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# ICERI2014

International Conference On  
Educational Research and Innovation



Enhancing Educational Research  
for Developing a Person of Character

## CONFERENCE PROCEEDINGS

Institute of Research and Community Services Yogyakarta State University  
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**ENHANCING EDUCATIONAL RESEARCH  
FOR DEVELOPING A PERSON OF CHARACTER**

Prof. Dr. Sri Atun  
Prof. Darmiyati Zuchdi, Ed.d.  
Dr. Margana  
Dr. Siti Hamidah



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**I. Artikel                      II. Judul                      III. Prof. Dr. Sri Atun, dkk**

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**Title :**  
**ENHANCING EDUCATIONAL RESEARCH  
FOR DEVELOPING A PERSON OF CHARACTER**

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**MESSAGE**

**FROM THE YOGYAKARTA STATE UNIVERSITY RECTOR**

Welcome to Yogyakarta, Indonesia!

His Excellency Director General of Higher Education of Education and Culture  
Ministry

Honourable Heads of Institutes of Research of the surrounding universities

Vice Rectors and Deans of all faculties

Distinguished all invited speakers and all other speakers

Distinguished guests

All participants

Ladies and gentlemen

Assalamu'alaikum warrahmatullah wabarakatuh

May peace and God's blessings be upon you all

A very good morning

On behalf of Yogyakarta State University and the committee, let me first of all extend to you all my warmest and heartfelt welcome to the 2nd International Conference on Educational Research and Innovation, held in Yogyakarta, one of the most historic and cultural cities in Indonesia, and, also, the city of education.

It is indeed a privilege for Yogyakarta State University to have the opportunity to organise this very important conference in which educational researchers and practitioners get together to share ideas, experiences, expectations, and research findings. This conference is held as one of the agendas of Yogyakarta State University to celebrate its 50th anniversary. The theme of this year's conference is Enhancing Educational Research for Developing a Person of Character.

Distinguished Guests, Ladies and Gentlemen

Research is one of the three activities that has to be done by the academic members of the university. The lecturers' research activity is a systematic effort to solve the problems or answer the questions by collecting data, formulating the generalities based on the data, then finding and developing organized knowledge by scientific method. Through research activities, it is expected to get valuable empirical facts to improve and develop the theory and practice to bring a better quality of education.

In connection with the essence of educational research that has been conducted to improve the quality of education, it is suggested that the research process should be done through a systematic process to get the knowledge and to solve the educational problems by using a scientific method, from the process of collecting data and its analysis up to the

stage of formulating the generalization based on the data interpretation. So, the research has a quality that is scientifically approved.

Another important effort is by updating the knowledge and insights in the educational field either through reading related references or having discussions and meetings with other researchers and educational practitioners. In this context an international conference on educational researches and innovations constitutes a strategic forum to improve the researchers' insights and studies in contributing themselves to solve the educational problems through researches.

I do hope that in the next conferences the coverage of the research areas also includes education in all fields, including education for professions, not only education in the school level.

Distinguished Guests, Ladies and Gentlemen

This conference will not have been what it is without the support from various parties. In this opportunity let me extend my sincere thanks and highest appreciation, especially the Head of the Research Centre and Community Service, the Chairperson of the Anniversary of Yogyakarta State University and the whole conference committee members. We have done our best to make this conference a big success. However, should you find any shortcomings and inconveniences, please accept my apologies.

To conclude, let me wish you a fruitful discussion during the conference and an enjoyable stay in Yogyakarta. And finally, hopefully all materials in this conference compiled into a proceeding that all related parties can read are useful for us to improve the quality of education.

Thank you very much for your attention.

Wassalamu'alaikum warrahmatullah wabarakatuh.  
May peace and God's blessings be upon you all

Yogyakarta, 7 May 2014  
Rector,

Prof. Dr. Rochmat Wahab, M.Pd., M.A.

**MESSAGE  
BY THE CHAIR OF THE CONFERENCE**

His Excellency Director General of Higher Education of Education and Culture  
Ministry  
Honorable Rector of Yogyakarta State University  
Vice Rectors and Deans of all faculties  
Honourable Heads of Institutes of Research of the surrounding universities  
Distinguished all invited speakers and all other speakers  
Distinguished guests  
All participants  
Ladies and gentlemen  
Assalamu'alaikum warrahmatullah wabarakatuh  
May peace and God's blessings be upon you all  
Good morning

On behalf of the committee, allow me to extend my warmest greetings and welcome to the 2nd International Conference on Educational Research and Innovation, held by Yogyakarta State to celebrate its 50th anniversary.

Raising the theme – Enhancing Educational Research to Develop a Person of Character - this conference is designed to develop the educational sciences and policies, innovations in the research methods, and doing some network among institutions focuses the discussions on the four pillars of education - class dynamics, teacher training, student learning, and teaching method.

Education should make humans better and wiser. They should be able apply their knowledge for a good life in every aspect of the society. An educational system can be considered successful if it can develop the human character which is needed to gain respect for this nation.

To achieve that, people are expected to help one another to improve the quality of education in this country. Hopefully, all discussions in this conference can be inspiring and useful for us to improve the quality of education.

Ladies and gentlemen

For your information, we will proudly present one keynote speech, four plenary presentation sessions and five parallel presentation sessions. Four outstanding speakers in the field of educational research have been invited. They are **Professor Dato' Dr Ibrahim Ahmad Bajunid** from INTI-Laureate International Universities, Malaysia, **Dr. Elizabeth Hartnell-Young** from Australian Council of Educational Research, **Prof. Darmiyati Zuchdi, Ed. D** from Yogyakarta State University, and Dr. Seloamoney Palaniandy from Infrastructure University of Kuala Lumpur, Malaysia.

Ladies and gentlemen

We have done our best to prepare for this conference. So, my highest appreciation and heartfelt thanks to all committee members. As to err is human, shortcomings may occur here and there. On behalf of the committee, I would therefore like you all to accept our apologies.

To conclude, let me wish you a productive discussion and a fruitful conference.  
Thank you very much for your attention.

Wassalamu'alaikum warrahmatullah wabarakatuh.  
May peace and God's blessings be upon you all

Yogyakarta, 7 May 2014  
Head of Research Institute and Community  
Service of Yogyakarta State University

Prof. Dr. Anik Ghufon, M.Pd.

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## **STUDENT LEARNING IMPROVEMENT AND ITS RESEARCH DEVELOPMENT MODELS: AUSTRALIAN EXPERIENCES**

**Dr Elizabeth Hartnell-Young**

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While improving student achievement levels is a priority for practitioners, researchers and governments around the world, different countries approach the challenge in different ways. In this paper I will outline some Australian research and practitioner experiences in relation to improving student learning and, more broadly, school improvement. I will outline the 'problem' at the macro level and suggest a solution that focuses on the micro. Through examples of teachers researching their practice the paper will show how, with support, we can collaborate to develop networked school improvement communities (Bryk, Gomez, & Grunow, 2010) with the goal of building practitioner capacities to learn in and through practice.

The OECD's programme for International Student Assessment (PISA) is designed to assess fifteen year olds knowledge and skills to meet real-life challenges, rather than assessing particular curriculum content. Sixty-five countries participated in 2012. Australian students' mean score in PISA reading declined from 528 points in 2000 to 515 in 2009, while in 2012 it 'flat-lined' at 512. Although this was significantly higher than the OECD average of 496 score points, and higher than the scores in Malaysia and Indonesia, it created a media frenzy in Australia, with headlines such as 'schools need to lift their game' and calls for higher entry standards for teacher education courses.

It is not only the quality of performance that worries governments and educators in Australia, but the inequalities that are apparent. Specific groups such as rural students, those whose first language is not English, or Indigenous students are often found in lower achievement bands. In any given year of schooling, the difference between the

most advanced 10 per cent of students and the least advanced 10 per cent is five to six years (Masters, 2013). This means that any teacher who attempts to cover the same material with all students and assess them all against the same grade-level expectations will not be providing the targeted support required to achieve learning for all.

Further, inequality in student performance is more often explained by differences within schools, rather than between schools. For this reason, some believe the focus of attention in Australia needs to move from large scale or macro policy efforts to micro or school-based improvements, echoing Barber and Mourshed (2007) who found in their analysis of school systems that many macro reforms had little effect on actual teaching and learning. Policy levers such as increased funding, smaller class sizes, increased school autonomy, stronger accountability, public league tables, ambitious national targets and even national curricula with explicit standards and expectations did not necessarily lead to greater student learning.

Perhaps this is not surprising to Fullan (2011) who argues that focusing on test scores and high-stakes accountability will be futile as it does not motivate the majority of teachers, and even when motivated, many teachers do not know what changes to make to improve their students' results. Similarly, Masters (2012) argues that 'practice-based measures' rather than 'outcomes-based measures' are needed. From his meta analysis of hundreds of research reports, Hattie (2009) concluded that the greatest effect on student learning comes from what teachers actually do with their classes.

The need to identify successful practices in schools was the driver for an empirical study conducted in the state of Victoria (Department of Education and Early Childhood Development, 2009). Looking at schools identified to be performing better than expected in relation to their socio-economic status, and using data routinely collected by the Department as well interviews and observations, the analysis found that the most common behaviours in these schools were:

- using data
- coaching, mentoring and sharing expertise
- raising staff expectations of students
- establishing and aligning vision, values and goals
- working in teams
- aligning professional learning
- raising students expectations
- assigning staff to key priority areas
- focusing on literacy and numeracy
- establishing partnerships (Department of Education and Early Childhood Development, 2009, p. 3).

Subsequently, the schools were invited to present at a conference to share their practices with others. Many school teams included students as presenters.

In another Australian state, Queensland, ACER was invited to identify ways to improve the poor performance of many students in the national testing program, NAPLAN. Following a careful analysis and synthesis of the literature on school improvement and effectiveness, ACER developed the Teaching And Learning School Improvement Framework (TALSIF) with Education Queensland, and later its successor, the National School Improvement Tool (ACER, 2012), with the Australian Government.

This Tool recognises that ‘school improvement’ occurs on a daily basis. It deliberately does not describe everything that effective schools do, but focuses on those practices that are most directly related to school-wide improvements, and thus outcomes for students. The Tool is designed to assist schools to review and reflect on their efforts to improve the quality of classroom teaching and learning, to support targeted planning. It facilitates conversations – including with parents and families, school governing bodies, local communities and students themselves – about aspects of current practice, areas for improvement and evidence that progress is being made. It consists of nine inter-related ‘domains’:

- An explicit improvement agenda
- Analysis and discussion of data
- A culture that promotes learning
- Targeted use of school resources
- An expert teaching team
- Systematic curriculum delivery
- Differentiated teaching and learning
- Effective pedagogical practices
- School-community partnerships

Although it has been designed to gather and feedback in relation to each domain separately, experience suggests that the most effective way to use the Tool is to make observations and gather evidence broadly about a school’s practices before focusing on individual domains. Schools may then decide to give priority to particular domains in their improvement efforts.

Where does leadership fit in these frameworks? Rather than being a separate practice, leadership is seen as fundamental to driving an explicit improvement agenda. Both leadership and management skills are required, to articulate a clear vision and to influence others to implement

the changes required. 'What qualifies people to be called leaders is their capacity to influence others to change their behaviour in order to achieve important results' (Grenny et al 2013, p. 6). Leadership and improvement from the ground up can be harnessed to support changes at a larger scale through collaboration.

ACER is supporting and sharing ways in which teachers and school leaders work as an 'improvement community' and has established an annual Excellence in Professional Practice Conference (EPPC) to provide an opportunity for schools to report widely on the outcomes of research into their own practices. 'Teachers driving school improvement' is a deliberate choice of title for 2014 because this conference focuses on practices at the school level. In establishing the conference program we called for abstracts of 300 words describing the 'problem' and how it was identified (baseline data); action taken by the school/teachers and the outcomes and implications for other schools. We asked proposers to identify the related school improvement domains from the National School Improvement Tool. This focus has clearly struck a chord with principals, teachers and support staff. Over 100 presenters will share their experience of data-informed school improvement through papers, workshops and poster presentations. EPPC has attracted participants from all Australian states and territories, and several countries including Hong Kong, Malaysia, Saudi Arabia, Turkey, Nepal and England.

Presentations at the conference focus on teacher learning as well as student learning, and come from primary and secondary, boys' and girls' schools, and university researchers working with schools. Examples include Sunshine College, a secondary school with an enrolment of 1000 students from more than fifty language backgrounds. The population in general suffers a high degree of disadvantage. In 2008, after several years of little or no improvement in data, the school began to construct a numeracy program which would support the conceptual understanding of all students and support a growth

mindset (Masters, 2013). This required a shift from a teacher-centred, textbook-driven curriculum to a more differentiated approach, as Domain 7 of the Tool suggests. Now the longitudinal data from national testing (NAPLAN) show whole school improvement where differentiated classes are conducted in the middle years, and students are maintaining this improvement in the senior years of school (ACER, 2014).

In terms of teacher learning, one practitioner research project investigated the use of professional learning teams (PLT) as a professional development method to change teacher knowledge and practice regarding feedback. It was conducted in Westgarth primary school with six participants, with varying years of experience. The research explored teacher practices when providing feedback to students, teacher understandings of feedback, and the process of using a PLT for changing understanding and practice. The teacher-researcher collected, compared and analysed quantitative and qualitative data, which revealed an increase in purposeful feedback, and a decrease in non-specific and negative feedback. Teacher responses from the interviews demonstrated a broadening of understanding of feedback, which developed with increased ability to define and use feedback effectively. They found the process of participating in a professional learning team was both supportive and beneficial to the development of their professional knowledge and practice.

It is teachers and school leaders such as these who drive improvement on the ground, with the support of researchers and professional organisations. With so much to share, from similar problems of practice, it seems that collaboration is desirable. This will lead naturally to the development of communities whose shared activities include understanding problems and starting points; designing possible solutions; monitoring implementation and changes in practice; monitoring student outcomes; and evaluating the effectiveness of new solutions through ongoing, iterative 'improvement research' (ACER, 2014).

In conclusion, our experience and research leads us to suggest that wherever they are, teachers, researchers, schools and systems would be wise to focus on growth at student, class and school level, research their own practices and identify those that have actually led to improved teaching and learning, share and promote these practices across schools, and develop partnerships with researchers, policy makers in networked improvement communities. I invite you to continue these conversations following the conference.

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**THE CHANGING ROLES OF UNIVERSITIES: INTIMATE EXPLORATIONS OF  
ISOLATED INTELLIGENT EMPIRES OF THE MIND  
(MANAGERIALISM AND ACADEMIC PASSION  
FOR AUTHENTIC MEANING AND PURPOSE  
IN TEACHING AND LEARNING)**

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*The general character of any philosophy  
is likely to be determined by its initial  
assumptions and its methods.*

*Clarence Irving Lewis*

*Citizens of Athens, aren't you ashamed to care so  
much about making all the money you can and  
advancing your reputation and prestige, while for  
truth and wisdom and the improvement of your  
souls you have no thought or care.*

*Socrates*

*Can education control the other powers man  
has gained and will use either for his annihilation or  
for his transformation?*

*Theodore Brameld*

*Children of the future Age  
Reading this indignant page,  
Know that in a former time  
Love! Sweet Love! Was thought a crime.*

*William Blake*

### Abstract

The paper outlines the development of education in Malaysia with reference to the history of ideas. It draws ideas and ideals regarding knowledge and education from the diverse treasury of human knowledge to interrogate current philosophies, policies and practices in academia. Several core concerns of civilization in the 21<sup>st</sup> century are identified, analyzed and contextualized. Of the institutions of mankind, schools and universities remain at once parochial and universal. With the transformation of societies in the new millennium, these institutions, particularly universities, are assigned new roles. One of the roles assigned to universities is the role to collaborate with industry. The role implies that universities are expected to produce industry ready graduates and the issue raises the age old debates on whether education is for a craft or for general cultivations of sensibilities and capacities, or, for both. Within the context of this debate the paper, attempts to clarify the nature of university industry relationships in the 21<sup>st</sup> century. The paper examines logic and evidence based balance of focus between industry-customized or, industry-influenced curriculum and the broad-based human potentialities curriculum, with attention to the education of intelligences, virtues and wisdom beyond practical, work related competencies. The critical question raised is whether an industry driven curriculum can be relevant *sans* the critical elements of humanity, encompassing, history, cultural enablement, personal sensibilities and aesthetics. Questions are also raised regarding nascent philosophical mistakes in academia, as scholars and institutions struggle to make sense of the contradictions in their enterprise. The First Principles of the Transmission of Worthwhile Knowledge encompassing such fundamental questions as “*Tell me why, What If, and How...*” is discussed. The paper further invites the formulation of the questions behind the questions and the nurturing of extended conversations which are expected to lead to continuing search for answers which will provide guidance for knowledge and values -based informed decision-making. To argue for the possibility of balanced approaches in the education of man, as a case study, the paper describes and discusses approaches to elegant thinking nurtured among students in a Master level class on Strategic Management. In sum the paper explores the kaleidoscope of ideas related to learning across the ages and analyzes the multifaceted educational challenges faced by educators in contemporary societies.

**Keywords** : *Academic leadership, University-industry collaboration, Co-creation of learning adventures, Educational criticism*

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### INTRODUCTION

Before the dawn of new centuries, writers who are futurists, write about the next century. Typically such writers predict or explain the trends-the G Forces- which would shape life styles(Lamm, 1985). In professional and specialized domains, there would be explanations of what forces and how such forces would change the world and shape global manifest destiny (Feather, 1989; Hall, 1992; Minkin, 1995; Caslione & Thomas, 2002). However, transformations of societies have been occurring throughout human civilizations (Fernandez-Armesto, 2002; Armstrong, 2006). In the 21<sup>st</sup> century, the concept of globalization, liberalization and internationalization have come to be in popular parlance, especially among the various political, economic, social, cultural and educational elites (Shipman, 2002; Williams, 2004; Branson, 2010).

### Core Concerns of Civilization in the 21<sup>st</sup> Century: Education under Attack

The common concerns of mankind really stretched across many centuries. However, there were different foci of concerns in different centuries, different eras and different decades. The twentieth century saw Two World Wars, the dropping of Two Atomic Bombs, Ideological clashes and the Cold War, the Struggle for Independence from former colonizers, the emergence of Afro Asian nations, the founding of the League of Nations and the United Nations, Organization of Islamic Council, Non Alignment Movement, killings in Cambodia and elsewhere, ethnic cleansing in Bosnia Herzegovina, and, hundreds of other conflicts in various regions of the world. In the new century there was the provocative prescient analysis of the realities of global politics, of the clash of civilizations, and, the vital search for

common grounds across civilizations. (Huntington, 1996; Ikeda & Tehranian, 2003)

Scholars have reported that in some societies and instances education had been

*"...“under attack “by state and non state alike to disrupt and deter educational provision. Such attacks are directed against learners, educators, and educational institutions of all levels. They include targeted killings, disappearance, abduction, forced exile, imprisonment, torture, maiming, rape by soldiers and security forces, recruitment of child soldiers and occupation and destruction of educational building.”*

(UNESCO 2010)

Between 2007-2009, education had been under attack in at least 32 conflict-affected countries or countries with regimes with poor records of human rights. Attacks include mass or multiple killings, persecution of academics, torture of teacher trade unionists, rocket or mortar attacks, gunfire or mass poisoning. The Report stated that

*“In higher Education, students or academics may be attacked to silence their criticism of government policies or behavior, prevent promotion of human or minority rights, limit academic freedom or prevent political pluralism...”*

(UNESCO 2010)

If universities are universal organizations, leaders enamoured by their national or institutional success of knowledge generation, and scholarly innovations, also need to have a high level of awareness of these other realities of education. Although such attacks against education may not be widespread, they should be recognized but should not be sensationalized, because there are other critical concerns of civilizations in the 21<sup>st</sup> century as well.

Questions of the Planet in Peril and Survival of the Species may seem dramatic but such questions have nevertheless been raised and must continue to be raised. The concerns of scientists and other leaders regarding climate change, widespread diseases, biological warfare, and weapons of mass destruction are all real concerns. There are conflicts

throughout the world in the early years of the 21<sup>st</sup> century as there are famines, poverty, human and flesh trade and persecutions of all kinds. A mechanistic education will graduate students with skills and competencies in their areas of specializations but mindless regarding the ongoing tragedies, oppressions and ultimately, unconcerned with the common destiny of the species (Dzulkifli Abdul Razak, 2011). Academicians and leaders from all sectors have to face the challenge of nurturing the leaders of the future well, of creating excellence, of renewing society and of managing sustainable futures (Waterman, 1987; Moschella, 1997; Gibson, 1998; Buder, 2000; Universiti Sains Malaysia, 2011).

Of the various ideas of concern in academia is the idea of the relevance of the curriculum, the effectiveness of teaching and the meaningfulness of learning. The ideas of curriculum relevance and impactful teaching-learning do not exist as standalone ideas or realities. In direct and indirect ways curriculum relevance and teaching-learning processes are related to and even bound by native culture and the learned and applied values and practices of the teaching profession. The university-industry relationships are not just about industry relevant curriculum but also about the attachments and internships of learners in a particular industry or company. The debate pertaining to attachment is whether interns are to be assigned only to positions and tasks directly related to their studies or whether they are to be assigned to a wide spectrum of positions and tasks in the company, beginning “from the shop floor”. Contradictory expectations and lack of clarity of purpose regarding attachments and internships create unnecessary “disconnect” among all parties. University- industry relationships also imply formalized protocols of assessment of students, including by the assigned personnel in the host organizations. Such expectations create their own chain of issues regarding training of assessors, payments and fees and other conceptual as well as practical issues. The matter of university-industry relationships can be analyzed from macro level and comparative perspectives of philosophies, policies and practices among societies and nations, or, the matter can be analyzed at micro level perspectives. The matter can also be contextualized to a



particular society or a particular institution or a particular time frame. As there are continuities and discontinuities in society, there are also continuities and discontinuities in all major philosophies, policies, practices. While the Socratic Method and deep questioning techniques may constitute continuities in Guruship/Teachership, there are discontinuities when particular schools of educational thought denigrate rote learning and celebrate the inquiry, discovery and problem-solving methods or vice versa (Ulich, 1947). As some of these approaches and methods of teaching are developed structurally, they gain the stature of such Methods as The Problem-Solving Method, the Project Method, Research-Led Inquiry or Ways of Learning (Vaill, 1996). An example of continuity in the Oath and Code of a Profession is the case of the Hippocratic Oath (See Appendix 1). To guide our deeper understanding of the disciplines of education so that we do not, through our pretension of expertise, become the generator of philosophical mistakes in education; it is useful to study the various traditional and emerging disciplines of education (Rusk, 1965; Morris, 1967; Adler, 1985; MQA, 2011). In the quest for depth of understanding we need to examine such matters as Child prodigies and teaching children to read and swim at an early age and teaching adults of the possibilities of contributions in later years, as well as the life experiences, for instance, lifelong learning in the vital years (Feldman, 1986).

The issue of university-industry relationship has to be examined in the context of the bigger picture of the idea of the university and teaching learning in academia. There are several models of universities encompassing, among other models, the elite university, the corporate university, the mass model and the industry driven model. The debate (and executive instructions) regarding university-industry relationships emerged in the context of the expansion of higher education institutions and their various programmes, and, specifically the issue of graduate unemployment. Within the debates of graduate unemployment are issues of inappropriate curriculum, inadequate mastery of skills for the work place, lack of competencies in soft skills, and expectations regarding the necessity for

Malaysian graduates to compete globally. The issue also involves the creation of jobs and the realization of the marketability and employability of students in the job market where there are the processes of search, selection, placement, development, and retention (Hyatt, 1995; Malhi, 2009). Such challenges have led to the Enrolment to Employment initiatives by institutions with the promise, realities and myth of control and influence for the placement of graduates in attractive high paying jobs. The academia-industry relations are not just about relevancy of curriculum but encompass matters of teaching and learning, assessment, research and development, and, as a matter of fact, the philosophy of higher education as a whole.

In America, for instance, Benjamin Franklin had in the 1750s suggested that the general understanding of the learner required a well disciplined and well stocked mind, that pupils be taught agriculture supplemented by farm visits, that future merchants be taught, French, German and Spanish and that general understanding was to be achieved through the diligent study of mathematics and logic and by training in careful observation of the natural world. American Education had always been a dualism in educational ideals, and had striven for "useful" education and "ornamental" education and students were to learn those things that were *"most useful and most ornamental simultaneously"* (Bruner, 1960). The American educational ideal had focused on useful skills on the one hand, and useful ideals on the other hand. It is noted, that in Malaysia, under British colonial rule similar focus was fostered in Teacher Education and in Malay primary schools (Awang Had Salleh, 1974, Bajunid 2008). Each of the issues of practical education, of ornamental education, of soft skills, of employability, has its own set of peculiarities, distinctness, characteristics, properties, and causes and effects. Singly, each of the issues is complex and requires broad-based integrated solutions. Taken as a group, the issues become more complex and there are no simple one-size fits all solutions for every learner, programme, teaching-learning initiatives, and institution, and, for the nation as a whole.

In the context of higher aspirations and expectations, and, with the increase in the numbers of universities, programmes offered, and expansion of student numbers in higher education, the issue of graduate employment looms large and has to be addressed. An official insight and recognition of the seriousness of the trend is noted thus:

*Out of approximately 923,000 students in institutions of higher learning at all levels and in all specializations, about 200, 00 will complete their studies. From the numbers, approximately 72,000 or 36% are male graduates and 128, 00 or 64% are female graduates. Therefore, the issue of Graduate employment receives the attention of Government. In 2009, for instance, it is estimated that 418.00 Malaysian citizens are unemployed, 41,514 or 9.93% are recent graduates and 22,640 or 5.14% are graduates with first degrees.*

(Khaled Nordin, 2011 pp.  
395-396. Translation from  
Malay)

*The Career and employment Carnival gather more than 500 companies from various agencies, GLC, MNC and SME, which offer approximately 15,800 jobs. ... To ensure graduate employability... the MOHE has determined that the absorption time for employment of graduates is one year. The Graduate Tracer Study conducted by the MOHE in 2009 indicated that within three months of graduation 81,744 or 52.7% of graduates obtained jobs compared to 41,514 or 26.7% who had not as yet get jobs. ...In 2009 the private sector was the main employer of graduates taking about 30, 290 or 43. % of graduates, The Government sector provided opportunities for 23,530 or 33.6 % of Graduates. Government linked Companies (GLC) offered jobs for 3%, of graduates (2,107). Approximately 8,507 or 12.2% of graduates were placed in Multinational Companies.*

(Khaled Nordin, 2011 pp.  
398-399. Translation from  
Malay)

On their own initiative or in response to Ministry of Higher Education (MOHE) directives, higher education institutions have embarked (sometimes with uncertainties) on the path of university-

industry collaborations. In redefining the roles of universities in terms of employability of students, INTI International University which champions University-Industry relationships has articulated the following objectives:

As part of our concerted effort to bring industry into our classrooms with the objective of producing job-ready and highly-employable graduates, INTI Education Group through its Enrolment to Employment (E2E) initiative is establishing Industry Advisory Boards for our Academic Programmes. The IAB provides the link to the outside world in a structured way that enables us to leverage and collaborate with relevant and high value employers, and deliver

“Industry Ready” graduates with superior level of skills and competencies.

The Inaugural IAB for Business will be a platform to discuss the following:

Aligning the programmes with employer needs.

Relevant technical and soft skills to be included in the teaching learning models.

Professional accreditation, certification and recognition for respective programmes.

Part-time study model that will be beneficial for both employers and employees.

Emerging industry trends and needs.

*E2E is an ecosystem with 5 elements: Curriculum, Placement, Employer Visibility, Projects, and Feedback. Our work with students begins from the day they join INTI until after they graduate and it revolves around integrating these elements into our programmes and the student experience.*

([www.newinti.edu.my](http://www.newinti.edu.my)  
2010 E2ETM)

In the Malaysia context, the question of university-industry relationships has been raised in many Fora. The gist of the concerns is typically noted as follows:

*Universities and industry which for long have been operating in separate domains, are*

*now rapidly inching closer to each other to create synergies. The constantly changing management paradigms, in response to growing complexity of the business environment today, have also necessitated these two to come closer. An academia-industry interface could be defined as an interactive and collaborative arrangement between academic institutions and business corporations, for it aims to achieve certain mutually inclusive goals and objectives. In this interface, universities' roles are not limited to only teaching and doing research, but also attempting to capitalize the knowledge they produce, and this implies a new mode of knowledge production. Higher education institutions are not only expected to contribute skilled human resources to business, but also through other various intangible ways. Therefore, the intersecting needs and mutually interdependent relationship require identifying means of further strengthening academia-industry partnerships.*

(Khaled Nordin, 2011, p. 461-462)

*Industries can contribute in the form of curriculum development, special equipment and training experts to universities and other institutes of higher learning, while on the other hand, institutes of higher learning can act as training providers and customize the curriculum and produce students with special attributes, knowledge, skills and competencies in the required subject areas. Realistically, these students will be ready to perform tasks waiting ahead of them without time loss for training because they are being prepared while they are still studying at the university.*

(Khaled Nordin, 2011, p. 463.)

The Government makes various kinds of efforts to fulfill its responsibility to create more jobs, not just by inviting Foreign Direct Investment, but by cultivating local entrepreneurship. An example of such an effort is when the Minister of Higher Education acknowledges the role of Western Digital in the collaboration marked by a Memorandum of Understanding between the MOHE and Western Digital.

*This collaboration provides the opportunity for the industry and the academic institutions to address the mismatch between industry demand*

*and graduates as well as to improve graduate employability. In Western Digital, the biggest concern is the need to employ additional thousands of graduates in the next five years. The common path is obvious in achieving the goal: the role of the universities, polytechnics, colleges and academic institutions to offer programmes that meet the requirements of Western Digital*

(Khaled Nordin, 2011, p.465.)

It is noted that in 2009, Western Digital has 2000 engineers and 3800 technicians. These figures are expected to increase to about 3100 engineers and 6500 technicians by 2015. In terms of job creation, without taking into account academic specializations and specific skills and other requirements, there will be approximately a need of 1100 engineers and 3400 technicians by 2015 for Western Digital, one of the largest Multinational Companies in Malaysia.

The Ministry of Higher Education has launched the Policy for Industrial Training and Entrepreneurship. Through this policy all undergraduates must attend industrial training between 4 months for a three year programme and 6 months for a four year programme, to enable students to be exposed to the world of work and also to provide job experiences. The entrepreneurship policy is to expand the interest and opportunities for graduates to become entrepreneurs. In 2009, it is noted that from among graduates there are only 1.5% graduate entrepreneurs compared to 13% in the United Kingdom. It is also noted that employment opportunities are related to the growth of the economy. The system of higher education in Malaysia is now reviewed to take into consideration the marketability and employability of graduates. The policy of entrepreneurship requires the internalization of new values, culture and entrepreneurship minds which encompass passion for innovation, problem solving capacity, capacities of progress, perseverance, competition and the spirit of working collaboratively.

At the National Academic Awards Council Ceremony for academic awards for the years 2009 and 2010, academicians from various public

universities were recognized for their contributions and leadership for Publications in Journals, Book Publications, Innovation and Commercialization of Products, Arts and Creativity and Teaching. Evaluation is based on cumulative contributions and lifetime achievement evidence. In the video presentation at the awards ceremony, one of the recipients noted that “teaching educates the teacher:” and teaching should be learner centered and not monotonous. Among the preferred practices of award winners in teaching, are the uses of Project Methods, focus on thinking skills, advocacy of the borderless classrooms, ensuring that students acquire hands-on skills, teaching and coaching at work sites.

The strict bureaucratic instructions issued from time to time to universities to conduct themselves in particular ways, has the tacit assumption that university leaders are not doing what they should be doing or are doing what they do not too well. There is also the assumption that expertise lies in the central bureaucracy which, in any case, draws expertise from universities. There are contradictions, paradoxes and policy confusion and initiative overload in the relationships between the centralized bureaucracy and higher education institutions in the system. Beyond the politics of control and dynamics of leadership, institutional leaders and academicians who are recognized authorities in their respective fields must not allow themselves to be diminished, trivialized or dismissed by misplaced and mindless managerialism. Academicians and thought leaders must take responsibility and be accountable for their knowledge leadership and their leadership in sharing such knowledge through teaching and learning (Bryner & Dawna, 1996).

In describing higher education in the United States, Henry A. Giroux makes the following observations:

*What is distinctive about the U S is that higher education is under attack not because it is failing but because it is public. It is now considered dangerous because it has the potential to function as a site whether the culture of questioning can operate, the imagination can blossom, and difficult questions can be openly debated and critically*

*engaged.. Hence, many conservatives see higher education as a threat to their reactionary and corporate oriented interests and would like to defund higher education, private it, eliminate tenure, and define the working conditions of faculty to something resembling the labor practices of Walmart workers. While the universities are increasingly corporatized and militarized, the governing structures are becoming more authoritarian, faculty are being devalued as public intellectuals, students are viewed as clients, academic fields are treated as economic domains for providing credentials, and work place skills, and academic freedom are under assault...*

*With the corporatization and privatization of higher education, it is increasingly more difficult for colleges and universities to expand and deepen democratic public life, produce engaged critical citizens, and operate as democratic public sphere... Moreover, higher education is defaulting on its obligations to offer young people a quality and broad-based education. This is true in part because the liberal arts and humanities have fallen out of favor in a culture that equates education with training. But the demise of education as a public good...is because many university presidents now assume the language and behavior of CEOs and in doing so they are completely reneging on the public mission of universities...Of course, there are a few university presidents who refuse to reduce higher education to an adjunct of corporate power and needs. Harvard University President Drew Gilpin Faust has both criticized the growing economic justification for higher education and the reduction of pedagogy to producing knowledge and social relations whose value ultimately resides in how closely they are aligned with measurable skills...*

(<http://firgoa.usc.es/drupal/node/48956> accessed 15/09/2011)

The debates regarding the corporate sector, industry-academia relationships remain provocative. There are those who caution the over-enthusiasm of such relationships because of various forms of unethical intrusions undermining academia and exposing scholars to corrupt practices and because such intrusions threaten independent thought. Naively regarding industry as savior and panacea to the problems of academia undermines public trust and erodes free enquiry.

While industry may contribute constructively to enrich the curriculum, there have been questions raised regarding ethical concerns in relationships especially pertaining to, medical, pharmaceutical, environmental issues of undue influence, secrecy, patent monopolies, misleading advertisements and control of decisions on research priorities (Bok, 2003; Washburn, 2005). As the industry-academia relationships are raised and expectations of returns are high, the following observation is made:

*As a result, some are going headlong to work with industry, often naively. The industry has been portrayed as a savior of some sort, and their demands must be met by all means. The insistence that everything must be "tailor-made" to suit the industrial needs and wants are changing the morality of education to mirror the morality of the market-place. In short, the industry is gradually deciding the education agenda with little disagreement from the educationists, at least in Malaysia.*

(Dzulkifli, 2011, p.97)

#### **Dangerous Ideas: Man and Man and Man and Machines**

In various nations, books and contents in various media, print, audio, and video, digital continue to be banned for various reasons. In schools in particular, books continue to be banned because they are considered to corrupt minds and sow ideas and thoughts which may challenge ruling regimes or existing paradigms of beliefs. As noted by Goethe, "No army can stop an idea whose time has come." Social scientists and educators continue to identify the various ideas whose times have come. In the education sector, many ideas considered "dangerous" have in fact, become global agenda for change. The rights of the child, education for girls, religious education, lifelong learning, have been considered dangerous ideas in some societies. Comparative religion, sex education, democratic and communistic ideas continue to be considered dangerous ideas. The identification and exploration of dangerous ideas continue to unfold in various ways in different societies (Brockman, 2006). Several ideas considered dangerous in the twentieth century, have been embraced by educators and advocates of educational change in

order to improve their societies, specifically through educational policies and practices. Such ideas are contained in the works of critical educators such as (Neill, 1962; Beard, 1970; Freire, 1970; Illich, 1970).

The struggle between machine and man, corporate culture and the culture of autonomy continues (Gershenfeld, 1999). Educators and thinkers who are sensitive to the challenges have been arguing for the human touch, and for human governance (Arnold & Plas, 1993). When academicians are hindered, or at the very least not encouraged to exercise free inquiry and independent thought because of excessive managerialism and bureaucratic controls, such constraints verge on the likeness of banned books and readings and forbidden knowledge (Shattuck, 1996; Karolides, Bald & Sova, 1999). As the Y generation become digital natives and as many people of influence become enamoured with technology there is concern that tools become the centre of focused mindlessness and the core of education, and, the minds and souls of the learners, take peripheral positions. The human aspect of the enterprise continues to touch the minds of educators, students and the public at large (Pausch, 2008). This issue is to be confronted and addressed in professional domains and from professional and personal perspectives (Arfah Salleh, Aziuddin Ahmad, 2008). A Philosopher notes that.

*It is-I take it- a distinguished character of philosophy that it is everybody's business. The man who is his own lawyer or physician will be poorly served; but everyone can and must be his own philosopher. He must be, because philosophy deals with ends and not means. It includes the questions, What is good? What is right? What is valid? Since finally the responsibility of his own life must rest squarely upon the shoulders of each, no one can delegate the business of answering such questions to another. Concerning the means whereby the valid ends of life may be attained, we seek expert advice. The natural sciences and the techniques, to which they give rise, though they may serve some other interest also, are primarily directed to the discovery of such means. But the questions of the ultimately valuable ends which shall be served, remains at*

*once the most personal, and the most general of all questions.*

(Lewis, 1929, p.2.)

Concerned and inspired by the agenda of creating a generative new landscape for deep and integral learning, as a “cartographer of the human purpose” Stephanie Pace Marshall wrote:

*There is a new world struggling to be born. This transformation will not initially emerge through the reinvention of social structures and institutions, although that will occur. Nor will it emerge through the reformation of governing policies and priorities, although that too will change. Rather, it will come from an altering of mind-the transformation of human consciousness and the emergence of integral and wise global minds that will creatively live into a worldview of an interconnected living planet and a sustainable and interdependent human family. It is my belief that the fullness of our humanity and the sustainability of our planet rest with the transformation of human consciousness and the nurturing of decidedly different minds.*

(Marshall, (2006, p. xvii)

In the popular literature of movie genre this deep learning has been documented as *Avatar*, *Inception* and *an Inconvenient Truth*. In the world of writing, the new consciousness is about the Empires of the Mind, Empires of the Word, and Mind Set (Waitley, 1995; Ostler, 2005; Naisbitt, 2006). In the development from the trading to the globalized economy it has been suggested, for instance, that people can develop and move themselves from the domestic mindset, to the international mindset, to the multinational mindset, to regional mindset and to the global mindset, underlining the geosopic reach of ideas and common destiny (Kanter, 1995; Jeannet, 2000).

### **The Quest for Meaning: Philosophy and Policies**

Each institution and each national system is conscious of its historical origins and cultural ties in the sweep of national and educational development. As each nation engages in national development and develops its national ideology, its various elites redefined the idea of the university to fit its own mould, to address the multifaceted concerns and issues in all domains of national aspirations and

development agenda. Universities in developing countries more than universities in the older nations are considerably influenced by international agencies like the World Bank and other funding and aid organizations. Typically too, universities surrender to the global definitions of (even the global mission) of what universities are expected to be and to do. As universities adopt global quality standards and its leaders nurture global culture and passion for excellence and international equivalency, (exemplified in Europe, for instance, by the Bologna Process, and, the European Higher Education Area), they adopt, at least superficially, a universal qualitracy culture and character, while maintaining the particulars of their parochial politics, policies, practices and realities. The competitive quest for world class status becomes one of the pursuits of universities, driven by stakeholders or their institutional leaders, whether self-styled as enlightened scholars of yesteryears, or, as CEOs in the image of Multinational Companies global reach and financial and managerial stature (Trump, 2009; Slater, 1998; Lowe, 2007). The political, and educational elites, and ideological power groups in each nation will struggle to control and shape the structures and missions of universities based on their ideologies. It was observed in the American context, that there are at least four choices of viewing educational change (at all levels) in terms of alternative policy choices and cultural interpretations of change imperatives. The four patterns and choices of educational change, are, essentialism, concerned chiefly with the conservation of culture; perennialism which centres its attention in the kind of educational guidance by the classical thought of ancient Greece and medieval Europe; progressivism, the philosophy of liberal, experimental education, and, reconstructionism which believes that contemporary crisis can be effectively addressed only by a radical educational policy and program of action (Brameld, 1965). Beyond American experience of educational thought, other societies may engage themselves with the pursuit of Indigenous Thought. While one may not subscribe to the interpretation which does not include historical periodization, the concepts are useful to help clarify ideological stances, or preferences of those who would shape educational futures. In using such concepts to develop clarity, the notion of classical thought may be substituted for Religious Thought, for instance, Confucian, Christian or Islamic thought, and reconstruction may be substituted with reform or transformation.

### The Malaysian Education System

The Malaysian school system and the Malaysian university system were inherited from the colonial system, moulded in the Eton-Harrow and Oxford-Cambridge System. The inherited spirit, philosophy and structure provided many advantages of embedded elitism, but simultaneously institutionalized discriminatory policies towards non elitist education. As the intellectuals of the nation struggled to understand the real and true pervasiveness of colonial influence on Malaysian society (Purcell, 1965; Khoo, 1991; Tan, Ho & Tan, 2005), there is consensual recognition and acknowledgement of the continuity of influence of indigenous education institutions, particularly, to the Muslims, the Islamic religious schools, and, to the Chinese and Indian communities, the Chinese and Tamil schools, respectively. The efforts to build a united nation through institutions of education lead to the exercise of defining and redefining the roles of schoolings and universities in Malaysia. Applying Brameld's categorization, it would seem that in the Malaysian political and educational milieu, driven by the contending political and educational elites, the four patterns of educational change occur or are intended to occur simultaneously. The aspiration to develop a united multiracial nation has necessarily led to a focus on a Malaysian variety of progressivism and reform. The drive of the various cultural communities to define the knowledge and culture worth knowing and worth transmitting has led to the focus on essentialism. As the mainstream political, religious and cultural elites define Malaysia as an Islamic state, upholding, championing and transmitting Islamic thought, and *perennialism*, in this context means cherishing and embedding the models of the best of Islamic civilization during earlier times, in the contemporary society. The initiatives to respond to contemporary challenges by introducing various "new" programmes of action imply "reconstruction". However, bureaucratic instructions which require compliance to particular initiatives or preferences at any level or in any educational domain, do not necessarily constitute a reform but may just be strong *managerialism*, lasting only for as long the organizational actors can exercise some form of legitimate authority. During

the last fifty years, there have been many ideas and ideals introduced into the Malaysian Educational System. While there have been contestations regarding some of these ideas in the political realm, there have also been support for many of the ideas and initiatives.

In attempting to understand "Education as Power", Brameld made the following observations:

*A charter for educational leadership adequate to our age can only be constructed within a great conception of education itself.*

*The generalization applies, however, to widely differing conceptions, all the way from Plato and Aristotle to Comenius, Pestalozzi and Dewey. Nor is it limited to philosophers invariably treated in the history textbooks. A case should be made, I believe to the effect that theories less orthodox or familiar (to American students of education)-the Marxist, Confucianist, Existentialist, and Zen Buddhist are a good sample-all promulgate educational outlooks in their respective ways that stretch man's imagination and push his horizons beyond his conventional self.*

*Accordingly, rather than to make a case for one or another of the major approaches to the questions before us, I prefer to elicit the aid of eight guiding concepts-concepts not necessarily identified with any of the great philosophies of education, yet surely reflecting the considerable influence of several. I shall call them: creativity, audacity, directiveness, convergence, commitment, confrontation, involvement, and control.*

The contestations of ideas, specifically, of educational ideas in the Malaysian context have encompassed all the eight concepts and more (Bajunid, 2008). To date, however, there have not been intensive and wide ranging debates regarding educational ideas and ideals, but there have been debates regarding programmes and initiatives.

### Of History and the Future

Philosophers, thinkers, researchers and policy makers can exercise thinking along the lines of "What If"...of past policies. In the education sector,

the questions of “*what if*” in Malaysian education can be, for instance, as follows:

What if the Education system was not under Federal Government Jurisdiction but was under State Jurisdiction or Community responsibility?

What if the mediums of instruction at all (or any of) the levels of education were French, or Mandarin or Arabic? (or, more plausible, the medium was just Malay?).

What if Comparative Religion was a compulsory subject in schools and universities? (Or, if Religion was not to be taught in schools and universities?)

What if the Lifelong Learning Philosophy and (established policies of lifelong learning) were implemented the last fifty years?

What if the History of Scientific Thought, Inventions and Discoveries were compulsory subjects at Form Five or at tertiary level?

What if Law was made an examination subject at Form Five or at tertiary level?

What if Vocational and Technical Education was the mainstream Focus of Education during the last fifty years?

What if private schools and universities were encouraged to grow during the last half a century?

What if curricular activities (Uniform Units, Sports and Athletics and Clubs and Associations) were recognized and given considerable weightage in the education system?

What if a large number of foreign teachers are to teach in universities?

What if Peace Education and Multicultural Understanding are made compulsory subjects in schools and Universities?

What if university-industry collaborations had been fostered during the last fifty years?

Such questions as the above can be further expanded and refined. The exercise of asking “*What if*” questions is not a futile exercise but is an exercise

which allows lessons to be learned, for retrospect and prospect. The further back societies can look to their examined past, the further forward they can look with hindsight and foresight to influence to shape the future with “*superspection, circumspection, and despection*.” A lifetime is not enough for an individual to partake the diverse knowledge available and to relish and use such knowledge in contexts. A lifetime is also not enough for contesting elites to understand the complexities of civilizational change and to intervene impactfully. Therefore, in order to generate ideas and initiatives for future policies and practices, there has to be consciousness and profound understanding of change and of preparedness for the future. *What if* thinking invites the pondering of crucial turning points of history which alters the course of human societies (Cowley, 2001). *What if* thinking also leads to the thinking of dangerous ideas, and thinking the unthinkable (Brockman, 2006). What if, “*What If Thinking*” is applied to Education, to educational institutions, to sites of learning and ways of learning and outcomes of thinking, feeling and learning?

The lives of educated citizenry in the 21<sup>st</sup> century would be enriched, insightful and enlightened when citizens understand the past, the ancient engineers, the scientists, the historians, the philosophers (De Camp, 1960; Gribbin, 2002), the Nobel laureate, and the futurists (Toffler, 1970, 1972), all of whom eventually become past scholars. From among these intellectual giants there will be those whose ideas remain relevant and powerful through the ages and across different cultures. From among such scholars too, are those whose ideas are considered satanic or against the cause of the proletariat. The educated person is one who strives to understand the *Empires of the Word* (Ostler, 2005) and the *Empires of the Mind* (Waitley, 1995) and the key thinkers in various domains (Hughes-Warrington, 2000; Palmer, 1998, 2001).

In the book “*We Scholars*” David Damrosch explores

*“...the academic culture in which disciplines are vigorously isolated and then further divided into specialized fields, making for a heady mix of scholarly alienation and disciplinary territorialism, a wealth of specialized inquiry and poverty of general discussion. This pattern, however, is not necessary and immutable; rather it stems from decisions made a century ago, when the American university assumed its modern form.”*



Awareness and acknowledgement of the embedded dysfunction of academia should lead to cooperation in intellectual endeavours within and outside of the university. However, the solution of the problem should not lead to new problems when the very disconcert for which solutions were engendered manifest in new forms of disconcert. If in the past, political and economic assumptions lead to the existing academic structures, the emphasis on employability, and bureaucratic controls should not lead to new academic structures with embedded dysfunctions.

Philosophizing and policy making for the common good, for the immediate and long term is not frivolous but serious business which demands the acumen of knowledge and insights of mature thinkers. A poignant analysis of the drama of understanding and the seriously deep-insight struggle of the philosopher in any domain is articulated by Nietzsche.

*The extent and towering structure of the sciences have increased enormously, and therewith all the probability that the philosopher will grow tired even as a learner, or will attach himself somewhere and "specialize" so that he will no longer attain to his elevation, that is to say, to his superspection, his circumspection, and his despection. Or he gets aloft too late, when the best of his maturity and strength is past; or when he is impaired, coarsened, and deteriorated, so that his view, his general estimate of things, is no longer of much importance. It is perhaps just the refinement of his intellectual conscience that make him hesitate and linger on the way, he dreads the temptation to become a dilettante, a millipede, a milleantenna. This is in the last instance a question of taste, if it has not really been a question of conscience.*

Fredrich Nietzsche, "We  
Scholars"

Scholarship has to be elevated to the level of insights and goodness of the sages and philosophers, and, not to be surrender to the hidden persuaders in the corridors of powers whose agenda are often not transparent and not for the common good, but for the short term political gains of the season. The comments or cryptic critiques by (Flynn, 2004) raise stimulating questions regarding initiatives and policies in social and educational systems alike:

*When ideology is your guide, you're bound to get lost. Ideology deludes, inspires*

*dishonesty, and breeds fanaticism. Facts, experience, and logic are much better at leading you to truth. Truth, however, is not everyone's intended destination....To succumb to ideology is to put your brain on autopilot. Ideology preordains your reaction to issues, ideas and people, your view of politics, philosophy, economics, and history. For the true believer, ideology is the Rosetta Stone of everything. It provides stock answers, conditioned response, and delivers one-size-fits-all explanations for complex political and cultural questions. Despite the conviction and seeming depth of knowledge with which ideologies speak, they are intellectual weaklings-joiners- who defer to systems of beliefs and charismatic Gurus for their ideas. Why bother thinking when the gurus provide all the answers? What's the use of examining the facts when the system has already determined the real truth?*

(Flynn, 2004, pp. 1-2)

*Behind the bad ideas that have poisoned politics and culture stands ideology. Behind ideology stands gurus-the popularizers and founders of the theoretical systems that have done great mischief by misleading people. These are the ones who have planted the many harmful and false ideas that have taken root in our society. We must naturally go back to these gurus to examine the roots of those bad ideas. Only by looking at the bad ideas and those who propagated them-and when, where, why, and how they did so-can we begin to clean up the mess that the ideas have unleashed.*

(Flynn 2004, pp. 5-6)

While technology provides access to information and knowledge, it also provides access to wrong knowledge which may destabilize existing societies. The paper suggests what the past can learn from the future. The past is always with each individual, family and society. Understanding the future which just happened, the reflective individuals can revisit the past for deeper understanding of what happened, why and what if we were to have the opportunity to make decisions of the past and take actions all over again. The notion of Future Focused Role Imagery is critical in order to change the behavior today by visioning the future strategically (Toffler, 1980). The complementary thought pattern is to consider the behaviour of today by understating what happened in the past, including the notion that the future just

happened. Thinking which allows for the convergence of past, present and future allows for the exercise of more critical and more imagination to unleash all potentialities (Imagination is more important than the intellect). The exercise of inviting the convergence of Time uses the best of thinking in time (Neustadt & Ernest, 1986). The sustainability of Virtues, Teaching for Wisdom and Teaching for Virtues is also an art not developed in Teaching-Learning in Higher Education (Bennett, 1995). The art of teaching and interrogating the past (not using the values of the present) but using the unutilized wisdom of the period is an art not developed. It should be the preoccupation of every person, every profession to continuously raise those unraised questions and to pursue answers to questions raised as the ordinary course of focus of lives and professions (Lauer, 2008).

As companies search for elegant solutions to their business and technical problems related to products and services, academia must help learners to realize elegant thinking to achieve their fullest potentialities (Dimnet, 1974). One of the critical elements of all education is character education. One neglected aspect of character education is that regarding the nurturing of intellectual character. Like character building, Teaching is always a work in progress, just like the cultivation of the mind. Notwithstanding all kinds of changes and challenges globally and nationally, at the institutional and programme level, educators have the opportunity and the responsibility to experiment with their own art and science of teaching to ensure that the experiences become positive and insightful "turning points" arrivals of meanings for teacher and learner during every meeting. The framework of one such joint effort between the actors in the co creation of learning adventurers is presented in Appendix 2.

#### **LEARNING THEORIES and LEARNING PROCESSES**

Taking the cue from the philosophical stance, it is every teacher's business to develop his or her own philosophy of teaching but teachers can seek expert advice on the means to ensure consistently great teaching. One of the focus areas in the information seeking behavior of teachers as education professionals is to acquire deep understanding of learning theories and learning processes. In these domains, there are scholars and researchers who have made significant contributions. In the quest to acquire knowledge from the vast treasury of educational knowledge, a dedicated teacher or lecturer may learn from the masters several

powerful concepts. These concepts if mastered well can change the lives of professional educators, particularly regarding how they look at learning processes which will, when well understood will influence teaching. Among the powerful concepts are, for instance, Constructivism, Arrival of Meaning, Joy of Surprise and Learning, Multiple Intelligences, Whole Brain Learning (Left and Right Hemispheres), Neurolinguistic Programming (NLP) and Accelerated Learning. Three of the powerful concepts are "Constructivism", "Arrival of Meaning" and "the Joy of Surprise."

The first of these concepts is Constructivism. There are several philosophers and scholars considered to be the formulators of the notion of Constructivism. The leading learning theorist in this area is Jerome Bruner. The second concept is Arrival of Meaning. Syed Naquib al Atas argues that learning takes place when there is understanding. This threshold of understanding is the "arrival of meaning." An influential American educational Philosopher I. Scheffler describes that profound learning occurs when there is the joy of insight, a kind of discovery. This discovery is the Joy of Surprise. It is clear that philosophers and educational theorists refer to the construction, arrival and surprise factor in learning for profound learning to occur. These three among others are concepts that are elements of what can be considered "transformative" learning. The notion of transformative learning in education can be understood further when the theories of Noam Chomsky are applied to the teaching-learning processes as "mentalist" processes as distinguished from B. F Skinner's "Behaviorist" processes. Other theories can also be explored to develop deeper understanding of the art and science of teaching and learning. (Ortenblad *et al.*, 2011). Learning really has to do with the use of intelligences. The leader in educational thought who has changed and enhanced understanding of human intelligence is Howard Gardner's ideas on the Theory of Multiple Intelligences. According to Gardner's Theory, there are not two or three Intelligences but nine. The Multiple Intelligences are: Verbal Linguistic, Logical Mathematics, Intrapersonal, Interpersonal, Kinesthetic, Spatial, Musical, Ecological, and, Spiritual Intelligences. Learning and thinking become most effective when the reflective individuals are conscious which of our Intelligences are operating at any point of time. Brain Theorists or researchers in the Cognitive Sciences have also developed our understanding on the Brain

Hemispheres. According to these researchers the two hemispheres perform the following functions:

| Left Brain            | Right Brain            |
|-----------------------|------------------------|
| <i>Logical</i>        | <i>Random</i>          |
| <i>Sequential</i>     | <i>Intuitive</i>       |
| <i>Rational</i>       | <i>Holistic</i>        |
| <i>Analytical</i>     | <i>Synthesizing</i>    |
| <i>Objective</i>      | <i>Subjective</i>      |
| <i>Looks at Parts</i> | <i>Looks at Wholes</i> |

Routine applications of such frameworks and making “constructions” and unexpected connections to examples from learners may create other learning “joys of surprise” and arrival of meanings. The quest of scholars is always the quest for meaning during the ordinary challenges of lives and during challenges of extremes, of unthinkable situations and conditions (Frankl, 2006). As scholars set in quest of the art of thinking, in the professional and academic fields teachers too set in quest of the art of teaching (Dimnet, 1974; Highet, 1989). Whatever the ages, there are always continuities and discontinuities in traditions of inquiry and in approaches to the transmission of knowledge. There are also works which are fleeting and works which are periodic, and, of course, there are some seminal works. In the field of education, there are several of the seminal works which provide frames of reference, exemplars, templates which are insightful. Among the seminal works are those of (Guilford, 1967; Gagne, 1971; Bruner 1996). An educator can develop by drawing knowledge and insights from many different scholars regarding, for instance, the Traditions of Inquiry (Brereton, 1985), the Examined life (Nozick, 1989), Intellectual Character (Richard, 2002). The choice for the scholar is not to be intellectual morons (Flynn 2004). The quest for mastery of educational knowledge to the level of connoisseurship would involve engagement, interrogation, rights and responsibilities, deep learning, structure of discipline, possibilities unutilized intelligences and limits of knowing. Even an executive instruction regarding the university-industry relationships can provide exciting opportunities and possibilities of re-exploring the many facets of educational

philosophies, policies, practices in diverse contexts and situations.

### Elements of Teaching

Many educators have provided inspiring insights regarding Teaching and Learning. There is so much that can be learned from exemplary educators who spend all their lives researching the enterprise. The insights that they share enrich educators everywhere (Scheffler, 1989). On a reflective, mode Banner and Cannon provide guidance regarding the elements of teaching. *On the Ethics of Teaching*, they noted the following:

1. *The first rule of ethical teaching is to do no harm to students.*
2. *Ethical teaching means setting high standards and expectations and inspiring students to meet them.*
3. *Ethical teaching means embodying the principles of teaching.*
4. *Ethical Teaching means teaching ethics.*
5. *Ethical Teaching means acknowledging students' minds, ways and beliefs.*
6. *Ethical teaching requires consideration of students' differing but tenable viewpoints.*

(Banner & Cannon, 1997)

The Hippocratic Oath referred to earlier is an enduring example of a Professional Code which influenced almost all other professions in thinking about ethics and Codes, over the span of human civilizations.

### The Future Just Happened

In human civilizations there are always the convergence of the past, present and futures. In time and spaces of convergences there are enclaves of wealth and sophisticated development side by side with oppression and dearth of life opportunities in all domains. While in each academic programme, institution or educational system, at any particular stage of development, leaders and the stakeholders may choose to focus on particular areas of concerns, some of the developments trends in higher education reforms would include a whole/wide range of concerns including the following:

- More societies will make policies on the democratization of higher education

- The quality assurance agenda becomes the global agenda as societies and nations attempt to ensure equivalency of qualifications/credentials among different educational systems.
- More people will work to acquire different degrees and different areas of specializations.
- More people will pursue education to the highest levels affordable and possible.
- Academic programmes will be more multidisciplinary and transdisciplinary.
- In the course of their higher education more students will enroll in academic programmes in other higher education institutions, in part or in larger segments of programmes.
- More opportunities will be created for joint doctoral research programmes beyond faculties of any universities to include collaborations between universities.
- Such agenda as the ASEAN/Asian Higher Education Areas (like the European Higher Education Area) will be advanced.
- More choices for individualized, customized and personalized curriculum will be realized.
- Novel strategies for formative and summative assessment using different media, including e assessment will be implemented.
- There will be greater alignment of educational philosophies, curriculum contents. Teaching-learning strategies and assessment strategies.
- There will be more of Independent and autonomous learning and greater use of e learning and blended learning g strategies
- Tertiary Educational institutions will foster greater focus on Deep Learning
- There will be the Enhancement of the Knowledge Seeking Behaviors of learners with greater opportunities for continuous professional development.
- There will be the Enhancement of Lifelong Learning and life wide learning across the life span.
- New paradigms of Leadership for learning to address the Learning and Development Needs of the Digital Natives will be introduced.
- There will be greater Mobilization of Resources to assist the hunger for

education beyond the hunger for food and abject poverty

- The passion for excellence will be championed by every teacher and quality becomes everyone's business and all learners will be nurtured to be champions of quality, internalizing the shared commitment as follows; *'I am the champion of quality for myself, my family, my community and humanity.'*

## CONCLUSION

All is not well in the education sector as all is not well in almost all other sectors. Gaps, schisms, contradictions continue to exist. Some of these older inherited problems and nascent philosophical errors are addressed or are being addressed by leaders at all levels, and, also by the citizenry, but many problems remain because they have not been adequately addressed. Despite the inertia of leaders or the inability of the people in particular societies, or, in failed nations, or, in nations at risk, to address such issues, evidence is available widely that everywhere there are commendable initiatives by international organizations, governments, civil groups, non-governmental organizations, businesses and individuals who contribute to create educational opportunities for those in need. In Malaysia, one such significant effort is Al Bukhary University which is established based on a philosophy of giving and caring for those who are in need and who would make a difference to their societies and to humanity. In the Middle East there was the establishment of WISE, and, in Europe, are organizations such as EDEN, and, elsewhere, the emergence of WERA. Cumulatively and incrementally, and sometimes, radically, leaders and societies have enabled themselves to make a difference in things which matter in education. As universities are among the most influential institutions in societies, in nations and globally, the ways of universities will influence how local and national society and the international communities and the critical mass of leadership are shaped positively, or, otherwise. Paradoxes in education exist at all levels and in all dimensions, overtly and in covertly: philosophical, technological, social, financial, structural, and professional. In the education sector, of all the paradoxes, learning and teaching paradoxes have to be addressed mindfully, for the core of power of education rest in its thinkers, scholars, teachers who have opportunities to exercise leadership for learning through the coherent alignment of profound understandings of

Education Disciplines, Curriculum, Pedagogy and Instruction, and Assessment. Beyond all these structured processes are other significant but unstructured learning processes. Such processes include non formal and informal learning, incidental learning, lifelong and life wide learning and perpetual learning, and, connections may not be made with the formal and structured learning processes. The challenge of holistic education would be to find or develop some sensible frameworks which enable learners to make meaningful and powerful connections between the formal and structured learning experiences with those other meaningful experiences in the community, in work places, in religious domains or in homes.

**\*A Special Acknowledgement of Indebtedness to Qualitative Data-Standing on the Shoulders of Giants**

The qualitative data, the streams of thoughts from philosophers and writers and researchers and scholars constitute the logic and the qualitative data for this paper. In writing this paper, we are indebted to the *anam cara*-the intellectual soul mates, who, from their life experiences and deep studies, from the best of their faculties have critiqued society and have conceptualized such notions as “*cartographers of the human purpose*”. Conversations with them enlighten our minds, and we are further intellectually challenged when we acquire insights, from their ideas encapsulated in an epithet, or in a perceptive paragraph, or in large volume treatises or books. In writing this paper, we stand on the shoulders of intellectual giants who have shaped the various flows of thoughts of contemporary civilization as we know today, the politics, economics, science and technology, thinking, cultures and education. In a paper, it is not possible to record all the exciting adventures in the empires of the mind which philosophers, thinkers and scholars enable us to build, sharpen, enhance and allow for elegant thinking, feeling and valuing. Contacts with the intellectual soul mates, even as fleeting acquaintance with the kaleidoscope of powerful ideas and ideals, allow for the acquisition of deeper perceptions, for the elevation of mind and for the appreciation of deep thought as one of the assigned and inherited destiny of Man-the *Homo Grammartikus*.

Version 3: Work in Progress

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## APPENDIX 1

### THE HIPPOCRATIC OATH (ORIGINAL VERSION)

I SWEAR by Apollo the physician, AEsculapius, and Health, and All-heal, and all the gods and goddesses, that, according to my ability and judgement, I will keep this Oath and this stipulation.

TO RECHON him who taught me this Art equally dear to me as my parents, to share my substance with him, and relieve his necessities if required; to look up his offspring in the same footing as my own brothers, and to teach them this art, if they shall wish to learn it, without fee or stipulation; and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the Art to

### THE HIPPOCRATIC OATH (MODERN VERSION)

I SWEAR in the presence of the Almighty and before my family, my teachers and my peers that according to my ability and judgment I will keep this Oath and Stipulation.

TO RECKON all who have taught me this art equally dear to me as my parents and in the same spirit and dedication to impart knowledge of the art of medicine to others. I will continue with diligence to keep abreast of advances in medicine. I will treat without exception all who seek my ministrations, so long as the treatment of others is not compromised thereby, and I will seek the counsel of particularly skilled physicians where indicated for the benefit of my patient.

### OATH AND LAW OF HIPPOCRATES

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### INTRODUCTORY NOTE

HIPPOCRATES, the celebrated Greek physician, was a contemporary of the historian Herodotus. He was born in the island of Cos between 470 and 460 B.C., and belonged to the family that claimed descent from the mythical AEsculapius, son of Apollo. There was already along medical tradition in Greece before his day, and this he is supposed to have inherited chiefly through his predecessor Herodicus; and he enlarged his education by extensive travel. He is said, though the evidence is unsatisfactory, to have taken part in the efforts to check the great plague which devastated Athens at the beginning of the Peloponnesian war. He died at Larissa between 380 and 360 B.C. The works attributed to Hippocrates are the earliest extant Greek medical writings, but very many of them are certainly not his. Some five or six, however, are generally granted to be genuine, and among these is the famous "Oath." This interesting document shows that in his time physicians were already organized into a corporation or guild, with regulations for the training of disciples, and with an esprit de corps and a professional ideal which, with slight exceptions, can hardly yet be regarded as out of date. One saying occurring in the words of Hippocrates has achieved universal currency, though few who quote it to



my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none others.

I WILL FOLLOW that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to any one if asked, nor suggest any such counsel; and in like manner I will not give a woman a pessary to produce abortion.

WITH PURITY AND WITH HOLINESS I will pass my life and practice my Art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and will abstain from every voluntary act of mischief and corruption; and, further from the seduction of females or males, of freemen and slaves. WHATEVER, IN CONNECTION with my professional practice or not, in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret. WHILE I CONTINUE to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of the art, respected by all men, in all times! But

I WILL FOLLOW that method of treatment which according to my ability and judgment, I consider for the benefit of my patient and abstain from whatever is harmful or mischievous. I will neither prescribe nor administer a lethal dose of medicine to any patient even if asked nor counsel any such thing nor perform the utmost respect for every human life from fertilization to natural death and reject abortion that deliberately takes a unique human life.

WITH PURITY, HOLINESS AND BENEFICENCE I will pass my life and practice my art. Except for the prudent correction of an imminent danger, I will neither treat any patient nor carry out any research on any human being without the valid informed consent of the subject or the appropriate legal protector thereof, understanding that research must have as its purpose the furtherance of the health of that individual. Into whatever patient setting I enter, I will go for the benefit of the sick and will abstain from every voluntary act of mischief or corruption and further from the seduction of any patient.

WHATEVER IN CONNECTION with my professional practice or not in connection with it I may see or hear in the lives of my patients which ought not to be spoken abroad, I will not divulge, reckoning that all such should be kept secret.

WHILE I CONTINUE to keep this Oath unviolated may it be granted to me to enjoy life and the practice of the art and science of medicine with the blessing of the Almighty and respected by my peers and society, but should I trespass and violate

day are aware that it originally referred to the art of the physician. It is the first of his "Aphorisms": "Life is short, and the Art long; the occasion fleeting; experience fallacious, and judgment difficult. The physician must not only be prepared to do what is right himself, but also to make the patient, the attendants, and externals cooperate.

#### THE LAW OF HIPPOCRATES

1. Medicine is of all the arts the most noble; but, owing to the ignorance of those who practice it, and of those who, inconsiderately, form a judgment of them, it is at present far behind all the other arts. Their mistake appears to me to arise principally from this, that in the cities there is no punishment connected with the practice of medicine (and with it alone) except disgrace, and that does not hurt those who are familiar with it. Such persons are the figures which are introduced in tragedies, for as they have the shape, and dress, and personal appearance of an actor, but are not actors, so also physicians are many in title but very few in reality.
2. Whoever is to acquire a competent knowledge of medicine, ought to be possessed of the following advantages: a natural disposition; instruction; a favorable position for the study; early tuition; love of labour; leisure. First of all, a natural talent is required; for, when Nature leads the way to what is most excellent, instruction in the art takes place, which the student must try to appropriate to himself by reflection, becoming an early pupil in a place well adapted for instruction. He must also bring to the task a love of labour and perseverance, so that the instruction taking root may bring forth proper and abundant fruits.
3. Instruction in medicine is like the culture of the productions of the earth. For our natural disposition, is, as it were, the soil; the tenets of our teacher are, as it were, the seed; instruction in youth is like the planting of the seed in the ground at the proper season; the place where the instruction is communicated is like the food imparted to vegetables by the atmosphere; diligent study is like the cultivation of the fields; and it is time which imparts strength to all things and brings them to maturity.
4. Having brought all these requisites to the study of medicine, and having acquired a true knowledge of it, we shall thus, in travelling through the cities, be esteemed physicians not only in name but in reality. But inexperience is a bad treasure, and a bad fund to those who possess it, whether in opinion or reality, being devoid of self-reliance and contentedness, and the nurse both of timidity and audacity. For timidity betrays a want of powers, and audacity a lack of skill. They are, indeed, two things, knowledge and opinion, of which the one makes its possessor really to know, the other to be ignorant.
5. Those things which are sacred, are to be imparted only to sacred persons; and it is not lawful to impart them to the

should I trespass and this Oath, may the reverse by  
violate this Oath, may my lot.  
the reverse be my lot!

profane until they have been initiated into the mysteries of  
the science.

## APPENDIX 2

### THE STRATEGIC MANAGEMENT DEEP AND COMPREHENSIVE LEARNING EXPERIENCE

#### The Rules

The Learning Contract

Courtesies and Ethics-Listening to Peers

#### The Catwalk

Students walk the Catwalk and are invited to be  
conscious of every step taken, of the feelings and  
emotions evoked as they walk around the class one  
by one in front of their peers.

#### The Frameworks

Making Connections

Reverse Thinking

Transfer of Learning and of Knowledge

Making Comparisons

Formulating and Asking the Questions behind  
the Question

#### The Challenge of the Art of Thinking

The beginning Thinker

The Developing thinking

The Competent Thinker

The Accomplished Thinker

The Elegant Thinker

The Elegant Thinker Par Excellence

#### Tell Me Why

The Bottom Billions

Crimes and Conflicts

#### Teamwork –Working in Groups

Sitting at a different seat with different  
neighbours every class

Looking at people, everyone in class when  
presentations are made

Sharing all materials (which are not original in  
the first place, anyway)

Vesting and Analyzing Lives at the Hypermarkets  
and Making Comparisons.

#### Clarifying Values

Plagiarism and Turnitin.

Intellectual Property Rights

Vision, Mission, Goals, Core Values

Corporate Social Responsibilities

#### Competencies

Knowledge

Skills Attitudes

Intellectual Logs

Core competencies:

Valuable Competencies, Rare and Unique  
Competencies,

Costly to Substitute Competencies, and, Non  
Substitutable Competencies.

#### Management Gurus

Rosabeth Kanter Moss

Joel Barker

Peter Drucker

Warren Bennis

#### Building Gestalt

My Fair Lady –Eliza Doolittle

12 Angry Men

Romeo and Julie across Societies and across the  
ages.

Tell Me Why

Asian Tsunami

Steve Jobs University Address

Bill Gates University Address

#### Individual and Group Presentations

Working with difficult colleagues and those  
learners are comfortable with.

#### Ask your Parents, Grandparents, Uncles and Aunties

Intergenerational Learning

#### Class Breaks (After 1 hour 45 minutes or 2 hours)

Eating Together

Toilet Break Together

#### Of Icons Signs and Symbols

Go out and appreciate the Sky, sun cloud moon,  
stars, trees and breeze

See patterns and explain

Make connections between the unconnected

Think Globally Act Locally

Think Locally Act Globally

#### Fostering of Reading and Writing Culture

Every learner is expected to read a book and write  
an annotated Bibliography and present the work to  
colleagues. In later meetings inn extended  
conversations learners are expected to make  
references to the books presented by their  
colleagues

#### First Principles

Truth, Certitude, Retrospect an Prospect, Error  
in Understanding, Trustworthiness of Senses

Consciousness, Memory. Exaggerated Realism.

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## EDUCATION IN THE TECHNOLOGICAL TRANSFORMATION ERA: IMPLICATIONS FOR TEACHING AND LEARNING, TEACHER PROFESSIONALISM, AND OF TEACHER MORALITY

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*Teaching, by virtue of the responsible nature of its task has intrinsically a claim of its own. It could be recognized and accorded the status of a profession endowed with privilege and status preserved for the exclusive guild or body of men of superior knowledge and skill bound by the spirit of coterie. The high regard in which some of the early teachers were held in estimation of the public as an image of respectability and wisdom was almost legendary.*

*Education is a service which is responsible to the well being of a progressive and dynamic society. It is an investment in the human resources of a nation...the service of a teacher is unique. He deals with the human mind which is indefinitely variable and definitely impressionable. Society cannot afford to entrust such responsible task to any but to those who have qualities and high competent to discharge that duty...*

*Education is only as good as the teacher. It would be sinful to allow deterioration of the teaching standards through any cause or whatsoever!*

### Abstract

This paper deals with some of the intrinsic aspects of teacher professionalism in the context of the current educational transformation. It argues on the need for teachers' change of attitude and strategies for technology-based teaching. Many teachers at various levels of teaching are simply using technology for technology sake. Teachers must understand the fact that technology merely represents the means to an end and not an end in itself. The idea is that in the modern educational arena, teachers must make use of educational technologies to the full potential in enhancing student learning experiences. Technology should help teachers to perform better and to achieve educational objectives. However, it must not be treated as a device or tool that would replace the teacher. The Information Age of technology has moved us into an era of instant information. The world is literally at our finger tips. However, one glance into a classroom and we would find very little has changed over the past 30 or more years. The paper concludes with recommendations on the need for change of teaching strategies to meet the challenges posed by technological development.

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### Introduction

It is apparent that one of the most powerful forces changing teachers' and students' roles in education is new technology (Esteve, 2000). The old model of instruction was predicated on information scarcity. In the past, teachers and their books were information oracles, spreading knowledge to a

population with few other ways to get it. But today's world is awash in information from a multitude of print and electronic sources. The fundamental job of teaching is no longer to distribute facts but to help children learn how to use them by developing their abilities to think critically, solve problems, make informed judgments, and create knowledge that benefits both the students and society. Freed

from the responsibility of being primary information providers, nowadays teachers have more time and responsibility to develop students' cognitive skills. Most importantly, in the new technological era, the role of the teacher is to guide the students to learn for themselves. Come to think of it, the purpose of teaching has been the same ever since: to make the students become their own best teachers. The first principle of true teaching is that nothing can be taught. No one can really teach anyone else anything, in the sense of implanting knowledge or skills in a passive student.

In the learning process, the learner must decide to investigate, think about or practice something for himself, or no amount of teaching can make any kind of knowledge 'sink-in'. As such, the responsibility for learning anything is on the part of the learner, who must first decide to become his or her own teacher before any other teacher can render help. The new role of a teacher is not an instructor or task master; he is a helper, a facilitator and guide. His business is to suggest and not to impose.

### **Teachers as Agents of Change**

Teachers play an immense role in the lives of students. A teacher has to don the mantle of a lucid communicator, a fair evaluator, an adept manager, a strict disciplinarian, a healing therapist and a skillful team leader. Moreover, at times, a teacher also plays the role of a surrogate parent, *Loco Parentis*. Thus, a teacher should possess certain requisite qualities expected of him. Teachers who exhibit professionalism, (i.e. good teachers) are also good learners; for example, they learn through their own reading, by participating in a variety of professional-development activities, by listening to their students, by sharing ideas with their colleagues, and by reflecting on classroom interactions and students' achievements. Good

teaching is therefore dynamic, reflective, and constantly evolving. Good teachers display enthusiasm for their subject and a desire to share it with their students.

Good teachers know how to modify their teaching strategies according to the particular students, subject matter, and learning environment. Good teachers encourage learning for understanding and are concerned with developing their students' critical-thinking skills, problem-solving skills, and problem-approach behaviors. As professionals, they demonstrate an ability to transform and extend knowledge, rather than merely transmitting it; they draw on their knowledge of their subject, their knowledge of their learners, and their general pedagogical knowledge to transform the concepts of the discipline into terms that are understandable to their students. In the pursuit of achieving educational and institutional aims, these teachers set clear goals, use valid and appropriate assessment methods, and provide high-quality feedback to their students.

In the light of the above view, it is emphasized that a teacher should always be a student; always willing to learn and relearn. A teacher can never truly teach unless he is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame. The teacher who has come to the end of his subject, who has no living traffic with knowledge, but merely repeats his lessons can only load the minds of the students, not enhance or develop them.

The second principle in teaching is that 'the mind has to be consulted in its growth (UNESCO, 1997). The teacher should be concerned not with what the student remembers, but what he understands (Heehs, 1989). The more that self-reliance is cultivated in the learning process, the more effective is the teaching. The whole purpose of teaching, of education, should be to help students become their own best teachers, take full control of their own learning. Instruction doesn't consist primarily of lecturing to students who sit in rows at desks, dutifully listening and recording what they hear, but, rather, offers every student a rich, rewarding, and unique learning experience. The

educational environment isn't confined to the classroom but, instead, extends into the home and the community and around the world. Information isn't bound primarily in books; with the advent of technology it's available everywhere in bits and bytes.

Students aren't consumers of facts either. They are to be treated as active creators of knowledge. Schools aren't just concrete structures made of building blocks. They're deemed centers of lifelong learning. Most importantly teaching is recognized as one of the most challenging and respected career choices, absolutely vital to the social, cultural, and economic health of our nation.

Today, the seeds of such a dramatic transformation in education are being planted. Prompted by massive revolutions in knowledge, information technology, and public demand for better learning, schools nationwide are slowly but surely restructuring themselves. However, we cannot be sure that, changes taking place, especially in the contexts of teachers' teaching styles are for the better. Leading the way are thousands of teachers who are rethinking every part of their jobs, their relationship with students, colleagues, and the community; the tools and techniques they employ; their rights and responsibilities; the form and content of curriculum; what standards to set and how to assess whether they are being met; their preparation as teachers and their ongoing professional development; and the very structure of the schools in which they work. In short, teachers are reinventing themselves and their occupation to better serve schools and students.

Traditionally, teaching was a combination of information-dispensing, custodial child care and sorting out academically inclined students from others. The underlying model for schools was an education factory in which adults, paid hourly or daily wages, kept like-aged youngsters sitting still for standardized lessons and tests. In the past, teachers followed a stereotype teaching whereby they were told what, when, and how to teach. They were required to educate every student in exactly the same way and were not held responsible when many failed to learn. They were expected to teach

using the same methods as past generations, and any deviation from traditional practices was discouraged by supervisors or prohibited by myriad education laws and regulations. Thus, many teachers simply stood in front of the class and delivered the same lessons year after year, growing gray and weary of not being allowed to change what they were doing.

In the context of professionalism, today's teachers are encouraged to adapt and adopt new practices that acknowledge both the art and science of learning. They understand that the essence of education is a close relationship between a knowledgeable, caring adult and a secure, motivated student. They grasp that their most important role is to get to know each student as an individual in order to comprehend his or her unique needs, learning style, social and cultural background, interests, and abilities.

Teachers have to be committed to relating to youngsters of many cultures, including those young people who, with traditional teaching, might have dropped out or have been forced out of the education system. The job of a teacher is to counsel students as they grow and mature, helping them integrate their social, emotional, and intellectual growth. As such, the union of these sometimes separate dimensions yields the abilities to seek, understand, and use knowledge; to make better decisions in their personal lives; and to value contributing to society.

Teachers must be prepared and permitted to intervene at any time and in any way to make sure learning occurs. Rather than see themselves solely as masters of subject matter such as history, math, or science, teachers increasingly understand that they must also inspire a love of learning. In practice, this new relationship between teachers and students takes the form of a different concept of instruction. Tuning in to how students really learn prompts many teachers to reject teaching that is primarily lecture based in favor of instruction that challenges students to take an active role in learning. Teachers can no longer see their primary role as being the king or queen of the classroom, a benevolent dictators deciding what's best for the

powerless underlings in their care. They've found they accomplish more if they adopt the role of educational guides, facilitators, and co-learners.

The most respected teachers have discovered how to make students passionate participants in the instructional process by providing project-based, participatory, educational adventures. They know that in order to get students to truly take responsibility for their own education, the curriculum must relate to their lives, learning activities must engage their natural curiosity, and assessments must measure real accomplishments and be an integral part of learning. Students work harder when teachers give them a role in determining the form and content of their schooling, helping them create their own learning plans and deciding the ways in which they will demonstrate that they have, in fact, learned what they agreed to learn.

The day-to-day job of a teacher, rather than broadcasting content, is becoming one of designing and guiding students through engaging learning opportunities. An educator's most important responsibility is to search out and construct meaningful educational experiences that allow students to solve real-world problems and show they have learned the big ideas, powerful skills, and habits of mind and heart that meet agreed-on educational standards. The result is that the abstract, inert knowledge that students used to memorize from dusty textbooks comes alive as they participate in the creation and extension of new knowledge.

Education can be used as a tool to empower the individual. Through student centered learning, students are able to see their own role in transformation. Societal change comes from the collective transformation of the individuals within that society. Empowered individuals are better equipped to question and critique societal realities and assumptions and more enabled to change their situation. Empowering education approaches individual growth as an active, cooperative and social process because the self and the society create each other (Shor, 1992). Rather than being merely in the world, individuals can be taught that

they are actually co-creators of their reality. Thus, education should best suit students as learners. The aim of free progress is to help students develop their intellectual, emotional, moral, spiritual and physical being out of their own capacities in participatory manner and at their own pace.

### **Teachers as Moral Agents**

Dedicated teachers teach not just because it is their job; but more because is their passion, and it is this passion that impels them to constantly strive towards improvement and excellence. Good teachers show respect for their students; they are interested in both their professional development and personal growth, encourage their independence, and sustain high expectation of them.

Teaching can be simplified as “a meaningful relationship between a teacher and student”. Student academic achievement and behavior are influenced by the quality of relationship teachers build with their students (Ireson and Hallam, 2005). Students must trust, respect and hold high regard for their teachers, before they develop willingness and desire to receive their instruction. Students learn about fairness, justice, integrity and honesty from their teachers. As such, it is critical on the part of teachers to model appropriate behaviours (Richmond, 2002). If students were to develop a sense of antagonism against their teachers, it will lead to a number of unwanted problems which can affect the learning environment (Wearmouth et al, 2004). Teachers must be willing to reflect and evaluate their own image as professionals, as imparters of knowledge and transmitters of educational and societal values (Carr, 1993). They must be willing to carry out a postmortem on their own positive and negative characteristics. Teachers, whether they like it or not, are bonded to the ethical nature of the profession. They must be honest, caring and fair, providing both educational instruction and appropriate role model for students under their care.

Furthermore, teachers must realize that teaching a subject matter without moral or societal value is not amounting to teaching. Every aspect of teaching must be accompanied by values, and the teacher must reflect the cherishing of such values by his/her own behavioural characteristics that can be modeled by students.

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## CONTROL STRATEGY AS AN ORGANIZATIONAL DESIGN OF SCHOOLS AND THE DEVELOPMENT OF TEACHER COMMITMENT

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### Absract

In 2013 Indonesia implemented "2013 Curriculum" for primary, junior high, an senior high schools. The development and implementation of this curriculum, included textbooks supplying and evaluation system were conducted by national government. Based on many studies in the USA reviewed by Rowan (2090), curriculum control called competence-based education produced the strongest negative reaction of any curriculum policy. Its effect is that that teachers develop a "technocratic mindedness", they define students needs in terh of test results rather than in holistic terms. The same effect may happened from the implementation of "Competence-Based Curriculum implemened in Indonesia during 2002-2005. Its worst effect is that parents give no trust to school in achieving high national test result, so they give hand to informal education institution to do that. The later curriculum was "Educational Unit Level Curriculum" (2006-2013). The purpose is to make teachers aware of their responsibility so that they have high commitment. Four studies reported that the readiness to implement the former as wll as the later curriculum was low, in terms of teachers competence to plan and evaluate learning activities and textboks supply. The present curriculum, "2013 Curriculum" is employing a new approch of teaching-learning process, mainly "scientific approach". Because of limited time to prepare the implementation and the scientific approach of teaching-learning, many teachers have not ready yet. New textbooks written in relatively short time and have not distributed in many schools make the constrain of this curriculum implementation bigger. (Notes: there are 148.142 elementary, 35.965 junior high. 10.000 senior high, and 9.000 vocational senior high public schools in Indonesia located in many different islands). The scientific approach is hopely develop a habit of scientific thinking in teachers and students. However it needs a high competence for the teachers to employ this approach. For some subjects such as Religion, Literature, and Arts, this scientific approach is not quite appropriate. The reason is that the teaching of these subjects in schools is to develop religious and aesthetic values in order make it possible for all of the subjects in the curriculum develop whole fuctioning human being. Science and values have been largely separated in modern time, and this separation has introduced a certain deep confusion in what is felt to be the meaning and purpose of education. In the beginning of the first semester this year, many techers are still unsure about their capacity to implement this curriculum. This unfortunate condition may make them feel powerless and lead to have no commitment to do their job as educators.

**Key words:** control strategy, scientific approach, curriculum, teacher commitment

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### Introduction

An analysis is needed if researchers are to evaluate newly implemented and newly proposed reforms (Rowan, 1990: 354). Last year Indonesia implemented new curriculum called "1913 Curriculum". There is a need to understand how bureaucratic controls over schooling in this project will possibly affect the work of teachers and wheather these lead to change in teachers' character, mainly their commitments to improve teaching quality.

"School improvement included the work of teacher is not done until full implementation is

achieved. Full implementation means that everyone is engaged in the school mprovement efforts at a high level" (Mooney and Mausbach, 2008; 13). However, we can predict the possible improvement by analysing the same form of strategy implemented in the past. School systems in Indonesia can be categorized as control-based since the government has direct control on curriculum, teacher performance, student achievement, etc. That is why, some research finding concerning the control strategy in organizational design of school will be presented as one of the references.

Historically, the educational reform in Indonesia can be seen from the three lately models of curriculum implemented: Competence-based Curriculum (centralized curriculum), Educational Institution Level Curriculum (an effort to decentralize curriculum), and 2013 Curriculum (centralized curriculum). It can be understood that the centralized curriculum is an effort “to strengthen the weak bureaucratic and professional controls that led organizational theorists to label school as loosely system, and a new model of organizations are needed” (Rowan, 1990: 353). Such an analysis is needed to evaluate a newly implemented reform in Indonesia, mainly the implementation of 2013 Curriculum. There is a need to infer how bureaucratic controls over schooling affect the work of teachers and whether these effects lead to changes in school community, especially the character of teachers.

The control strategy can be seen from the role of the Indonesian government in developing and implementing “2013 Curriculum”. This strategy involves the development of an elaborate system of input, behavior, and output controls designed to regulate classroom teaching and standardized students opportunities for learning and the expected result in student achievement. This strategy can be compared to the commitment strategy. “This strategy rejects bureaucratic controls as a mode of school improvement and instead seeks to develop innovative working arrangement that support teachers decision-making and increase teachers’ engagement in the tasks of teaching. The assumption of this approach is that collaborative and participative management practices will unleash the energy and expertise of committed teachers and thereby lead to improve student learning” (Rowan, 1990: 354).

#### **Research Findings on Control Strategy**

There are two focuses that can be discussed concerning the control strategy of organization in schools. The first one is about the system of controls over curriculum goals, instructional materials, and student testing. The second focus is on the controls over behaviours of school principals, supervisors, teachers, and students.

#### **Control over Curriculum**

These following reviews of studies were done by Rowan (1990) on the area of control strategy of organization in the USA schools:

Floden et al (1988) did not find a pattern of policy implementation consistent with a curriculum control strategy. Moreover, there was little evidence that curriculum policies were reinforced by other controls; teachers were neither rewarded for following district rules about texts, objectives, or testing, nor punished for ignoring them. The benefit of this study for new curriculum implementation in Indonesia may be on the consequences for teacher who really do or do not make the curriculum in practice. It could be used as one of the criteria to keep a certification a teacher has or to get a new one. However, the possibly negative effect of this policy on teacher character needs to be considered.

Based on Clune, White, and Patterson’s study (1988), state controls over curriculum affects school processes. It is reported in other study (Palla, 1984) that curriculum reform increases achievement of students on average but has little effect on the achievement of students with low grade-point average. These findings mean that a control to the development of a new curriculum that the bureaucratic has should be accompanied by other controls, mainly the process of learning in schools varied characteristics in various aspects.

Another form of curricular control in the USA is state-level competency test for students. These controls can have important effect on school processes (Rosenhald, 1987). All sample teachers altered of their instruction to conform to the content of the tests. However, these controls negatively affected the level of teacher commitment. Fewer than 25% of the teachers thought these controls were helpful.

Darling, Hammond, and Wise (1985) reported that a kind of curriculum control called competency-based education produced the strongest negative reaction of any curriculum policy discussed with teachers. Goldstein (1984) illustrates the effect of the competency-based education in shaping teachers’ thinking about instruction. Teachers

developed a “technocratic mindedness” in which they gave little thought to educational goals and instead fixed attention on the means to achieving goals. The technocratic view led teachers to define student needs in terms of test results rather than in holistic terms. There is a tendency to think of students as “products possessing a set of known and measurable qualities that teachers are to enhance”. The attention focused on means rather than in goal create problems; rising scores in basic skills areas positively related with the declining scores in writing, mathematical problem solving, and analytical reading, what we understand as thinking skills.

In the past, Indonesia also implemented competency-based curriculum. State-level competency test has also been implemented until now. The same effect seems to happen on the mindset of teachers concerning the function of instruction. The technocratic view of the teacher discussed above obviously developed. The focus of instruction is minimized on achieving high national test result, so the instructional procedures are test oriented. The condition of community makes the technocratic view of the teacher even growing stronger. Almost all parents think that the high national test score is “the goal of education”. Lacking confidence on the school competency in achieving high national test score, they ask nonformal education institutions to give a hand to do a test preparation training. That is why there are so many “test agencies” in Indonesia.

### **Behavior Controls**

Curriculum controls often emphasis on increased behavior controls. Behavior controls represent a useful supplement to curriculum controls. These controls designed to in-service training programs and incresed evaluation of teachers.

Teacher cerfication is one form of state-level behavior controls currently implemented in Indonesia. As reported by Rowan (1990: 364), in Florida and Tennese career ladder program created much discontend among techers, because teachers viewed the evaluation procedures used to place them at various position on the career ladder as

unfairand unreliable. In Indonesia, some studies found that certified teachers do not really have significantly better performance compared with uncertified ones. Furhman et all (via Rowan, 1990) suggested that locally developed career ladder may work better than centrally administered ones, in part because many of the political problems that arise from defining the nature of good teaching and allocating rewards can be handled more sensitively at the local level. This suggestion may be suitable in administering teacher certification in Indonesia, since the number of teachers as well as the number of schools are very big. They live in many different islands and the transportation from some islands to the others is not easy. However, differences among regions in Indonesia are still high in terms of human resources and capital resources. Unless these differences can be minimized, a good suggestion stated above can not be realized.

Even the local evaluation for teacher still has several weaknesses. If teachers are only observed by supervisor once or twice a year, the result will not be accurate. Consequently, the teachers themselves will not be satisfied because they view the system as unfair. So the problem of supervisor quantity and working ethos needs to be resolved. The more frequent the evaluation for teachers using the same standard, the more leverage teachers believed they had.

One of the conclusion of many research findings reviewed by Rowan (1990) is that only partly of the data confirm the notion that intensive controls over teaching damage teacher commitment in the school setting. However, the possible negative effect of control strategy on damaging teacher commitment should be taken into account. That is why a strategy that can develop the commitment of teachers needs to be discussed.

### **The Commitment Strategy**

The commitment strategy began to be implemented in the United States in 1990. The purposes of that reform are: to redesign teacher roles, to promote teacher collaboration, and to redesign school organization to achieve organizational integration.

Teacher participation in school decision making is one aspect of a commitment strategy. This strategy is based on an assumption that the hierarchical organization of schools deprives teachers of important opportunity for decision making and in turn, leads to dissatisfaction among teachers. In the other side, teacher participation in school decisions will enhance both teacher commitment and school quality. "Based on a survey, among 1.789 teches in the USA, most of them think they should have considerably more opportunity to be involved in decision making" (Rowan, 1990:369).

The commitment strategy should have a clear design because lack of clarity will lead to various patterns of implementation. This condition is potential to this strategy to be implemented inconsistently and partially in schools. Various elements of the commitment strategy, mainly school-based management, job enrichment schemes, and pattern of collegiality in school need to be combined into a single index of school organization.

The leadership is also the key element of the commitment strategy to make school effective. How best to match an organizational structure with the supperintendent's priorities and advance agenda with efficiency, effectiveness, and high level of performance? According to Schiller (2010), unless the best people are in the appropriate roles and the organization workss in a fluid, proactive responsible manner then forward progress will be curtailed".

Monney and Mausbach (2008: 13) state that a strong curriculum is the power source for improving schools. Without a rigorous and thoughtful curriculum, the work in classrooms falls short of exelence. But, more time should be spent on aligning curriculum and instruction rather than developing curriculum guides, shifted from focusing on what to focusing on how. They make a conclusion, full improvement means that everyone engages in the school improvement efforts at a high level.

The trend of implementing commitment strategy discussed above can be seen in the teacher evaluation system. For example Karwan (2014)

reported her study on alternative teacher evaluation in one US district of 23 schools. The finding is that teachers shifted instructional practices and focused on student learning. Teachers leveraged their knowledge inside district teams to spread this knowledge across school teams in an innovative model. Writing about educational policy in Malaysia, Balakrisnan informs that the Ministry of Education in Malaysia officially introduced School Based Assessment in primary schools in 2013 and secondary schools in 2012. Teachers participate from planning the assessment programme to developing assessment tasks right through making assessment judgements.

This following part is about "2013 Curriculum" just implemented in Indonesia and a possible effect on teachers commitment. The new characteristic considered as the strength of this curriculum will be discussed first.

### **School Curriculum**

Before "2013 Cirriculum" is implemented, there were two kinds of school curriculum used in Indonesia: Competency Based Currriculum" (2002-2006) and then "Educational Unit Level Curriculum" (2006-2013). The first one is an adaptation of competency based education implemented in the USA and other countries. It is a national curriculum that basically is centralized control in the development of the curriculum, especially in determining the basic competences that should be achieved by students and the evaluation system based on national test. Four components on it are: curriculum and learning outcome, classroom based assessment, teaching-learning activities, and school based curriculum implementration. Setya Raharjo et all (2003) reported their qualitative study in four pilot project schools in Yogyakarta. The obstacles of implementing this "Competency-Based Curriculum" were the lack of relevant textboos and the teachers low understanding about essessment system.

The "Educational Unit Level Curriculum" is an operational or experiential curriculum planned and implemented in every educational unit (Government Regulatin Number 19, 2005, National Standard of Education). This curriculum consisted of: educational unit goals, curriculum structure and

content, and syllabus based on local needs. The purpose of this curriculum is to make teachers aware of their responsibilities so that they have high commitment. That curriculum can be seen as the emerging trend to commitment strategy of school organization. However, some constraints arise as reported in these two studies. Wardan Suyanto et al (2006) reported that based on a survey conducted in Yogyakarta, there were 46,75% of teachers and principals who had not ever got any information about this curriculum. So the readiness to implement this curriculum is very low. The following year, Anik Ghufro (2007) employed content analysis technique to local curriculum documents, syllabus, and textbooks used in elementary and junior high schools supposed to develop agriculture and oceanary skills. The content of the documents was not quite relevant for achieving the goals.

Because of some reasons, in line with the government policy to reform education, a new curriculum called "2013 Curriculum" was developed. This curriculum was implemented partly in some schools in 2013 and will be implemented nationally in 2014. This curriculum is highly centralized in all level, from the development level until the evaluation level. The textbooks used are developed in relatively a short time. It is because a new characteristic is considered as an essential innovation in this curriculum.

Based on the Minister of Education Regulation Number 65, 2013 about The Standard of Primary and Secondary Education, it is a must to implement a scientific approach in the teaching-learning process. It is a special characteristic and considered to be the strength of "2013 Curriculum". The philosophical foundations of the scientific approach can be analyzed as follows.

The ontological foundation is that by using this approach, every student will be able to actively construct concepts or principle through these steps: (1) problem identification, (2) problem formulation, (3) hypothesis formulation, (4) data collecting, (5) data analyzing, (6) conclusion drawing, and (7) communicating findings. These steps are what we call scientific procedure. This

scientific approach is considered as a "golden bridge" for the development of attitudes [should be affective domain of learning], skills, and knowledge of the students.

The epistemological foundation refers to the instructional procedures or methods to learn all subject matters using scientific approach. Among others are problem based learning, project based learning, and discovery learning. The step of employing these methods includes: observing, questioning, experimenting, analyzing, presenting, concluding, and creating. Theoretically, these activities are potential to help students to have scientific habit. However, the teachers should have a high competence to use these methods. For students in primary school, since the intellectual development of children in this level of education is still in concrete thinking period, it is difficult for them to follow the scientific procedure. According to Piaget, the formal or abstract thinking period begins in the age thirteen, when the students enter junior high school. Another weakness of this approach is that not all of the subjects learned in school can be categorized as scientific knowledge. Religion, Literature, and Arts are not sciences but knowledge, and the ultimate goals of teaching this subject in schools are to develop religious values and aesthetic values. The scientific approach is not appropriate to teach these subjects.

David Bohm (in Sloan, ed., 1981: 25) reminded us that : the active response of a general self-centeredness in the content of science creates blocks and barriers that in effect cause evidence of incorrectness of such science to be distorted, covered up, devalued, ignored, to the point where it rarely enters the consciousness of the vast majority of mankind. What is needed to dissolve the blocks and barriers is insight, which is able to end the commitment to absolute necessity in all knowledge, including the knowledge which is involved in forming values such as religion and arts. Education will have to take account of insight. The essence of insight is such mental energy, which in effect perceives and dissolves the subtle and yet powerful forces in knowledge.

Science and values have been largely separated in modern time, and this separation has introduced a certain deep confusion in what is felt to be the meaning and purpose of education. This condition leads not only to a dangerous and irresponsible use of science but even more to a general loss of meaning in life as a whole (Bohm, in Sloan, 1981: 8).

The axiological foundation of scientific approach refers to the significance of that approach in helping students to develop their capacities and the relation between the way of using that approach and moral conduct. In other words what is the significance of using the scientific approach for the students after using it? In general, continuously using the procedure of scientific approach in their schooling makes it possible for the students to actively construct knowledge and skills or to have a habit of getting scientific finding. As stated above, for students of primary school, because of the concrete level of thinking they have, experiencing the procedures of the scientific approach can possibly make them frustrating.

What is the possible effects of the “2013 Curriculum” on teacher commitment? Since it is not easy for the teachers to implement this curriculum, especially in the instructional activities they should plan and realize in school based on the scientific approach of this curriculum, the central government should conduct a “big training” for all of the people involved. Based on the reality that Indonesia is a large country with so many islands, it is not realistic to prepare and socialize a curriculum document in a short time. Moreover to prepare many sets of guideline for the implementation of it, especially in making many textbooks for grade 1-12 ready on time, each of it in the form of a book for student and for teacher. It is almost impossible to use any existing textbook because of the scientific approach of learning being used.

Around the beginning of the first semester of 2014 academic year, many teachers are still unsure about their capacity to implement the new curriculum. They have not even got the textbooks they are supposed to use. This unfortunate condition makes it

possible for them to feel powerless that lead to have no commitment to do their job.

### **Conclusion**

The present curriculum implemented in Indonesia (“2013 Curriculum”) is employing a new approach of teaching-learning process, mainly “scientific approach”. Because of limited time to prepare the implementation and the scientific approach of teaching-learning, many teachers are not ready yet. New textbooks written in relatively short time and not yet distributed in many schools make the constrain of this curriculum implementation bigger. (Notes: there are 148.142 elementary, 35.965 junior high, 10.000 senior high, and 9.000 vocational senior high public schools in Indonesia located in many different islands). The scientific approach is hoped to develop a habit of scientific thinking in teachers and students. However it needs a high competence for the teachers to employ this approach. For some subjects such as Religion, Literature, and Arts, this scientific approach is not quite appropriate. The reason is that the teaching of these subjects in schools is to develop religious and aesthetic values in order make it possible for all of the subjects in the curriculum to develop whole functioning human being. Science and values have been largely separated in modern time, and this separation has introduced a certain deep confusion in what is felt to be the meaning and purpose of education.

In the beginning of the first semester this year, many teachers are still unsure about their capacity to implement this curriculum. This unfortunate condition may make them feel powerless and lead to have no commitment to do their job as educators.

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## CURRICULUM DESIGN AND INNOVATION IN THE TERTIARY EDUCATIONAL LEVEL IN INDONESIA: ENGLISH CURRICULUM AT MANAGERIAL ACCOUNTING, POLITEKNIK NEGERI BATAM

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### Abstract

This paper discusses the design and innovation in the English curriculum at the Managerial Accounting Study Program of Politeknik Negeri Batam. It provides the information on how the study program designs and innovates the English curriculum which then makes it different from the English curriculum of other study programs. It also gives the information on the reasons of innovating the curriculum and implementing the innovation in its relation to the mainstream subjects. All the information was gathered through interviews and then descriptively presented. The object of the research was the English Curriculum of the Managerial Accounting of Politeknik Negeri Batam as well as the syllabus and teaching guidance. The results showed that the Managerial Accounting Study Program had a good design of the English subject and made a good effort to innovate the curriculum by making the English subject compulsory for four semesters. However, the process of designing and innovating the curriculum did not involve the students.

**Key words:** tertiary education, education policy, curriculum design, curriculum innovation

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### Introduction

Some educational policies tend to impose one language of power to simplify the management and for economic purpose (Tochon, 2009). English is one of the languages that can increase the economical value of the speakers. Having good English communication skill leads the speakers to improve their employment potential. This phenomenon causes policy makers in educational area in Indonesia to put English as compulsory subject for the students so that the students will have valuable skills when they finish their study and compete in working place. Moreover, the decision to have English as a compulsory unit in a course demands professional and creative expert in order to be able to propose a language curriculum which encounters the main aim.

Graves in Hall and Hewing (2001) has outline seven components as the framework for course development process: need assessment, determining the goals and objectives, conceptualizing content, selecting and developing materials and activities, organization of content and

activities, evaluation, and consideration of resources and constraints. The needs of institution, teachers, students, and other parties are always different. Therefore, educational institution has to have good and clear framework in designing and developing the curriculum for a unit. However, the practice is sometime not as smooth as it is planned. Political, cultural, and social issues often have influence in the design and implementation of the curriculum. The implementation of the framework then often becomes the way to record the process for legalization or certification needs.

Therefore, this essay wants to discuss about the framework and design of English curriculum in Vocational institution, Politeknik Negeri Batam. This essay will discuss about the role of management, lecturers, students, alumni, and industry in English curriculum, particularly in Managerial Accounting (MA) study program. Moreover, this essay provides information on how the study program designs the English curriculum as well as the innovation which then make the curriculum different from the English curriculum at other study programs. The essay also gives information about the reasons of innovating



the curriculum, and the implementation of the innovation in its relation to the mainstream subjects. In addition, the notion related to the organization of the curriculum as well as the external influences together with the issues related to the implementation of the curriculum and the innovation of the curriculum will also be discussed.

### **Methods**

The objects of this research are the curriculum design of English subject together with the syllabus at Manegerial Accounting, Politeknik Negeri Batam. The information is gathered from those two objects which will be supported by the information from the head of Managerial Accounting study program and the students through the questioner.

All the information will be analysed to see how close the process of English curriculum design and innovation at Manegerial Accounting to the theories about them.

### **Findings**

#### **Curriculum Design at Politeknik Negeri Batam**

As a vocational higher education institution, Politeknik Negeri Batam (Polibatam) offers courses which are purposed to produce skillful graduates in their field. There is equal ratio between practical session and theoretical one. Polibatam has four departments with seven study programs. First, Mechanical Engineering department. It has one study program, Mechanical engineering. Second, Electrical Engineering. It has Electrical Engineering and Mechatronics study programs. Third, Informatics Engibneering. It has Informatics, and Multimedia and Networking study programs. Last, Business Management which has accounting, Managerial Accounting, and Business administration study programs.

English as a unit which is compulsory for the students but not the core unit which is designed based upon the specification of each department. The central government make this subject to alwaysbe included in every subject at tertiary level of education in Indonesia. However, in this case, each study program has authority to design the English curriculum and syllabus. It is decided in the

gradual meeting of the study program conducted prior the new semester, attended by all lecturers in that department. Moreover, in the meeting, the lecturers also can determine the number of English units.

Management policies about curriculum contains that curriculum evaluation is committed once in three years. There may be some units withdrawn and some new unit added to the new curriculum. The evaluation is normally referred to the current national policies as well as the needs of industry as the user of the graduates in the future. The management committed a research (questionnaire) to industry in Batam region, as well as the questionnaire to the alumni. The questionnaire contains information about the needs of industry from the employee (related to skills in those four departments) as well as the feedback from the alumni related to the units taken in their study in their relation to the implication in working place. The result from the questionnaires is used to see whether the current curriculum can meet the needs of industry or it needs to be improved as long as the improvement does not contradict to the current national policies about vocational higher education. In other words, the evaluation of the curriculum committed once in three years is regarded to the units offer to the students. Moreover, curriculum regarded to the content of each unit is always evaluated every year. This yearly evaluation is purposed to add new or current issues related to the unit as the content.

#### **English curriculum Design and innovation at Managerial Accounting Study Program**

MA study program was established in 2011 at Politeknik Negeri Batam. Therefore, all the curriculums in the program was designed and settled within the year.

The curriculums are designed based upon the survey about the needs of the industry in Batam together with the consideration of graduates competences. The designing procedures are not only for mainstream subjects but also for English one. In order to meet the targeted output, especially, for English competence, MA study program not only has English as general subject,

which is normally given for one semester, but English is given for four semesters with total 56 sessions. In order to go with the policy of Politeknik Negeri Batam, the content of syllabus of every subject is evaluated every year to encounter whether improvement or changes are needed.

Different from other study program, Managerial Accounting has English subject in its curriculum for four semesters. English subjects are designed to be general English class and ESP class.

English 1 and English 2 are English as general subject which is about General English grammar and conversation. In semester three and four, the student will get Business English 1 and Business English 2 as English for specific purpose (ESP).

In Business English 1, the students learn spoken business communication. This subject is design to be Business English Presentation class. The student are taught how to be a good presenter in English and how to have intereting and informative presentation.

In addition, in Business English 2, the students learn written business communication. This subject is design to be Business English Corresspondence class. The students are taught how to communicate writtenly in business field. They get information and knowledge on how to write and reply request letter, quotation letter, purchase order, invoice, letter of payment, complaint letter, recommendation letter, termination letter, testimony letter, etc.

Having English 1 and 2 and Business 1 and 2 is underpined by the principle reasons of designing the English curriculum, that is, to provide the graduates with good English competence and to meet the needs of industry as well as to help the student to succeed well in understanding the mainstream subjects since most of the textbooks of core units are written in English, therefore the students need to be able to understand the content of the book to be success in the unit. Moreover, when the students complete their course and become jobseeker, English is one of the

tests given in the written test, before they come to the interview session which is also in English. Therefore, the students need to have good ability in general English communication whilts the knowledge of business documents helps them to get easiness in doing their job if the are working in the administrative level.

The decision to have four English subjects is not only the personal idea of the head of MA study program but it is the result of lecturers' meeting and workshop, the survey from industry, as well as the input from expert from other universities/ colleges.

As one of the study program in vocational field, this subject is delivered twice a week. First meeting is the theoritical sessions (100 minutes), and the second meeting is for practical session (100 minutes). In order to link the topics offer in the syllabus with the need of industry, pratisationer from industry is invited to share knowledge and information which they apply in their company related to the topics gathered by the students in the classroom. The invited lecturers from company is gradually give the lectures once per semester, especially for Business English 1 and 2.

The syllabus is always evaluated in the following academic year. Therefore, the record and report related to the implementation of the syllabus from English lecturer are needed because it will be the base in evaluating the content of the unit. Beside the record, the questionnaire from the students together with the lecture's content from invited lecturer from company also contribute to the change or improvement of the content of the unit.

Just like other units, English is set for 16 weeks, 14 weeks for class sessions; 1 week for mid-term test; 1 week for final exam with total 28 meetings (14 meetings for lecture and 14 meetings for tutorial (practical)). The total students are about 300 students. However, it has only one permanent English lecturer which is insufficient to handle all classes. Therefore, to cover all classes, part-time English lecturers are hired. One class consists of 30 students. This is quite large for language class, and

the teacher has to be creative in delivering the subject in order to reach the main goal as well as eliciting the participation from the students.

#### **English curriculum/syllabus and its mainstream at Managerial Accounting study program**

As it is stated above, English is just additional unit but compulsory at Politeknik Negeri Batam, however, English then become core subject in Managerial Accounting Study Program in form of ESP. The ESP units are designed to be English for specific purpose which is not specifically connected to the knowledge gathered by the students in the mainstream (core units) such as accounting managerial, business communication, financial report, etc. Through this unit, students learned how to write business documents in English. This is not a hard task and exercise for some students but still become nightmare for some others even though they have got basic knowledge in two English subjects in semester 1 and 2. There are still a lot of students who are low in English proficiency which then become barrier for them to be fluent in writing the documents.

#### **English Subjects and Students Perceptions on It**

Most of the students who are now at third year or semester six feel that their English is not good and they still feel afraid to try to communicate in English. The condition where General English is normally offered in semester 1 and semester 2, while the students have the course for six semesters, also commented as the reasons which contributes to the failure of mastering English communication. There are only limited number of the students who are able to communicate well in English when they have been in semester six.

Besides having afraid to try, most of the students also claim that they forget many English vocabulary since they never use the language in their daily activities. The only moment to use their English is when they watch movie with English subtitle. The English input in two meetings (200 minutes) a week is also another reason given by

the students which lead them not to work well with good English spoken and written abilities.

#### **The theoretical approach in teaching method**

English 1 and 2 are underpinned by half-traditional grammar approach and half-communicative approach. The topics are about common English tenses used in Indonesian contexts such as *present simple*, *present continuous*, *past simple*, *past continuous*, *present perfect*, *past perfect*, and *future tense*. The students learn the theoretical principles on how to construct a sentence in English structure. Then in the second meeting of the week, they have tutorial session, where the students usually work in pair or in small group to prepare a small talk related to the topic. The tasks are normally a kind of telling a story or short conversation: daily activities, unforgettable memory, holiday planning, etc. The teacher leads the class to make sure that all students participate and try to practice their English.

Moreover, Genre based approach underpins the design and material in Business English 1 and 2. Students are taught English for specific use. The specification depends on the course. In addition, communicative approach is still applied in this unit. The class is organized to be more student-centre even though they have not got prior knowledge about basic principle in business speaking and writing.

Even though the focus of English 1 and 2 are English grammar or general English, it does not mean that the students are only listening to the explanation of the teacher about English rules. In this case, teacher does not solely teach the principle rules of English grammar because all tenses and other grammatical rules have been learnt at school level. Therefore in lecturing session, the class can still become student-centered because teacher does not present the explanation but recall the explanation from the students. The role of the teacher is to clarify if the explanation given by the student is not on the right track. The same practices are also applied to Business English 1 and 2 subjects.

## Discussions

English curriculum Design and innovation at Managerial Accounting Study Program

As a new study program in Business Management department of Politeknik negeri Batam, MA study program tries to appear as different program, especially in English subjects. In its initial design of English curriculum designs, the study program set the subjects to be given in four semesters with two semesters of general English and the other two semesters with Business English. MA study program has also provide the syllabus for the subjects. It means that the educators in this study program understand that they need to have procedures and principles to be implemented as subjects to be taught to the students. The understanding and the action confirms that the theoretical claims about curriculum definition asserted by some researchers. Nunan in Yilmaz (2011) defines curriculum as the principles and procedures to be planned, implemented, evaluated, and managed for an educational program. Moreover, McKeman in Al-Murabit (2012) understands curriculum as a recent concept used to describe courses of study at universities and schools.

As the policy at Politeknik Negeri Batam states, the curriculum is evaluated in every three years but the content of the syllabus can be reviewed every year. This also committed in MA study program. The overall curriculum evaluation is not yet committed since the study program is just got three years now. However, the reviewed and change to the content of the syllabus is always committed every years. The change is purposed to develop the subject to always meet current needs of industry or other stakeholders.

This step seems to be good action since the fact that the technology is rapidly changed cannot be avoided. McKeman in Al-Murabit (2012) supports that the rapid and continuous change in technology, culture, required life skills and knowledge necessitate curriculum development.

At the beginning the curriculum design and innovation in English subjects in this study program can be said better try than other study program

because this program commit to have more English classes. According to Brown in Hall and Hewing (2001), there are five facets in innovation paradigm: compatibility, relative advantage, complexity, trialability, and observability. He adds that the compatibility of the new idea with current ideas and with client needs (teachers and learners) affect whether the new idea is adopted. Moreover, the complexity and the advantages of the new idea should also be highly considered. The idea should derive from observation.

Referring to the curriculum innovation in MA study program, the decision to have English for four semesters with two ESP subject reflects that the design of the English subject base on two facets. They are relative advantage and observability. The decision is made base upon the current trend in job vacancy ads. Most of the vacancy ooffer require English ability. Therefore, the study program decides to give more English subject in order to give the students chance to learn and practice their English. Moreover, the ESP is purpose to give knowledge to the students in order to be able to communicate well spoken and written about business topics. The knowledge and capability are the relative advantage expected after having those ESP.

In addition, the decision to have more English subject in the study program also explains questions such as *who adopts what, where, when, why, and how*, that are proposed by Cooper (in Markee, 2001) as another framework for innovation in language teaching. The study program seems understand well who, where, when, why, and how the innovation apply. The innovation is for the betterness of the students' English and business knowledge. It is offered since the beginning of MA establishment.

The design of the syllabus which provide additional tutorial class is meant to encounter the needs of giving more times for the students, particularly to give chance to practice more in the classroom. Altman in Sarwar (2010) views that basic tenets that characterizes language teaching in individualization concept for large classes are a syllabus that meets the needs, abilities, and interests of each learner; personalized goals, means,

and expectations for learners; teaching method tailored to the needs of the learners.

Teaching language need flexible method because the class atmosphere tends to change, the personal condition and ability of the students also change. Those conditions lead the innovation in the classroom itself. Teachers are allowed to have different way or method in teaching (they can bring the students to library or outdoor study as well as they can change the materials or catch up certain topic to give more time for other topic. Damanpour and Evan in Hadley (2006) identify the creativity of the teacher as process innovation because teacher finds new things in the manner which a situation is perceived whilst the action to change the material or catch up the material as product innovation since the teacher presents new things or materials. In addition, the the quality of foreign language teaching is another aspect to be reviewed as practical activities in curriculum development which aims to improve the practices of foreign language teaching (Richards in Yilmaz, 2011).

Furthermore, the purpose of the curriculum in MA study program is too ideal. It is too hard to reach with only two units of general English within 2 semesters. Most of the students feel that their English is not good and they still feel afraid to try to communicate in English. The condition where General English is normally offered in semester 1 and semester 2, while the students have the course for six semesters, also contributes to the failure of the design itself. There are only limited number of the students who are able to communicate well in English when they have been in semester six. The English input in two meetings (200 minutes) a week does not seem to work well to produce graduates with good English spoken and written abilities. Moreover, new students have different level of English proficiency when they register as new students. For them who are from low level of proficiency, learning English for two semesters with limited time is not enough to have good language acquisition. On the other hand, the availability of Business English as ESP subject has been felt as units which give good knowledge by the students. They agree that the two units are not enough to improve their English communication skill but the units give

knowledge and open their minds on business documents. On the other words, the ESP design is able to meet what the study program wants from the units.

Waters and Vilches (2005) convey that Innovations have often been conceived of in idealized rather than localized terms, and the primary focus has tended to be on the design of the innovation product rather than the management of the implementation process. This claim seems to be true in the way curriculum is evaluated and innovated in MA study program. The focus of the curriculum innovation, particularly in English ESP unit, is more on the ideal form of output which is not supported by adequate process planning to achieve the goal.

Rogers in Hadley (2006) adds that innovation succeed when they are: advantageous to the end users; compatible with earlier educational practices in the institution; simple to understand and utilize; easy to try and easy to backward from; visible to all the stakeholders. When we look at the English curriculum design in MA Study Program, it contains the notion of advantageous skills for the students as students and students as graduates as well as it is compatible with the present educational practice but it does not seems visible to all stakeholders.

#### **The role of Teacher as a lecturer, observer, and facilitators**

Teachers are another component who contribute to the innovation process in English subject, especially dealing with the content of the syllabus. They are the observers. They are ones who know more about the learning habit, and learning achievement of the students. In the classroom, English teachers are only lecturing the student but also to facilitate, assess, and direct the students. Rea-Dickins & Gardner (2000) assert that the main responsibility of teacher is related to curricular subject and English language use. This might be a challenge for English lecturers who teach the two business subjects. All of them have got Linguistic educational background. They have knowledge on how to teach language (English) but they have responsibility to guide the students to be able to

discuss business documents principles and activities in English.

The role of teachers in the implementation of the new curriculum is important because they are the key players in promoting and implementing the innovation in syllabus design other innovation process (Markee in Hall and Hewings (2001). For this reason, the head of MA study program assigns a senior lecturer to be the coordinator of the unit and has responsibility to design the syllabus, manage the other lecturers who will teach the unit, as well as provide tutorial to other lecturer if it is needed.

In order to enrich the knowledge of the teacher as well as to be able to work well with the innovated curriculum, English lecturer (normally the coordinator) is gradually sent to have short training at least once a year. It can be concluded that the process of innovating the curriculum or improving the content of the curriculum in general always based on the needs of the teachers and learners for better achievement in the future. Even though there are still some aspects ignored in the process of decision making for the curriculum innovation.

Referring to language learning theory, what happen during the learning process in English 1 and 2, Business English 1 and 2 are closely related to Input-interaction-output (IIO) model introduced by Gass (Block, 2003). Prior knowledge of the students contributes to high participation of the students. The active participation can also become input for other students which influence the cognition. In this stage, the teacher should be able to find ways to accelerate the students to actively participate in the class discussion. As the results, the students is going to more familiar with English practices.

### **Gap between Policy and Practice**

Gaard, Arif & Scott in Al-Murabit (2012) argue that it is much easier to introduce new curriculum or suggest ways of changing it than to implement such suggestions or to integrate different elements of curriculum into one coherent pedagogical package. In other words, changing the content and organizing it to meet the market needs is not difficult but to implement the change is not always as easy as to change it. MA study program finds the

implementation as the problem as well in the program. Eventhough the content of the syllabus is always be reviewed and change based on the industries and stakeholders need but the target of the English subjects is not yet close to what it is expected. The output can be seen from the comments of the students who are now in semester six. The students had got four semester English subject in total of 128 sessions or equals to 107 hours. Most of the students are still in low level of English communication ability an only small number of then can communicate well in English. This can be proof that the implementation of the curriculum design and innovation as well as the evaluation and changes are not yet effective.

Further more, since the main aims of curriculum development is to make better programs and meet the needs of the students as it is stated by Brown, Graves, Nunan, and White in Yilmaz (2011). MA study program need to find the solution for the betterness of the curriculum or syllabus implementation. The current condition of the semester six students' English ability seems not only as the ineffective implementation of the curriculum but can also the gap built from the beginning of designing the curriculum. As the information given by the head of the MA study program, the designing process encounters the idea from all lecturers, the survey from industries, and input from experts from other universities. It is clear that the needs of the students are understood based upon the perspective of those three elements. In fact, the students themselves are not fully involved.

Brindley, Kaur, Nunan, and Xenodohidis in Yilmaz (2011) tells that in order to design an efficient curriculum, curriculum developers need to know about learners' needs, for example their objectives, language attitudes, expectations from the course, and learning habits. Yilmaz (2011, p.77) adds that 'evaluation is an important part of curriculum development and student perception is an important source for evaluation. Also, many researchers have focused on student needs and determined the effectiveness or success of the program depending on how much those needs are met.

The design and innovation of English curriculum seems also face problem in the implementation regarded to the size of the class. The normal number of students in a class are about 30 students. In fact this is a big class for language learning class. Here, we can find that curriculum policy and the practice in the classroom is not running as what it is expected. Big number of students is a problem for teacher to run the class. Teacher great creativity is needed in organizing such big class to have good practice. Elmore and Sykes in Wang (2010) find that there is an incongruent and complexities relationship between curriculum policy and the practice. According to Bekalo and Welford in Wang (2010) adds that it is often exist a discrepancy between what was intended and what is enacted. Therefore, the policy makers, administrator, and teachers should find ways and win the challenges in order to meet the target of the curriculum design and innovation (Connelly and Lantz in Wang, 2010).

#### **The external influences and clashes in the curriculum/syllabus**

The design of the curriculum in Managerial Accounting study program is highly influenced by the need of industry and the need of the institution. Industry needs employees with good English communication skills, written and spoken. On the other hand, the institution needs to have well recorded evidence for accreditation purpose as well as quality certification.

The expectation of the curriculum is too high to achieve even though the students have been given four units of English. The main obstacle in getting the aim of the curriculum is the environment. English is taught in the place which has no access to English speakers except the teacher. The curriculum expects the student to be able to communicate and share their idea well in English but the only time for them to access the language is limited to 200 minutes a week in the class room.

Another issue is related to the teaching materials. The main resource of English teaching-learning process is the module compiled by the teacher. In addition, teacher cannot also use additional online material in the classroom because classroom is not provided with internet line. There

is 'wi-fi' facility but the band is not strong enough to be used for quick browsing. Uploading the link of online material in e-learning of each unit cannot help much because most of the students do not have internet network at home.

Therefore, the development of the curriculum seems to be a juggling act for changing agents as they consider the various issues and stakeholders within their educational environments (Nunan in Hadley, 2006).

Moreover, cognition and Social Factors are known to contribute well in Language Learning (LL). Input is important in second language learning because the acquisition occurs through the noticing the incoming data which then be related to the past knowledge of the learner. The prior knowledge helps the learner to notice the input better. In other words, prior knowledge allows the students to have more comprehensible input.

Students which cannot immediately participate in the classroom activity do not mean that there is no intake during the process of the learning. In this case, learners may store the incoming information. The memory will sometimes recall for future needs.

Other notions which are also significantly contribute in second language learning process are 'task' and 'negotiation for meaning' (Block, 2003). Social aspect of learning language is greatly implied in those two processes. Through tasks learners are situated into information exchange. In addition, tasks are designed for a particular goal, detailed procedure, target-touched content, as well as the outcome expectation; therefore task can facilitate the learners to have better output. Related to the activities in the classroom, task can be considered as integration between inputs, interaction, and output because in a task, teacher and learners have input, action, outcome, feedback as well as monitoring to the progress of the learners. Furthermore, a task is also a media for negotiation for the meaning in getting the understanding for the students. In the task, teacher can also monitor and clarify the understanding of the students. In other words, task challenge the ability of the students to be engaged in the activities and conversation in the

class. Task allows confirmation check, comprehension check, clarification request, and lexical substitution to happen. The interaction during the task contains information exchange between teacher and students and student and student.

Based upon the socio-cultural perspective, language and communication are regarded as the part of identity and culture because using language in communication is meaning transfer. We cannot separate the meaning with the culture and identity. Language makes group of people differ from others. Block (2003) contends that socio-cultural, pragmatic competence and learner's identity are shaped through interaction in many contexts. A

Furthermore, curriculum is an external factor that greatly influences the language learning, particularly learning additional language because people normally learn the language in formal setting. When the curriculum does not encounter the needs of the learners, there language acquisition will hardly take place. Furthermore, the students who come from culture which has lower status than other culture in which the language is learnt tend to have slower progress. The students are mostly shy to actively participate in the classroom activities. Last, there is significant advantage to have opportunity to interact with the native speakers of the language, within and outside of the classroom. This access allows the learners to have correct linguistic model for the language they learnt.

### **Conclusion**

As higher education institution, the curriculum is not designed by central government. Institution has authority to decide and design its own curriculum. At Politeknik Negeri Batam, management does not get involves in deciding and designing the curriculum. The design is done in department level. Each department has freedom to manage the design as well as the content of the curriculum.

Managerial Accounting study program decide to have four semester English Subjects. Two semester for general English and the other two semester for ESP subject. Given more English

subjects is expected to resulted graduates with good English competence and knowledge on business documents. The condition of the semester six students who are notably still low in English communication ability proves that the practice of the curriculum design and the innovation is not yet fully resulted as what it is expected

On one side, MA study program has got good step of designing and innovating the curriculum by involving teachers and students in the process, but on the other side, there is obvious gap between the needs of institution, department, students, and industry as the end user. The needs of the students are not taken account from the beginning the curriculum of the English subject designing. When the study program is decided to have English for four semesters, the expert in language acquisition as well as the students are also not included to contribute idea about how many English subjects are needed. In addition, the notion of class size is another problem which results the gap between curriculum policy and the practice. Having around 30 students in a class is not an easy task for the teacher to organise in the process of getting the language target.

Therefore, the research about the truly needs of management, teacher, students, and user such as industry is valuable to be committed in order to get clear pictures about the needs of each parties which then can be used to draw a line to encounter all the needs. It is not the only the decision maker in determining what to have in the curriculum. In addition, the research on the role of teachers in succeeding the curriculum as well as to minimize the gap between the curriculum and the practice is needed to be clarified in more details.

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## **CURRICULUM 2013 IMPLEMENTATION AS A CHANGE IN ORGANIZATION (A CASE STUDY IN SMP NEGERI 2 DEMPET DEMAK)**

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### **Abstract**

This paper describes the stages of the organizational changes implemented in SMP Negeri 2 Dempet Demak in the implementation of Curriculum 2013 and the obstacles. The theory of Kurt Lewin change - Unfreezing, Changing, and Refreezing – was used. The results obtained indicated that in the the Unfreezing stage phase of the changes made by SMP Negeri 2 Dempet Demak, the principal disseminated the change of curriculum to all school members and motivated them to make the changes. In the changing stage, all of them implemented Curriculum 2013 in the learning process. In addition, the principal diagnosed the existing barriers and tried to find a solution. In the final stage, refreezing, the principal strengthened the implementation of the curriculum by monitoring, evaluating, and providing feedback on the curriculum changes. The obstacles in the implementation of Curriculum 2013 are that some of the school members were not aware of the changes and the lack of adequate infrastructure for the implementation of the new curriculum.

**Keywords:** *Curriculum 2013, Change, Kurt Lewin Theory of Change*

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### **Introduction**

Change is not a unique property of the social reality we see around us. In fact, the social reality is constantly changing and this is not experienced as something strange. The social reality, in turn, consists of organizations. If a group of people organize themselves for some purpose, an organization is born. Whether this group of individuals has organized itself to run a company which manufactures a certain product or for social purposes (friendship, charity, etc.), the most important fact is that people are subjected to numerous kinds of organizations in their daily life. Each person organizes part of his or her life, and the remaining part is organized by other forms of organizations (Hann, 2006)

In modern life, faced with challenges of very quick educational changes and it is sometimes difficult to predict. Thus, every educational organization requires to be able to have an ability to anticipatory and adaptive to a wide range of possibilities, as a consequence of the change. Schools, as lowest level organization engaged in educational services will be faced with the challenges of change. Change of leadership, the publication of the new curriculum, the development

of school buildings are examples of planned changes while the natural disasters that might be fall the school is an example of unplanned changes.

The school in ability to anticipate and adapt to changes will not survive and it might disappear swallowed by the change. Organizational change is always difficult because behavioral patterns must be completely rearranged. This aspect will result a tendency to resist the change. An organization can be successful if it can make changes to face competition. It must be smart and accurate. It is able to develop an innovative will and it is always ready to face struggle competition. However, it is not easy to think, because of the changes made by the organization must be done through a variety of thought and consideration in advance. Change means to make something different in the past, present, and future. To realize the plan changes, it must use a mature and consideration. The background of a change in the organization is the ability of the organization to survive in the high competition and always dynamic of both internal and external factors. In other words, if an organization does not make changes, it will certainly have difficulties, disorientation, stress, might even not be able to survive. A change makes every

organization has become imperative, including the components of competent, a necessity or obligation that must be done to raise the fighting spirit to survive and be able to face the competition.

SMP N 2 Dempet is an undergoing organizational change. Changes occurs in the school now is the implementation of 2013 Curriculum policy. Changes in the new curriculum is a government policy as a complement old curriculum was radically policy. Policy implementation in schools will surely affect change all elements of the school. A lot of questions asked from the teacher or school staff, why the curriculum needs to be replaced and the target as well as the differences between both the standard and curriculum or why SMP N 2 Dempet have to be the piloting to implement this new curriculum. It is a normal and reasonable respond. The school component would rather conduct in former and comfort able condition. To solve the problems the principals as the agent of change need to understand, anticipate and manage as well as to determine solution, so it the confusion within the school community will not appear. Early stages of the change process play a very important role and successful in supporting rolling a change. In making a change, the school activities plan goal-oriented.

In this study, it will subscribe to the theory of Kurt Lewin change. Kurt Lewin stated that the change occurred because of the emergence of pressures on organization, individuals, or groups. Kurt Lewin change theory and Lewin's three stages model is very much a significant part of change management strategies for managing change in the workplace in the 21<sup>st</sup> century. This change management model was developed during the 1940's and the concept of 'Unfreezing-Changing-Freezing' still remains very relevant today. Kurt Lewin's change management model is a fantastic change model for understanding the basic concepts of a straight-forward change management process. How it works today as a key part of business improvement and successful organizational change initiatives. This theory focuses on the statement "why ". Why individuals, groups, or organization change. The study wanted to know how the change can be managed and produce something. Lewin

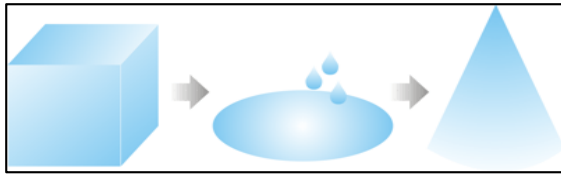
found that driving forces will be faced with resistances to change. Changes that might occur by strengthening the "driving forces" that, or "weaken" resistances to change". The Kurt Lewin model was developed to summarize what Kurt Lewin believed were the basic steps in good planned change. Lewin said that to manage an organization to change, we should create compelling and motivating reasons to change (unfreeze). Then implement and install the necessary changes (transition) to the way we wish for things to be. Then aim to stabilize the operation (freeze) at a better and /or higher level of performance. This model works whether the changes are strategic and incremental or reactive or anticipatory change. There is a very broad selection of strategies for managing change in the workplace that management can select from to achieve successful organizational change. The Kurt Lewin three stages model provides an outline that assists us to visualize, plan and manage each of the stages of change. Each stage of the Kurt Lewin change theory as being able to be planned, as implementable, and as auditable for achieving successful change management program implementation and business improvement results. The problems of this study are how the stages of the organizational changes implemented in the implementation of 2013 Curriculum and what obstacles in the implementation of 2013 Curriculum in SMP N 2 Dempet. The purpose of this study are to know the stages of the organizational changes implemented in the implementation of 2013 Curriculum and to find obstacles in the implementation of 2013 Curriculum in SMP N 2 Dempet.

### **Method**

This research method used a qualitative descriptive approach. Subjects were school principals, teachers and students of SMP N 2 Dempet, and implemented in March 2014. Methods of data collection were interviews, observation, and documentation.

This study uses the theory of Kurt Lewin Change. Kurt theory reveals that the change can be divided into three stages, namely unfreezing, changing, and

refreezing (Lewin, 1951 from Lancaster, J., Lancaster, W. 1982). Such changes can be described as follows:



### 1. Unfreeze

This first stage of change involves preparing the organization to accept that change is necessary, which involves break down the existing status quo before you can build up a new way of operating. Key to this is developing a compelling message showing why the existing way of doing things cannot continue. This is easiest to frame when you can point to declining sales figures, poor financial results, worrying customer satisfaction surveys, or such like: These show that things have to change in a way that everyone can understand. To prepare the organization successfully, you need to start at its core – you need to challenge the beliefs, values, attitudes, and behaviors that currently define it. Using the analogy of a building, you must examine and be prepared to change the existing foundations as they might not support add-on story's; unless this is done, the whole building may risk collapse. This first part of the change process is usually the most difficult and stressful. When you start cutting down the “way things are done”, you put everyone and everything off balance. You may evoke strong reactions in people, and that's exactly what needs to be done. By forcing the organization to re-examine its core, you effectively create a (controlled) crisis, which in turn can build a strong motivation to seek out a new equilibrium. Without this motivation, you won't get the buy-in and participation necessary to effect any meaningful change.

### 2. Change

After the uncertainty created in the unfreeze stage, the change stage is where people begin to resolve their uncertainty and look for new ways to do things. People start to believe and act in ways that support the new direction. The transition from unfreeze to change does not happen overnight: People take

time to embrace the new direction and participate proactively in the change. A related change model, the Change Curve, focuses on the specific issue of personal transitions in a changing environment and is useful for understanding this specific aspect in more detail. In order to accept the change and contribute to making the change successful, people need to understand how the changes will benefit them. Not everyone will fall in line just because the change is necessary and will benefit the company. This is a common assumption and pitfall that should be avoided. Time and communication are the two keys to success for the changes to occur. People need time to understand the changes and they also need to feel this can require a great deal of time and effort and hands-on management is usually the best approach.

### 3. Refreeze

When the changes are taking shape and people have embraced the new ways of working, the organization is ready to refreeze. The outward signs of the refreeze are a stable organization chart, consistent job descriptions, and so on. The refreeze stage also needs to help people and the organization internalize or institutionalize the changes. This means making sure that the changes are used all the time; and that they are incorporated into everyday business. With a new sense of stability, employees feel confident and comfortable with the new ways of working. The rationale for creating a new sense of stability in our every changing world is often questioned. Even though change is a constant in many organizations, this refreezing stage is still important. Without it, employees get caught in a transition trap where they aren't sure how things should be done, so nothing ever gets done to full capacity. In the absence of a new frozen state, it is very difficult to tackle the next change initiative effectively. How do you go about convincing people that something needs changing if you haven't allowed the most recent changes to sink in? Change will be perceived as change for change's sake, and the motivation required to implement new changes simply won't be there. As part of the refreezing process, make sure that you celebrate the success of the change – this helps people to find closure, thanks them for

enduring a painful time, and helps them believe that future change will be successful.

### **Result and Discussion**

The background of the need for change in the curriculum according to Education and Culture Minister Muhammad Nuh that amid the changing times, the education system in Indonesia must always follow suit. The 2013 Curriculum development is expected to be the answer to improving human resource capacity in the face of a changing world. Development of 2013 Curriculum has been a long process and analyzed so that the time presented to the public in order to be able to give a more perfect view. With all its consequences, changes in the curriculum that will begin in 2013 to do if do not want the quality of Indonesian human resources left behind. SMP N 2 Dempet selected by the Department of Education, Youth, and Sports as a school piloting the implementation of 2013 Curriculum. Of course this creates a change in the school, which affects both the methods of learning, methods of assessment, the necessary infrastructure, and even change the mindset of the teachers in delivering materials to conform to the standards set in the 2013 Curriculum. The issue is when people ask what the difference between the curriculum and standard is. The standard, it is the curriculum. Though standard and curriculum are distinct entities. Standard is what should be achieved while the curriculum is the way how to achieve that standard. Therefore, needs to be revised. Changes to the things that are fundamental but does not change the entity level of curriculum education unit. The most important change in the curriculum is to integrate the character of the nation as a base strength as a nation of self-enhancement and competitive nation. He emphasized in his presentation that there are standards in curriculum content, in order to avoid misunderstandings it is no longer standard term competence but modified so core competencies (Media Indonesia, 2013: page 5). Below are the steps being taken by SMP N 2 in Dempet to face a changes in 2013 Curriculum in which adopted the methods of Kurt Lewin:

#### **1. Unfreeze**

At this stage the Principal as a agent of a change communicate to all school components that the school will be piloting the implementation of the 2013 Curriculum in and they realize that they need change it to seek a better purpose. The principal gives motivation and understanding to the school community to be ready to accept the change and gave a powerful stimulus to accept the change. The Principal expected that all of the school components will produce concrete guidelines on roles that all stakeholders at both national and local levels can play for the successful implementation of the 2013 Curriculum. Principal asks all the school component to gain perspective on their day-to-day activities, unlearn their bad habits, and open up to new ways of reaching their objectives. Basically, the current practices and processes have to be reassessed in order for the wheels of change to be set in motion. The principal expects all the school components are ready to implement the 2013 Curriculum.

#### **2. Change**

The Principal diagnoses problems appear, especially teachers who are not yet ready to face the 2013 curriculum as a change. They still maintain the "Status Quo" meaning that they are still using the old Curriculum models, they assume that the old curriculum needs to be revised yet. Furthermore the Principal seeking a way out that is to attend the seventh grade teachers in the 2013 curriculum training. While for the eighth and ninth teachers, the school invited resource persons in the 2013 Curriculum to conduct training activities. Besides, the school also provides books supporting the 2013 Curriculum. With a lot of training, it is expected the "Status Quo" into a new phase that is willing to accept the changes. The Principal ensures to all teachers and all school component the benefits of the new curriculum and how the Curriculum will affect everyone in school management. The principal also provide plenty of options for employee involvement, have line managers provide day-to-day direction, and involve the school committee in the process of change. Unfortunately, some people will genuinely

be harmed by change, particularly those who benefit strongly from the status quo. Others may take a long time to recognize the benefits that change brings. You need to manage these situations.

### 3. Refreezing

At this stage, after school members receiving new curriculum means they start with all the changes in the curriculum in 2013. Principal assisted by a co-leader in curriculum. Continuous monitoring and evaluating the implementation of the 2013 curriculum in schools so that the school community is consistent with the changes, meaning the teacher learning does not use the former curriculum. Additionally the Principal provides feedback and reinforcement about the change. The Principal and the vice Principal identify the support and the barriers of the 2013 Curriculum and seek the solution. The Principal ensures the leadership support and creates a reward system for whom refreeze the change.

In the implementation of the 2013 Curriculum, SMP N 2 Dempet finds some obstacles, namely:

1. Some of the school community are not familiar with the changes.

The teachers are accustomed to using the old curriculum in the delivery of learning and assessment method, feel less comfortable with the changes in teaching methods and in 2013 Curriculum assessment. Thus, despite being followed up by the Principal as agents of change, they still maintain the "status quo" of his. This impedes the process of change in the implementation of 2013 Curriculum in the Junior High School 2 Dempet.

2. Inadequate facilities and infrastructure for learning implementation of the 2013 Curriculum.

Approach to the 2013 Curriculum in using a "scientific approach" where in teaching learning

begins by observing, questioning, associating, experimenting, and networking. In addition, the 2013 Curriculum using IT based learning (Technology Information). Junior high level, giving lessons use Technology Communications and Telecommunication (ICT) in the classroom. This policy allows the use of computers in the classroom but the computer is not enough for all students in SMP N 2 Dempet. In reality the IT-based learning cannot be implemented in every classroom.

### Conclusion

To follow the life changing, SMP N 2 Dempet as an organization that is engaged in educational services also make changes. One of the changes made by SMP N 2 Dempet is a change in the curriculum, the 2013 Curriculum. Stages of change in the implementation of the 2013 curriculum in SMP N 2 Dempet are (1) Unfreezing stage occurs when Principal gives a socialization and motivation of the 2013 curriculum to the whole school community; (2) Changing stage rises which all the school components implement the 2013 Curriculum. The Principal and vice Principal diagnose some problems and find the solution in implementing the 2013 Curriculum; (3) Refreezing stage occurs when the Principal holds a monitoring, evaluation, giving feedback, and stabilize the 2013 Curriculum implementers. Some obstacles in implementing the 2013 Curriculum found that some of the school community have not familiar yet to the changes and the school infrastructure have not support the learning in the 2013 Curriculum.

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## ENGLISH AS A LOCAL CONTENT IN THE ELEMENTARY SCHOOL CURRICULUM: PROBLEMS AND IMPACTS

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### Abstract

This paper presents the problems and impacts of the government's policy on English as a local content in the curriculum. English is included in the local content of not only in Curriculum 2013, but also in the previous curricula. Two major problems and impacts of the misinterpretation are discussed. If, the elementary schools do not have English as a local content, parents should send their children to an English course to make their children good at English. Thus, it means extra money. The second problem is that the students who have learned English before have to stop learning English because the school does not have the English subject. The third problem is that today is the 21<sup>st</sup> century, an era when technology and information play very important roles. The instructions in technological devices are written in English. It is ironic that children must wait until graduating from the elementary school to understand technology. The conclusion is the government should rethink about the policy of putting the English subject in the local content, not the national content of the curriculum.

**Keywords:** English as local content, curriculum 2013, government policy on English

### INTRODUCTION

Curriculum 2013 is a new curriculum which mainly contains personality values in the teaching learning process applied for Elementary School and Secondary School. All subjects which previously the text book was separated one another, now they are all in one text book or so-called thematic materials, except English. In this curriculum, English is deleted in the Elementary School national curriculum, but it is included in the extracurricular. This absence of English in the Elementary School curriculum raises public pro and against. Those who agree think that English is unnecessary for kids to study. Also, the issue of nationalism strengthens this argument. They better learn Bahasa instead of learning English. On the other side, people believe that language, no matter what language it is, including English, should be taught at early ages. Elementary School is the ideal time to get in touch with English. However, the Government goes applying curriculum 2013 regardless these pro and contra sides.

Figure 1. Main Competencies for Grade 1,2 and 3 in Elementary School

| KOMPETENSI INTI KELAS I DAN KELAS II                                                                                                                                                                                                         | KOMPETENSI INTI KELAS III                                                                                                                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Menerima dan menjalankan ajaran agama yang dianutnya                                                                                                                                                                                      | 1. Menerima dan menjalankan ajaran agama yang dianutnya                                                                                                                                                                                                             |
| 2. Memiliki perilaku jujur, disiplin, tanggung jawab, santun, peduli, dan percaya diri dalam berinteraksi dengan keluarga, teman, dan guru                                                                                                   | 2. Memiliki perilaku jujur, disiplin, tanggung jawab, santun, peduli, dan percaya diri dalam berinteraksi dengan keluarga, teman, <b>tetangga</b> , dan guru.                                                                                                       |
| 3. Memahami pengetahuan faktual dengan cara mengamati [mendengar, melihat, membaca] dan menanya berdasarkan rasa ingin tahu tentang dirinya, makhluk ciptaan Tuhan dan kegiatannya, dan benda-benda yang dijumpainya di rumah dan di sekolah | 3. Memahami pengetahuan faktual dengan cara mengamati [mendengar, melihat, membaca] dan menanya berdasarkan rasa ingin tahu tentang dirinya, makhluk ciptaan Tuhan dan kegiatannya, dan benda-benda yang dijumpainya di rumah, sekolah, dan <b>tempat bermain</b> . |

Source: Kemendikbud.go.id

This figure shows that in grade 1, 2 and 3, the students are introduced about accepting and applying the religion teachings, personality values: honesty, responsibility, politeness, caring, confidence at interacting with family, friends and teachers, and understanding God's creatures.



Figure 2. The Elementary School Curriculum Structure

PENGEMBANGAN STRUKTUR KURIKULUM SD 2013

### Struktur Kurikulum Sekarang

| No     | Komponen                 | I  | II | III | IV | V  | VI |
|--------|--------------------------|----|----|-----|----|----|----|
| A      | Matapelajaran            |    |    |     |    |    |    |
| 1      | Pend. Agama              |    |    |     | 3  | 3  | 3  |
| 2      | Pend. Kewarganegaraan    |    |    |     | 2  | 2  | 2  |
| 3      | Bahasa Indonesia         |    |    |     | 5  | 5  | 5  |
| 4      | Matematika               |    |    |     | 5  | 5  | 5  |
| 5      | IPA                      |    |    |     | 4  | 4  | 4  |
| 6      | IPS                      |    |    |     | 3  | 3  | 3  |
| 7      | Seni Budaya & Ketrpln.   |    |    |     | 4  | 4  | 4  |
| 8      | Pend. Jasmani, OR & Kes. |    |    |     | 4  | 4  | 4  |
| B      | Muatan Lokal             |    |    |     | 2  | 2  | 2  |
| C      | Pengembangan Diri        |    |    |     | 2  | 2  | 2  |
| Jumlah |                          | 26 | 27 | 28  | 32 | 32 | 32 |

### Usulan Struktur Kurikulum Baru

| No     | Komponen                          | I  | II | III     | IV | V  | VI |
|--------|-----------------------------------|----|----|---------|----|----|----|
| A      | Kelompok A                        |    |    |         |    |    |    |
|        |                                   |    |    | Tematik |    |    |    |
| 1      | Pend. Agama                       | 4  | 4  | 4       | 4  | 4  | 4  |
| 2      | Pend. Pancasila & Kewarganegaraan | 5  | 6  | 6       | 6  | 6  | 6  |
| 3      | Bahasa Indonesia                  | 8  | 8  | 10      | 10 | 10 | 10 |
| 4      | Matematika                        | 5  | 6  | 6       | 6  | 6  | 6  |
| B      | Kelompok B                        |    |    |         |    |    |    |
| 1      | Seni Budaya & Prakarya            | 4  | 4  | 4       | 6  | 6  | 6  |
| 2      | Pend. Jasmani, OR & Kes.          | 4  | 4  | 4       | 4  | 4  | 4  |
| Jumlah |                                   | 30 | 32 | 34      | 36 | 36 | 36 |

Fenomena Alam, Sosial dan Budaya sebagai obyek pembelajaran. Oleh karena itu, secara substantif tetap diajarkan. meskipun tidak ada Mapel IPA, IPS.

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Source: Kemendikbud.go.id.

The left table is the KTSP curriculum and the right one is curriculum 2013. In the KTSP curriculum, English is included into Group B or local content. Meanwhile, in curriculum 2013, the local contents (Group B) only include Arts, Culture and Works and Physical Health subjects. English is not taught both in Group A and Group B, it is an extracurricular.

In Surakarta, there are only 12 Elementary Schools which are pointed to be the pilot project of this curriculum because of their success in achieving the high scores in the national exams. Meanwhile, the total number of Elementary School in Surakarta is almost 400. In other words, most of Elementary School in Surakarta still uses the older curriculum which places English as the local content. However, some schools are influenced with the issue of curriculum 2013. Some of them change their English teaching system. Thus, before researching English as an extracurricular content, we better know what is happening with English as the local content first.

This background leads the writer to investigate more about the implementation of English as a local content in Elementary School Curriculum. Is the implementation same from one school to

another? If not, why? This research is the pre-research of English as the extracurricular content.

The significance of this research is the window of people's awareness about the implementation of a curriculum applied in Elementary School. Should curriculum change all the time and make the students trial and error objects? Or only the teaching and learning methods should be changed?

### Research Method

This is a qualitative descriptive research. The sources of data are teachers and school principals at SD Negeri Pabelan 01, SD Negeri Gonilan 02, SD Ar-Risalah Surakarta, and SD Al-Azhar Syifa Budi Surakarta. The method used to collect the data is interview. The objects of data are the interview results with the sources of data on the curriculum implementation of English as the local content. The writer's reason of choosing these schools as the research sample is because these schools still teach English as the local content.

### Literary Review

Education curriculum in Indonesia has been changed several times. On this year of 2013, the curriculum will be changed with an integrative

thematic concept applied to elementary, junior high, high school, and vocational school. In November, Indonesia's deputy minister of education, Musliar Kasim, explained that changes in the Indonesian educational system curriculum was an absolute necessity because, "Right now many students don't have character, tolerance for others, empathy for others." The need for augmentation was in response to concerns that students were becoming overwhelmed with the workload, and that instances of student violence were increasing as a consequence. Government officials asserted that students needed to learn how to become better citizens and that it could only be achieved by instilling character and a greater sense of morality. To prepare for the implementation of the new curriculum, the ministry would give teachers 52 hours of training, as well as mentoring sessions during the first few months of the 2013/2014 academic year. Separately, Retno Listyarti, the chair of the Jakarta Teachers Discussion Forum (FSGI), said that 52 hours of training would not be enough to prepare teachers for the new curriculum. It would be very hard to instruct and force teachers to apply this new curriculum, with the hope of teaching about heterogeneous society from math. The new curriculum could be used to improve religious tolerance as education should not only make people smart but also to train Indonesians to be mentally tough, physically healthy, tolerant and willing to live in harmony with others with different religions, race, and tribes. We are educating people not only to make them smart but also to produce Indonesians who are mentally tough, physically healthy, tolerant and willing to live in harmony with others of different religion, race, and tribe. (International Education, 2012)

## **FINDINGS AND DISCUSSION**

### **FINDINGS**

- a. SD Negeri Pabelan 01 (Interview with the English teachers)

English is taught from grade 1 until grade 6 with 2 credit hours per week. This school teaches English because one of the factors is the student parents' support. This school also cooperates with an English Course Institution in Surakarta. The reason is to

strengthen the limited hours of learning English in the class room. Even, some parents send their children in grade 1, 2 and 3 to this English Course Institution. This school now uses KTSP curriculum, but will still use this because according to the teacher, a language including a foreign language which is also English in it should be taught at early ages because it will make them easier to absorb and understand the language skill and knowledge. Besides, this is to prepare students language skill in the next level of study, to succeed the nine-year compulsory program, and to face the information technology era.

- b. SD Negeri Gonilan 02 (Interview with the school principal)

In this school, English is taught in grade 1, 2 and 3 as the school local content, while in grade 4, 5 and 6, English is taught as the province local content. The difference is that school local content is the school's own initiative or not the province's agreement, but province local content is based on the province government mandatory. Although this school is based on KTSP curriculum, this school is influenced with the issue of curriculum 2013 by reducing English teaching credit hours in the class room. Consequently, the irregular English teachers seek another school to teach English to fulfill their needs. For the regular teachers, they are given other skills to complete their teaching credit hours load. The principal says that English is actually not appropriate taught for elementary school students, but English should exist in the Elementary School curriculum because it is good for children not to be left behind about information. Another reason is that there is a science competition using English. So it is impossible not to teach English for Elementary School students.

- c. SD Ar-Risalah Surakarta (Interview with the English teacher)

Since the establishment of this school (2002), English is taught as the local content with 2 credit hours long. This school always has various teaching methods to teach English. This school is not afraid with the issue of curriculum 2013 that says English will be deleted from Elementary School local content because the priority is the Islamic teachings.

However, this school will continue teaching English because according to her, English is important introduced at early ages. These are the best times to learn a language, even it is English as a foreign language. Nevertheless, this teacher hopes that the teaching aids must be supported like LCD because children like learning English through moving pictures.

d. SD Al-Azhar Syifa Budi Surakarta (Interview with the English teacher)

As a bi-lingual school (English and Arabic), SD Al-Azhar Syifa Budi Surakarta uses three curriculums: the National Education curriculum, the Singapore curriculum, and the Religion Department curriculum. The National Education curriculum is used to teach grade 4, 5, and 6 due to the preparation of the national exam. The Singapore curriculum is used to teach the lower classes: grade 1, 2, and 3. The Religion Department is used for all grades. Not like the other Elementary Schools, this school applies curriculum 2013 for grade 1 and 4 for all subjects except English though not mandated by

the Government to apply curriculum 2013. However, it is not a pure implementation. If curriculum 2013 English is an extracurricular which means English is not taught in the class room like main and local contents, English at SD Al-Azhar Syifa Budi is still taught in the class room. It results in the reduction of the credit hours which is previously 4 credit hours, now it becomes 2 credit hours per week. Thus, the standard materials are downgraded since this curriculum consumes more time on the thematic materials. This leads to complaints from the student parents. Most of them complain on the change of some text books which were written in English, now they are in Bahasa. They complain as this school is a bi-lingual school, but the percentage of the text books written in English is very low as the impact of curriculum 2013. The school effort is then emphasizing English more in the daily practices for communication and inserting English to deliver school subjects. This teacher also suggests that English should be taught at early ages even since grade 1.

## DISCUSSION

Table 1. Profiles of School, Problems, and Impacts of teaching English as a local content.

| School                           | Type of School              | Curriculum Used                                                                         | Credit Hours        | Problems                                                                                                                                                                                                          | Impacts                                                                                                                                                         |
|----------------------------------|-----------------------------|-----------------------------------------------------------------------------------------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SD Negeri Pabelan 01             | Public                      | National Education Curriculum                                                           | 2 Credit Hours/week | Low number of credit hours                                                                                                                                                                                        | Cooperating with an English Course Institution                                                                                                                  |
| SD Negeri Gonilan 2              | Public                      | National Education Curriculum                                                           | 2 Credit Hours/week | English teachers are lack of credit hours teaching load.                                                                                                                                                          | The teachers seek another Elementary School to fulfill their needs.                                                                                             |
| SD Ar-Risalah Surakarta          | Private/Religion            | National Education Curriculum and Religion Department Curriculum                        | 2 Credit Hours/week | Not supported with teaching aids                                                                                                                                                                                  | Students cannot watch moving pictures                                                                                                                           |
| SD Al-Azhar Syifa Budi Surakarta | Private/Bi-Lingual/Religion | National Education Curriculum, Religion Department Curriculum, and Singapore Curriculum | 2 Credit Hours/week | Bi-lingual systems cannot be practiced<br>The text books are written in Bahasa<br>Student parents' complaints on the absence/much reduction of English usage in the text books<br>Very low number of credit hours | Emphasizing English more in the daily practices for communication and inserting English to deliver school subjects<br>The materials are not explained in detail |

From the findings above, it can be seen that mostly, the problems lies on the low number of credit hours of English teaching. SD N Pabelan 01 responds this by cooperating with an English Course Institution which is held at the school as an extra learning. To send their children, parents must pay not a chief prize. This may cause parents to pay more money than if English is taught more than two credit hours. It may be not a problem for the rich. However, not all student parents of this school afford to pay the extra spending.

It is also noticeable that there is a crucial problem at SD N Gonilan 02 that the English teachers must run to another school to achieve their appropriate income. It is ironic that English teachers are lack of earning from their professional. Meanwhile, at SD Ar-Risalah, it does not matter if English credit hours are reduced because the English teachers can teach religion subjects for this school focuses more on Islamic teachings.

SD Al-Azhar Syifa Budi Surakarta which the bi-lingual program as the breakthrough is the "victim" of KTSP which places English as the local content, moreover as the extracurricular in the curriculum 2013. English is their jargon. That's why, this curriculum does not support the school curriculum. It leads to some problems: the impracticality of bi-lingual program, most text books are in Bahasa which are mostly written in English in the past, and the reduction of credit hours form four to two credit hours per week. Those of course bring student parents complaints. To respond the problems, SD Al-Azhar Syifa Budi then emphasizes English more in the daily practices for communication and inserting English to deliver school subjects, but unfortunately the English materials in the class room are not explained in detail. It may trigger students' misunderstanding.

## **CONCLUSION**

From the findings and discussion, it can be concluded that:

- a. With English as the local content, English with 2 credit hours are not enough,
- b. Elementary School English teachers must struggle to earn their income,
- c. Bi-Lingual schools suffer much from the change of the KTSP to curriculum 2013, and
- d. Only rich parents who can send their children to learn English in an English Course Institution if curriculum 2013 is really applied.

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## ROUNTOKARTA (AROUND TO YOGYAKARTA): GAMES TO LEARN THE LOCAL CULTURE OF YOGYAKARTA

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### Abstract

Yogyakarta is a province that has unique local culture in Nusantara. That uniqueness makes Yogyakarta become a special place. Every year, there are a lot of tourist visiting Yogyakarta. It will have two impacts toward Yogyakarta, positive impact such as the improvement of economic activity, negative impact such as acculturation culture from the tourists and natives. Superior for the young generation, it needs an efforts to defend loyalty of local culture to be everlast. The author recomend a game to learn the local culture of Yogyakarta named Rountokarta (Around To Yogyakarta). Rountokarta is designed in the circle form with 5 devide areas. Each devide area is imagination of the regency in Yogyakarta. Message in this game is what and how to learn about foods, cultures, trips, dan histories from this special place. The author uses Research and Development (RnD) method to make the game. From RnD Ploom's version, there are 4 phases in making a game, those are (1) preliminary investigation, (2) design, (3) realization/construction, and (4) test, evaluation, and revision. Rountokarta has a test from media expert judgment and content expert judgement. Based on the result, the Rountokarta's contens is good to be learned for childern. It also says that this game has superiority in the material and very comfortable dan cheap. Subject of the game is 5 children of 5th grade in Giwangan elementary school. From the interview with respondences, Rountokarta is a new media learning innovation. Hope for attendance Rountokarta Indonesia children will be able to know closeler about their local culture. So that they will feel having something precieuse and will have motivation to conserve the local culture.

**Keyword :** Rountokarta, Local Culture, Yogyakarta

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### Introduction

Yogyakarta is an unique province that called Daerah Istimewa Yogyakarta (Yogyakarta Special Province). This Province is also sequential of student city, history city, and culture city. Local culture of Yogyakarta include long lasting from globalization. But, multicultures of yogyakarta's society can make akulturation (the mix cultures but seen the each cultures characteristic) and also asimilation (cultures mixture so make a new culture). as a consequence, the societies are difficult to knowing their own local cultute. The risk subject about this problem is the childern as the next generations. Therefore, needs an appropriate effort to introduce the yogyakarta's local culture to children, specially to elementary school. Why must the elementary school? because the children in elementary school level (7-10 years old) are in concrete operational stage that have characteristics like always want to know, easy to learn and easy to understand the value.

The Governor of Daerah Istimewa Yogyakarta (Yogyakarta Special Province), sri sultan Hamengku Buwono X in his book [1] that effort to finding, exploring, learning, actualizing the local culture is the modals that can be used to reinforce a sense of national unity. How to educate the children for know what is in their area, their region potentials, and how their respond to their local cultural richness. However, education will not be optimal if only do in persuasion / solicitation or using story telling methods (lectures). it refers to the children characteristics according to Jean Piaget in Mulyani Sumantri [2] that children are easy to accept something which is concrete than abstract materials. As for showing a variety of Yogyakarta cultures results directly (real) to the child will be very difficult and costly. Therefore, a bridge is needed to connect the abstract to become concrete.

The presence of learning media can be alternative to become a bridge that message. Learning Media will be help the teachers and

students to achieve the goals of learning, Hartono[3]. Therefore, the authors conducted a study to develop an educational media is called Rountokarta (Around To Yogyakarta) game.

Based on the background of the problem, the formulation of the problem is how to develop Rountokarta (Around To Yogyakarta) as the educational games to learn DIY's local cultures in grade fifth of elementary school students? The goal which be reach with this research is to develop Rountokarta (Around To Yogyakarta) as the educational games to the learn DIY's local cultures in grade fifth of elementary school students.

The benefits from this research can be divided into three. There are for students, for teachers, and for researchers. For the students, that get an attractive alternative learning media, can be inspired through the content media, and can understand the condition and potential of DIY. For the teachers, the alternative media to enrich learning to educate students and help to develop the characters such as collaboration and love the local culture through intersting media. For the researcher, to apply the knowledge gained from the lecture bench, as well as knowing and increase knowledge and assessment of the implementation of learning media to students, especially for elementary students.

## Review of Literature

### 2.1. Potential Areas privileges of Yogyakarta

Special Region of Yogyakarta (DIY) is the second smallest province after province of Jakarta and is located in the center of the island of Java, Central Java province surrounded and including the south-central zone of the geological formation of the island of Java. Total area of the Province of Yogyakarta is 3185.8 km and less than 0.5% of Indonesia's land area. The capital of the province of Yogyakarta Special Region (DIY) is Yogyakarta, while DIY has four districts they are Bantul, Kulon Progo, Sleman and Gunung Kidul. DIY administratively divided into 1 (one) city which

form an unity Adiministration Yogyakarta self. (<http://potensidaerah.ugm.ac.id>)

### 2.2. Planning to make Educational Games

Game is a manifestation of a media. Denny Setiawan, and friends [4] describe the necessity of make planning of the media before the media is realized. The steps are :

1. Planning manufacture media (1) structured planning procedure that requires organizing, attention to logical order, and the integrity of the message, and (2) the flow of ideas and free expression and unstructured generated by the creative thinking and refers to issues that arise during the media development takes place.
2. The idea which choose over emphasized based the benefit related to the needs of a group.
3. Media should aim to give motivation, give information or teach something.
4. Develop learning objectives that include cognitive (related to knowledge and information), affective (relating to attitude, appreciation and value), psychomotor (skills).

### 2.3. The Characteristics study of elementary school student

Piaget in Sumantri Mulyani [2] describes that elementary school level (7-11 years) are in the concrete operational stage, they can think systematically to achieve problem solving. the Elementary school student also need a bridge to understand something abstract into something concret. The characteristics in conducting education at this stage, are:

1. Stimulated with the game because kids love to play.
2. Give the student Facilitate to move because the children do not like if they must stay/kept silent.
3. Give Facilitate to the children to work in groups

## The method used in this research is Research and Development (R n D).

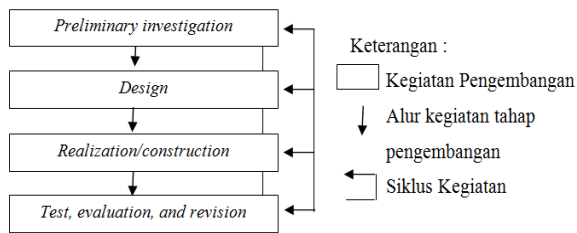


Chart 01. Model R n D Plom's Version

The model used is the model Plomp's Development (in study Ikhlusul, 2011) that researchers modified to use four stages, namely:

### 1. Preliminary Investigation Phase

Gather information about the learning content in SD N Giwangan related material and media about Yogyakarta. In addition, this phase also analyzes the tools and materials that will be used to create media. The tools and materials required are 1) Scissors, 2) Cutter, 3) Printer, 4) Pen/Pencil, 5) Eraser/type X, 6) Printer ink, 7) Ruler, 8) Glue, and 9) Double tape.

### 2. Design Phase

Designing the standard models and the method of Rountokarta. The shape of board game is circular with a diameter of 50 cm contained 25 plots. The total number of 80 cards with the details of one district  $3 \times 4 = 12$ ,  $12 \times 5 = 60$  districts, stations plots and terminal plots there are 20 cards. Making matters also to be presented in the design of the card and an answer key.

### 3. Realization/Construction Phase

The initial design results from the design phase and then realized into Rountokarta media. Before the results of the design set, first performed experiments in the field with the approval of media expert and expert material.

### 4. Test, Evaluation, and Revision Phase

In this phase conducted product trials results from realization phase. Media that has been developed and tested in the field research early to

get a qualitative evaluation. The test is done to be able to say the media is worth assessment applied to elementary level students.

## Results and Discussion

Rountokarta is put forward the concept of educational games to play while learning in groups. As the name implies, Rountokarta will invite the player to be iconic sight seeing in the province of Yogyakarta (DIY). One set consists of toys Rountokarta are (1) 1 piece dice; (2) as a replica of a player pawn, maximal 4 pieces; (3) Rountokarta board game; (4) the card questions; (5) the board answers; and (6) paper counting points.

Rountokarta board game is a board that is a circle with a diameter of 50 cm. The circular board divided into 25 equal parts, where each part is called plots. Each plot is numbered 1-25 in a circle to facilitate further division. The board game is divided into five sections according to the number of districts in Yogyakarta. Here is a Rountokarta's game design.

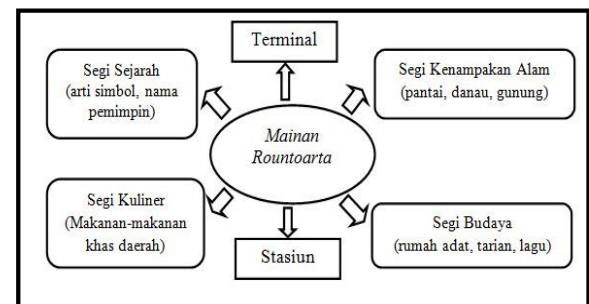


Chart 02. The mind of game Rountokarta

One set consists of toys Rountokarta are (1) 1 piece dice; (2) as a replica of a player pawn, maximal 4 pieces; (3) Rountokarta board game; (4) the card questions; (5) the board answers; and (6) paper counting points.

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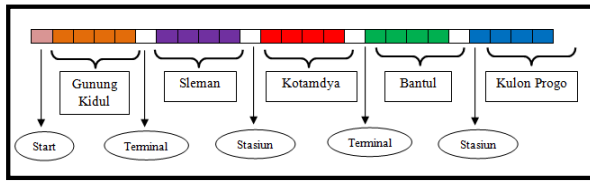


Chart 03. Sketch plot placement

The contents of the four sections in each district are words and images associated with natural appearance, culinary, culture, and history. Meanwhile, empty plots are plots terminals and stations. The following information about the number and names plots.

Tabel 01. Description of the number and name in Rountokarta toys

| No. | Information                            |
|-----|----------------------------------------|
| 1   | Start, the first row to start the game |
| 2   | Culinary of Gunung Kidul regency       |
| 3   | Culture of Gunung Kidul regency        |
| 4   | History regency Gunung Kidul regency   |
| 5   | Tourism of Gunung Kidul regency        |
| 6   | Bus Stations Row                       |
| 7   | Culinary of Sleman regency             |
| 8   | Culture of Sleman regency              |
| 9   | History of Sleman regency              |
| 10  | Tourism of Sleman regency              |

|    |                                 |
|----|---------------------------------|
| 11 | Trains Stations Row             |
| 12 | Culinary of Kota Jogja regency  |
| 13 | Culture of Kota Jogja regency   |
| 14 | History of Kota Jogja regency   |
| 15 | Tourism of Kota Jogja regency   |
| 16 | Bus Stations Row                |
| 17 | Culinary of Bantul regency      |
| 18 | Culture of Bantul regency       |
| 19 | History of Bantul regency       |
| 20 | Tourism of Bantul regency       |
| 21 | Trains Stations Row             |
| 22 | Culinary of Kulon Progo regency |
| 23 | Culture of Kulon Progo regency  |
| 24 | History of Kulon Progo regency  |
| 25 | Tourism of Kulon Progo regency  |

Rountokarta made two boards layered with a distance of 1 cm. Separating the cavity between the first layer and the second layer will be used to put the cards containing questions. Each plot contained three questions that relate to the name of the corresponding plot. Special to plot stations and terminals there are no cards on the bottom, but when a player landed on the plot, the player cards are required to take on a circular board Rountokarta. The contents of the card is a matter relating to the preparation, safety, equipment, traffic rules that must be followed when an excursion.

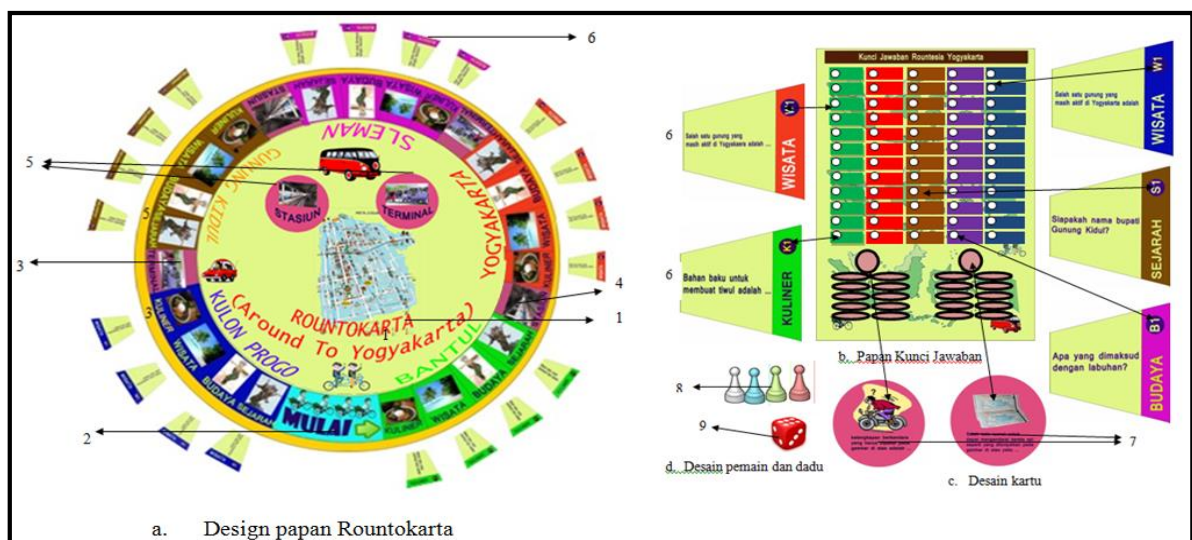


Chart 04. Sketch of Rountokarta toys



**Description:**

a. Design Board Rountokarta

- 1: Board Rountokarta the scope of Yogyakarta
- 2: The pawns to start the game
- 3: Terminal, if the player stops at the terminal then the player must take a card terminal
- 4: Stations, stops at the station if the player then the player must take a card player
- 5: wheretoput the question card terminals and stations

b. Answer Keyboard

c. About the card design

- 6: Card questions to be answered when the players occupy one place in the region of Bantul, Yogyakarta, Sleman, Gunung Kidul, Kulon Progo and
- 7: Cards questions that must be answered when the player occupying the terminal or station

d. Design and dice players

- 8: pawn to represent players on board Rountokarta
9. Dice

Regulation play Rountokarta is as follows.

- 1) Toys Rountokarta can be played by people masimal 5, with 1 child acting as a key holder.
- 2) Each player is represented by a point that started the journey of the star box.
- 3) Each player rolls the dice to determine how many plots measures to be taken.
- 4) When a player occupies a plot within the district (between culinary, culture, history, natural features), then the player must take a card number at the bottom of the plot.
- 5) The contents of the card is a matter relating to the plot in question. If the answer true Players are entitled to take the card and can continue

the journey by rolling the dice againafter 1 round (period) players. If the answer False Players may not take the card but can go on to roll the dice again after 1 round (period) players.

- 6) The number of questions on each plot is 3 pieces.
- 7) When the players occupy plots terminals, then the player must take a card that is in the middle of the board Rountokarta, a collection of labeled card terminal or station. All card terminals and stations totaling 10 pieces each.
- 8) The contents of the card and the terminal or station is about dealing with the things that need to be prepared when you want to picnic. If the Answer True Players are entitled to take the card and can continue the journey by rolling the dice again after 1 round (period) players. If the answer False Players may not take the card but can go on to roll the dice again after 1 round (period) players,
- 9) The game ends when the cards contained in the depleted plots collected by the players.
- 10)The winner is the player who can get the most cards.

Prior to implementation in the field, Rontokarta get expert assessment of materials and media experts as follows.

**A. Validation of Materials and Media**

Validationis done by experts material about materials, namely Mrs. Sekar Purbarini Kawuryan, M.Pd who is a lecturer in Social Sciences (IPS) of theTeacher Education Program Elementary School FIP UNY. The results of the first judicial getting feedback that there are many indicators that have not been in accordance with its aspects. The content of cognition and affection need not be included in the column aspect. Some indicators are still mixed with each other. The most important thing that needs to be fixed is the aspect that is assessed is made more concise ands tructured. The following table Rountokarta material validation.

Tabel 2. Materials Validation

| NO | THE REVISED SECTION         | REVISION SUGGESTIONS                |
|----|-----------------------------|-------------------------------------|
| 1  | Assessment scale 1-5 rating | scale is changed to 1-4 rating      |
| 2  | Numbering indicator         | Indicators need not be numbered     |
| 3  | Aspects assessed            | Created more concise and systematic |
| 4  | Grammer                     | Fixed                               |

Rountokarta media validation performed by the media, namely the Unique Ms. Ambar Wati, M.Pd who is a lecturer in Teaching and Learning Strategies and several other subjects. She is a lecturer of the Teacher Education Program Elementary School FIP UNY. The results of the first judicial getting feedback that there are many indicators that have not been in accordance with its aspects. Rountokarta products need to be resolved until the packaging. The following table Rountokarta media validation.

Tabel 3. Media Validation

| NO | THE REVISED SECTION | REVISION SUGGESTIONS                |
|----|---------------------|-------------------------------------|
| 1  | Packing             | There needs to be product packaging |
| 2  | Aspects assessed    | Made more concise and systematic    |
| 3  | Grammer             | Must be consistent                  |

## B. Revision Materials and Media

Revision of the product made after researchers conducted a validation test on the material and the media matter experts and media experts. Revisions were made based on suggestions from the experts who have delivered in record sheet and suggestions for improvement and also messages directly from two experts. Revisions were made to the questions in Rountokarta and also the media. After getting approval (assessment) of media experts and expert material, researchers try to apply the fifth grade students of SD N Giwangan.

Before and after playing Rountokarta, researchers gave questionnaires to the five students were used as samples. The questionnaire

contains questions in the card game Rountokarta. All students can answer a lot more after playing Rountokarta.

Tabel 4. The Questionnaire Results Before and After Playing Rountokarta

| No | Name                   | Before |    | After |    |
|----|------------------------|--------|----|-------|----|
|    |                        | Yes    | No | Yes   | No |
| 1  | Untari Dewi Kurniawati | 17     | 13 | 26    | 4  |
| 2  | Sekar Putri R          | 16     | 4  | 20    | 10 |
| 3  | Dhiea Tsuraya          | 17     | 13 | 21    | 9  |
| 4  | Carissa Arana          | 17     | 13 | 26    | 4  |
| 5  | Astuti Sekarsari       | 17     | 13 | 26    | 4  |

As noted by Chomsin and Jasmadi Widodo S. (2008) that the text book is not capable of displaying moving images such as videos, movies, and can not interact directly with other resources. However, learning with less educational multimedia character of cooperation and interaction with peers. This indicates that the lack of learning with multimedia can hone social skills with peers. Seeing Rountokarta target players, the media were stimulated with the game due to the characteristics of children who love to play. The game is also designed Rountokarta cooperative learning can enhance the social value of a player such as being honest, cooperation, and responsibility. Rountokarta raises critical power players in terms of culture, cuisine, history, and natural features that exist in Indonesia. This learning will be more meaningful if the child act something directly.

## CONCLUSION

From the results of this research and development datas, it can be concluded as follows:

1. Research and development is conducted through four phases, namely the preliminary investigation phase (initial investigation), the design phase (design), the phase of realization/construction, phase test, evaluation, and revision.
2. Based on expert validation and revision materials, media Rountokarta stated that the material presented is appropriate for students at the elementary school level.

3. Based on the validation and revision of media experts, media Rountokarta stated that the medium used is very loved by the students, but it still needs to be a more attractive product packaging.

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## JAVANESE PARENTING ROLE IN STUDENTS' MORAL DEVELOPMENT

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### Abstract

Education does not only include the child's intellectual development, but also aspects of the child's morality. The pattern is the compassionate care of children in developing emotional and spiritual intelligence so as to upgrade a sense of compassion, empathy, having social norms and values that can be accepted by the society. This compassionate pattern will affect the development of children's affection, covering morals, emotions and behaviors. In the Javanese concept of inner adhere to three principles - manners, respect and harmony. Comity is a psychological element in creating social *unggah-ungguh* (deed). In the concept of comity Javanese life is divided again into being afraid (*wedi*), embarrassed (*malu*), and reluctant (*sungkan*). To foster respect, the children will get used to position ourselves, who understand and will understand manners prevailing in a community context. The habituation will be form moral values in children. It is expected that using the values of Javanese wisdom in parenting will build the child's behavior and morality in the society. Javanese parenting that is grounded in local knowledge of Java at the same point can preserve the Javanese culture that has not been applied in education.

**Keywords:** education, javanese parenting, moral, student

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### Introduction

Javanese people is very close with tradition and culture. They have many tradition and it is comprehensiv in all aspect of life. Then, from that tradition and culture be the basic philosophy of life's javanese people. The javanese philosophy of life is conserve until this time by the Javane people in social community. One of implementation can be observed on the Javanese children educationwho will appear on the parenting models. Javanese people are fully aware that education not only encompass in the intellectual/ cognitive students aspect, but affection aspect which reflected on moral and behavior of children is more important.

The children moral development is be affected by the environment. Moral value accepted by the children from the sosial envorinment, especially from their parents. They learn that values and try to apply it on their behavior. In this time , the role of parents is very important, especially when children are toddlers. Family is the most ideal spot of character education. In the family, the children

will learn moral value through practice and imitate the manners of surrounding people, especially their parents. Likewise noted by Geertz (1985: 151) that in the Javanese family thrive respect manners which the aim is social harmony. The values of these manners will be studied in the family naturally.

Family moral education became the basic of character, children will be more aware the goal of the live in the world. Accordance the opinion Santiyoso (2000: 62) that good character must be educatedto children earlier. Parent education background is will affect to the parenting model. Generally, family parenting is divided into three models, namely authoritarian, permissive and democratic or authoritarian. One model and the other has a weakness. Therefore, the Javanese people with diverse culture accommodate the parents and children needs. The Javanese parenting is inherited continuous from one generation to the next generation. Javanese parenting has special characteristics and cover all that parenting models.

So with a variety and unique parenting model, Javanese parenting can provide a positive impact for the moral development of elementary school children. This positive effect can be observed from attitude and character who manifest in behavior and communication in social life. It is also proved that the values of Javanese local wisdom can thrive and adapted the era

## **Discussion**

### **Characteristic of Javanese**

The Javanese according Magnis-Suseno (1988) whose native language is the Java language and is a native of central and eastern part of the island of Java. According to the Javanese culture can be divided into the northern coastal residents were cultured coastal and inland Java area residents called Javanese. The Javanese majority of life as a farmer. In lowland rice farming and farming in mountainous areas and cassava crops. In the absence of stratification known Javanese society as a system of royal heritage and past colonial feudal system. Based social groups, according to sociologists Koentjaraningrat, the Javanese are classified into three (3), namely:

- a. Wong Cilik (little people) consisting of farmers and those with lower incomes.
- b. The Priyayi consists of employees and the intellectual.
- c. The Patrician is among those whose lifestyles are not far from the gentry.

In addition to differentiated social group, the Javanese also distinguished on the basis of religion in the two groups:

- d. Java is often called abangan Javanese. In consciousness and way of life is determined by the pre-Islamic Javanese traditions. Priyayis traditionally considered almost entirely Javanese Java.
- e. Pupils, who understands himself as a Muslim or a strong orientation towards Islam and strive to live according to the teachings of Islam.

In the Javanese kinship system of the nuclear family is the basic kinship group in a life that consists of father, mother, and children. Then the traditional social order upon the family is the most important in the village. Social relations in the village berdasarkan mutual aid system that is an extension of interpersonal kinship throughout the village. In Javanese social relationships identified with various attitudes polite, shy, hiding feelings aka do not like direct, maintain ethics speaks both content and language content words and objects talk. Java or the Java community has two basic rules of life that is the principle of harmony and respect principles.

#### **a. Principles of Harmony**

Pillars means to be in a state of harmony, calm and serene, without strife and conflict. Pillars is a condition that must be maintained in all social relationships such as household, hamlet, village, and the other that is at peace with each other, like to work together, accept each other, in an atmosphere of calm and agreed. The goal is a harmonious social harmony. Demands harmony in Javanese society there are two: first means not to disturb the harmony existing alignment, both open conflict prevention by maintaining harmony in relationships. The means of applying the principle of harmony is through etiquette governing all forms of interaction beyond the nuclear family. This etiquette regarding bodybuilding, sitting sequence, content and form of a conversation. Manners gained through education in the family core Java community.

#### **b. The principle of respect**

Is the way a person carries themselves always having to show respect towards others in accordance degrees and position. The principle of respect based on the view that all relations in society that is organized hierarchically according aligned unity of social manners. Awareness of the social position of each party permeates Javanese life. Comity is reflected in the use of the Java language that there are two levels. Manners Java language as an expression of an attitude of

respect and low Javanese language as an expression of intimacy. The use of proper deference has been developed through the Java childhood education in the family.

Awareness of social status is important in harmony and respect the principles of the Java community. The second principle of life it appears that some of the attitudes adopted by the Java community. Attitude to life include:

a. *Andhap asor* or behave modestly

Javanese ethics upholds both attitude and speak. To speak, a younger smooth should use the Java language that seemed more polite. In contrast to the language used for peers as well as those under the age. Likewise, the attitude, the younger people should actually able to keep a good attitude towards ethical people older than himself.

b. *Ora ngoyo* or not ambitious

These patterns describe the attitude of resigned paced life with every decision that is determined by God. Javanese people believe that life is indeed nothing is set and can not be challenged for granted. Every thing that happens in this life is in accordance with the will of the regulator of life. We can not dodge, let alone fight it. This is said to be the fate of life and the fate of life is the secret of God, we as living beings can not be dodged. Not to be too ambitious to do something obviously can not be done. Javanese people do not recommend it.

c. Mutual aid or cooperate

The habit of living in groups leads to a sense of self Javanese people so close to each other, so that mutual help is a necessity. They always provide help to others who need help. Even with all the ways they helped someone out of trouble, especially if *sesaudara* or have become friends. Living it should benefit other people around us, the greater the benefits that we can provide will certainly be better, but no matter how small the benefits that we can offer, do not let us be the one disturbing the public.

d. *Ngajeni wong tuwo* or respect for the elderly

Javanese people in interpersonal interactions in the community, always keeping each other all the words and deeds to not hurt other people. Javanese people so cherish the friendship that the existence of others is highly valued as something very important. They do not want anyone else or hurt himself experiencing or *tersinggung* by word and deed is done.

### Javanese's Parenting

Set the Java community interactions through the two principles, namely harmony and respect. Both of these principles require any form of interaction should always be in harmony and in every situation the rank and position of all parties concerned recognized by comity. Both of these principles acquired through education and taught in the family or parenting from parents to their children. Parenting among Javanese culture is influenced by parental age, parental involvement such as family members of the parents, parental education, previous experience of parenting, and marital harmony.

Java family upbringing is divided into two stages of growth of human children. The first is the phase of the children. The starting age infants aged up to 5 years old. During this time the child becomes the center of attention and affection environment. Here the role of emotional, outward and inward attachment between mother and child is crucial. A mother is required to educate children starting from the child begins to learn to talk, play and get to know the adults around them. At this stage the most important attitude *siakp* trained behavior in children through subtle repetition constantly. To older people, children learn to speak manners. Children also learn manners in the context of a simple example procedure for eating, wearing, or being. In Java parenting children demanded obedience not through threats of punishment or reprimand the mother but by the threat of force outside the family such as demons or aliens. With regard to the principle of respect at this stage began to be educated stages comity is *wedi, isin* and *sungkan*. This special stage children

are taught *wedi* attitude. That is the attitude of fear, either in response to physical threats or fear of the result of an act less tasty. Children will be praised if *wedi* towards older people and to foreigners. Furthermore, children begin to be educated to *isin*. *Isin* means embarrassed or feel guilty. Education to have an attitude of shame is the first step into a mature personality Java. Javanese people feel ashamed if it can not show proper deference to the people who deserve respect. Fear of embarrassment is one of the motivations of the Javanese to adjust his behavior to societal norms.

The second stage is when the teenagers, parenting ways began to experience the process of cultural value and meaning to Java itself or the value *Kejawen*. Children are considered adults and able to distinguish between good and bad. Children are increasingly expected to carry themselves civilized. Therefore, children must learn all the elements of manners expected of a mature Java. Javanese parents always told about these issues will be relevant in matters of dating/ marriage. In order to study the attitude of respect at this stage the child is taught attitudes hesitate. Shy is a feeling that is close to the embarrassment associated with the attitude in the face to a supervisor or the unknown. Magnis and Suseno (1988) revealed *wedi*, *isin* and hesitate a feeling of continuity with social functions to provide psychological support to the demands of the principle of respect. The concept relates to manners or good manners which is an ordinance or hereditary rule and thrive in a culture in association with others, so intertwined intimate relationship of mutual understanding and respect, as the manner specified respect. More and more children become adults and mastering courtesy manners, is increasingly recognized as a full member of the Java community.

Based on the above, the family has the following functions:

a. Moral Education Base

The family is the ideal place seeding character education. In the family, the child will learn many practical through practice and imitate the manners

of the people around him, much less emulate their parents. Likewise noted Geertz in Suwardi (1985: 151) that in the growing family of value Java respect manners that lead to the appearance of social harmony. The values of these manners will naturally be studied by children in the family Dalma.

Through moral education in the family that became home base character, children will be more aware of his presence in the world. This is in accordance with the opinion Santiyoso in Suwardi (2000:62) that early education child must be implanted noble character. If successfully educating families manners, means the family has fulfilled its role as an educational institution smallest determine the fate of the nation. Among the family 's role in moral education by Bratawijaya in Suwardi (2006:82), the family as a container: (1) family education, (2) character education, (3) social norms education, (4) education manners, (5) education about good and bad, and (6) religious education. Of some elements of this education is a family duty to care for children as well as possible. Mistakes in parenting can be fatal. Therefore, parents need to nurture and educate children as early as possible so that the values and moral character can be instilled in the child.

b. Base Life Attitude Formation

Manners prevailing in the Java community, is actually an accumulation of a great idea about the attitude of life, value systems and belief systems. In principle embodied in character and noble ideas or moral teachings. This is no other moral teachings as one compaction values that are very deepest philosophy.

Attitudes are important factors that determine success in social interaction. Mastery of attitude is the main foundation of noble character. Human actions will be largely determined by the attitude of their lives *masig* respectively.

According to the Kelvin Jong in Suwardi (2006:83) that the Java community has attitudes *rila*, *nrima*, and *sabar*. These three attitudes are by Sujamto in Kelvin (2006:83) is not complete if not coupled with an attitude: mindful (aware),

*percaya, mituhu* (loyal, friend, warrior pinandhita, pillars, and selfless. Such attitudes have been given in the life of a family through a variety of practices. Parents will be advised of the various attitudes to their children so that their children later in social life can run smoothly.

In addition, Suwardi (2006:89) said that role of parents in caring for children include:

c. Mother Responsibility

In Javanese life, a mother has an important role of parenting in order to educate their children manners. Through a mother, the children will learn a lot more manners. Because since before birth through adolescence, children tend to be closer to his mother.

Mothers in parenting tasks are extremely diverse, ranging from the trivial or easy to complex matters, among others, the way kids eat, how to sleep well, the polite way to sit, how to dress, and others. Some of the things that really instilled since childhood is thanked for example when Dibe something, and receive the gift by using the right hand.

A mother should be able to inculcate these values to his son, because in order Javanese society, manners and morality are manifested in behavior is a very important thing to be realized. Therefore, sometimes a mother instilling these values to provide certain prohibitions against children, although sometimes some of the restrictions placed containing superstition. For

example, when looking at occupying the pillow, the way the mother forbids the sentence, " *oyo nglungguhi bantal, mundhak wudunen* " (do not occupy a pillow, ulcer pain later. Finally, the way the child will get used to not do things that are not polite, even with a growing child mother should begin to explain the rationale of the prohibition is not well behaved.

d. Responsibilities Dad

Javanese people understand that a father should have a character that *rumangsa handarbeni* which indicates that a father is the leader of the family as they must care for their children. Therefore, I'll try to please their children. Thus, parents will bear the consequences of all his behavior. Parents will not bear to see his misery. So that when children do wrong, the parents will take the burden of the consequences.

Parents have the principle of "tega larane ora tega patine". It means that many parents will surely give you a lesson about manners though sometimes using penalties or sanctions. But parents impose sanctions in accordance with the child's ability, not until the child will die.

### Comparison of Parenting Models

Family education is affected by the parents' parenting. Based on Java parenting and sharing parenting parents in general, can be seen some of the similarities and differences. Comparison between models of parenting can be seen in the table below:



Table 1. Comparison models of parenting

| No | Javanese's Parenting                                                                    | Authoritarian | Permissive | Autoritative/<br>Democratic |
|----|-----------------------------------------------------------------------------------------|---------------|------------|-----------------------------|
| 1  | The child should be subject and obedient to the will of parents                         | √             | -          | -                           |
| 2  | Parents have the authority to regulate the behavior of the child standard               | √             | -          | -                           |
| 3  | Parents must take full responsibility for children's behavior                           | √             | -          | -                           |
| 4  | Parents bear the consequence of his behavior                                            | √             | -          | √                           |
| 5  | Parents impose penalties / sanctions for children who violate the standards of behavior | √             | -          | -                           |
| 6  | Parents guide children to behave                                                        | √             | -          | √                           |
| 7  | Parents guide the moral development of children                                         | √             | -          | √                           |
| 8  | Parents control the child's moral development                                           | √             | -          | √                           |
| 9  | Parents provide certain restrictions to his son                                         | √             | -          | -                           |
| 10 | Parents provide examples of conduct                                                     | -             | -          | √                           |
| 11 | Parents always give advice to his son                                                   | √             | -          | √                           |
| 12 | Parents always give an answer to a child with a logical answer                          | -             | -          | √                           |
| 13 | The Javanese prioritize deliberation                                                    | -             | -          | √                           |
| 14 | Loving parents in educating their children                                              | √             | -          | √                           |
| 15 | Children tend to be obedient to parents                                                 | √             | -          | √                           |
| 16 | Children are aware of the behavior that must be done                                    |               |            |                             |
| 17 | Children perform in accordance with moral rules                                         |               |            |                             |
| 18 | Parents usually compare their behavior                                                  | √             | -          | -                           |
| 19 | Some parents use the puppets as planting media morality child                           | √             | -          | √                           |
| 20 | Some parents use a traditional song as the basis for educating children                 | √             | -          | √                           |

### Javanese Parenting Role in Student's Moral Development

Each character has a specific child though born of the same father and mother. The specificity of each child's character is due to the child's development is influenced by two factors: genetic and environmental. This is in accordance with the opinion of William Stern (figure Convergence flow - education experts from Germany) that was basically a child's development is influenced by two factors namely the disposition and the interplay of the environment (Dirto, 1995). Talent brought at the time of birth will not thrive without the support of a suitable environment for child development. Environment is often referred to as tripusat educational environment that is family, school and community.

Family environment is generally defined as a group of individuals associated in marriage,

including his father and mother (parents) and children. The family is the institution first and foremost, organized and handled directly

by the parents. According Darajat in Tina, in implementing family education

should be tailored to the child's stage of development is no exception in the emotion educating children. Educators (parents) should have an understanding of the emotional development of the child because the child has their own characteristics in its development.

Model of parenting as it has delivered Java has a lot of influence on the moral development of

children. Java parenting with different characteristics have an influence include:

e. Instilling Respect Principles

The principle of respect is the role of social norms in the Java community interaction (Suseno in Suwardi, 2006:23). Respect the principle of a social norm to maintain harmonious relations between members of society. Respect this principle instilled by the parents of the child. The relationship between parent and child will also indirectly reflects the application of the principle of respect.

According to Geertz (1985:114) that children learn the principles of respect Java in three situations, namely wedi, isin, and shy. As was mentioned earlier, that the three situations is fundamental in nurturing their children. This attitude is a reflection of character who studied children in family communication.

Comity related manners, carried the child to the parents, and others outside the family. Respect for older people is a form of affection towards the child's parents, with respect and filial to their parents. While respecting other people do as a form of maintaining social harmony.

f. Embed Harmony Life

Pillars is an ideal size for social relationships. The principle is based on the harmonious life of the Javanese phrase is "crah agawe Bubrah, rukun agawe santosa" which means that the quarrel will take damage while going to make a tranquil harmony. In Javanese life, the concept is instilled through family. Implanted between family members to avoid a fight. Parents also provide an example to always live in harmony with his wife and his children. So with a father role model behavior in parenting, children will also understand that it is necessary to live in harmony in social life.

g. Instilling Wise and Honest Character

Java parenting also requires parents to direct their children to grow up with the attitude and

behavior of humble, friendly, polite, and so on. Such parenting will bring children become wiser and practice of social life.

h. Instilling Honest and selfless Character

Pattern of care provided by parents will also have an impact on the level of sincerity children. It is instilled by parents from an early age, children should listen to the advice that parents should not interrupt the conversation, not to be hurt or resentment due to the words of parents, because the parents advise children for the good of the child. From these characteristics, then the child is learning sincere, hold his own lust, and learned not to expect a profit from other people.

i. Shaping Character *Eling*

Humans will always do well if based mindful attitude. The Javanese have a principle of life that might stop by wong urip ngombe meaning of human life is only temporary, like stopping for a drink. With this attitude to life, the child will be more focused and not do something just for indulgence in lust. This is because it fosters self-awareness mindful attitude. Conscious means considering the result of the behavior does.

j. Shaping *unggah-ungguh* and good manners

According Sastrowardjojo in Suwardi (2006:40) that the word *unggah-ungguh* and manners are not much different. Guidance decorum in the Java community, there are implanted through oral poetry. In oral poetry usually are the values that lead to the manners of Java in a family. Use of this *unggah-ungguh* exemplified parents through everyday language, that in the Javanese culture, the language has a caste which is applied to the level of one's honor. So the children would not want to have to learn to practice, at least in eluarganya own. If the *unggah-ungguh* used still fragmentary or distorted behind, it will be considered unethical in view of the Javanese. As a result, the children are still often mistakenly be ashamed of themselves and trying to fix it.

k. Build a Religious Character

Is a fundamental religious character and very important. Children learn the religious character of the family. If parents educate children to obey the commands of his religion, the child will tend to adhere to the religion. Religious attitudes and behavior in the Java community is also present in many traditional songs.

**Conclusion**

Java community is very close with tradition and culture. They have many tradition and it is comprehensiv in all aspect of life. Then, from that tradition and culture will be the basic philosophy of life's javanese people.. Javanese philosophy of life is that until now still being maintained by the Java community in social life. One of implementation can be observed on the Javanese children educationwho will appear on the parenting models. Javanese parenting is a combination of models and democratic authoritarian parenting. Javanese parenting has a positive impact on the moral development of the child. This positive effect can be seen from the attitude and character of the children who manifest in behavior and *unggah-ungguh*child communication in social life. It is also proved that the values of Javanese local wisdom can thrive and adapted the era.

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## OPTIMIZATION OF PUPPET PAPER TOYS THROUGH STORY OF JAVANESE PUPPET (SOJET): A MEANS OF CHARACTER EDUCATION AND LOCAL CULTURE INTRODUCTION FOR CHILDREN

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### Abstract

The aim of this paper are: (1) to analyse the emergence of paper toys as an educated toys for children, (2) to display the superiority of story in 3D, (3) to analyse SOJET concept as a media of character education for children. The writer uses descriptive qualitative method and the secondary data resource which is from text book, online book, and others. The data analysis technique are data reduction, data display, and verification. The study as follows: SOJET is a development concept of children's stories by using puppet paper toys as a figure of doer which is possible for children to play. SOJET uses 3 main principles in story commission. They are dialogue of story, suggestion, and black-white stories. The characters which are developed in elementary school education through the stories are fond of reading, nationalism, curiosity, cultural appreciation, honesty, loyalty, respect to parents, and many others. SOJET concept takes 3 expert opinion. There are from Jean Piaget, Sigmund Freud and Berns. Its development performs 3 main aspects in education by using SWOT analysis. They are affective, cognitive, and psychomotor aspect.

**Keywords:** *puppet paper toys, story of javanese puppet, sojet.*

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### Introduction

Undang-undang Dasar 1945, article 32 verse 1 states: "countries advancing Indonesia national culture in the middle of world civilization with a guarantee of freedom of society in maintaining and developing cultural values". It's mean that our country gives the citizen freedom to keep and develop his cultural values to increase Indonesian national culture in the middle of world civilization. One of Indonesian region which has rich of culture is Java. Java Island becomes a place for spreading Hindus-Buddhist and Moslem religion. One of Javanese art is puppet. Puppet is acculturation of Hindus-Buddhist culture which was brought by Wali Songo for spreading moslem education to our archipelago. No wonder, puppet contains valuable value which is suitable with moslem education on the figure and it's stories.

The recent problem, the art puppet has started lost and were left by society. Film, television, online media, social networking, and other more desirable than the puppet show. This phenomenon suggests

that technological progress shifts the public interest in the traditional arts.

Another problem is not the inclusion of the puppet into the educational curriculum. This is similar to the statement Suparmin Eko S. (2012), Chairman of the National Secretariat of Indonesian Puppets Puppet Summit press conference at the Ministry of Education and Culture in Jakarta, Thursday (22/11/2012), stating that the proposed inclusion into the educational curriculum puppet National has not received a response [1]. Presented at the same event that the number of spectators puppet is increasingly shrinking and almost no spectators amongst the youths in which 80% of the audience puppet over 50 years of age. As a result, many of the people of Indonesia who do not know this culture does not even recognize the characters in it. On the other hand, UNESCO, in 2003 has recognized the puppet as one of the 13 heritage belongs to Indonesia, which has recorded a World Heritage (The World Heritage) (Lia: 2012)[2].

Based on these facts, the society and the government are required to contribute to preserving the culture of the puppet as mandated in the Undang-undang Dasar 1945, Article 32 verse 1 above. To that end, in this paper, the authors try to provide solutions in order to preserve the puppet with the development of the concept of SOJET, hope gives impact on the existing character in the figure of puppet.

### **Goal of the Paper**

The aim of this paper are: (1) to analyse the emergence of paper toys as an educated toys for children, (2) to display the superiority of story in 3D, (3) to analyse SOJET concept as a media of character education for children.

### **Relevant Theory**

#### **Paper toys/Paper craft**

Paper toys is the art of cutting, folding and sticking pieces of paper into a three dimensional form in accordance with the desired model. Paper toys is the development of origami (Japanese paper folding art). The difference between origami and paper toys is the amount of paper used, origami uses only one sheet of paper, while the art of assembling paper craft a few sheets of paper (<http://papercraft-art.blogspot.com/>)[3].

#### **Character Education**

Suyanto (2009) suggested the character education is a plus character education, which involves aspects of knowledge (cognitive), feeling (and action [4]. According to Ramli T. (2003), the essence and character education has the same meaning as moral education and akhlak education [5]. The aim is to form personal human children to be good citizens. Therefore, the nature of character education in the context of education in Indonesia is the educational value of education is the great value that comes from the culture of Indonesian people themselves in order to develop the personality of the young generation.

#### **Traditional Local Culture**

Traditional culture is a culture that is formed of diverse ethnic cultures in Indonesia, which is an

integral part of Indonesian culture as a whole. According Judistira (2008:141), the local culture is a complementary regional culture and regional culture are essential parts in the formation of culture nationwide[6].

In the cities and in the upper layers of society existing national culture, while the traditional local culture and become stronger when getting away from the city center. Although the initiative and creativity of local culture and traditional fall into the hands of the city, a sense of belonging to the tradition of the village is much greater. (Kuntowijoyo, 2006:42)[7]

#### **Wayang (Javanese Puppet)**

Wayang (Javanese Puppet) in Javanese language, means "shadow". If the terms of the philosophical meaning of "puppet" can be interpreted as a shadow or a reflection of the properties that exist in the human soul, such as rage, virtue, greedy and others (Wawan Junaidi, 2011)[8]. Wayang is a traditional art that developed in Java and Bali. Original puppet (wayang) from Indonesia is punakawan. Punakawan is the designation for four puppet characters, including Badranaya Semar, Nala Gareng, Bolong Kanthong Petruk and Bagong. Punakawan figures has its own character that can be used as a model to learn a character in life when understood correctly. Punakawan have each shape depicting the characters of each character. These characters are as follows.

#### **SOJET (Story of Javanese Puppet)**

Story of Javanese Puppet derived from English (the Oxford Dictionary, 2010: 1472) described a Story discription of events that the writer or speaker has invented in order to entertain people [9]. Puppet (in the Oxford Dictionary, 2010: 1990) described a model of of a person or an animal that can be made to move [9]. Javanese Javanese means. Sourced from the above definition of Javanese Puppet Story is a children's story concept that includes characterizations and stories puppet with an easily understood by children.

### **Methodology**

#### **Approach of Paper Writing**

Writing papers using qualitative descriptive approach. According Hadari (2005), descriptive method can be interpreted as a problem-solving

procedure to describe / describe the circumstances of the subject / object of research at the present time based on the facts that appear or as they are[10] Basrowi (2002) states that a qualitative approach is writing that aims to gain an understanding of the facts or events through inductive thinking process (logico indicative abstractif)[11].

#### **Data Source**

The data source in this paper is a secondary data source. The author takes various studies in the literature analyzing and providing solutions in solving the above problems. The source data comes from journals, books printed books online, mass media, and online media.

#### **Stages of Writing**

Some stages in the writing of a scientific paper is as follows.

1. Assess and identify issues related puppet cultural development.
2. Studying information from various media (newspaper references, online media, e-books, etc.) development of puppets.
3. Processing, reviewing, and analyzing the problem based on literature review as well as the information that has been obtained to get an answer from the formulation of the problem.
4. Draw conclusions based on the discussion and recommends to follow up on this as a research paper.

#### **Data Analysis Techniques**

Sugiyono (2010: 335), suggests the data analysis is the process of systematically searching and compiling data obtained from various sources by way of organizing data into categories, defined in units, synthesize, organize into a pattern, choose which ones are important and which will be studied, and make conclusions so easily understood by oneself or others [12].

Data from studies that have collected then analyzed using data analysis model of Miles and

Huberman. Miles and Huberman in Sugiyono (2010: 337), suggests that activity in qualitative data analysis is done interactively and lasted continuously until complete so that the data is already saturated[12]. Activity in the analysis of data, namely data reduction, the data display, and conclusion drawing / verification.

**After researchers conducted data collection, the next step is to analyze the data as follows.**

#### **Data Reduction**

Reduce data means summarize, choosing subject matter, focusing on things that are important, look for themes and patterns and discard unnecessary. In reducing the data, each researcher will be guided by the objectives to be achieved. The main objective of qualitative research is the finding.

#### **Data Display**

After data reduction, then the next step is to do a presentation of the data. In qualitative research, data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowchart, and the like.

Sugiyono (Miles and Huberman (2010: 341)) states that the most frequently used to present data in qualitative research is the text that narrative [12].

#### **Verification**

When data reduction has been done and the presentation of the data, the next step is to perform inference and verification. Conclusions in qualitative research is expected to be a new finding which previously had not been there. The new findings could be a description or picture of an object that previously was dimly lit or dark so that after investigation it became clear. The data have been presented if supported by solid data, it can be used as a credible conclusion.

#### **Analysis**

#### **Paper toys as Education Toys**

Education toys or educational toys is a means to stimulate the activity of the child for the child to learn something without realizing it, using modern

technology and traditional technology is even simpler (Andang Ismail, 2006: 156)[13]. Educational toys are also a means to improve knowledge and understanding of the child about something.

Basically toys intended to improve the three basic capabilities (Andang Ismail, 2006: 156-157), namely [13]:

**l. Physicalability - motor skills (psychomotor)**

Psychomotor development is associated with changes in the development of muscle and physical movements (Wina Sanjaya, 2010: 267) [14]. Physical movements to train the muscular system so it will be well-formed and healthy. Fine motor skills a child can also be trained with activities such as cutting out pictures, puzzles, large or small to distinguish shapes and so on.

**m. Social-Emotional ability (affective)**

Affective capabilities related to attitudes, interests, emotions, values and appreciation of the child's life to an object or activity is conducted.

**n. Ability Intelligence (Cognitive)**

Cognitive abilities related to intellectual ability, the children's ability to use the brain to think (Wina Sanjaya, 2010: 272) [14].

Paper toys is one form of education toys for psychomotor training in addition to also evoke a child's cognitive creativity. According to Julius (Paper Replika Indonesia community founder or PERI), working on this Paper toy hone stimulate creativity and fine motor skills in children.

Paper toys and SOJET is a unity in which SOJET (Story of Javanese Puppet) is an optimization of the emergence of paper toys. The goal children can play and learn from the media that his desire would have an impact on education character internalization.

**Story Book Excellence in Form 3 Dimensional (3D)**

Three-dimensional storybook form contained in the market is a pop-up. According to Nancy and Rondha (2012:1), a pop-up book that is a 3-dimensional shape that has the potential for motion

and interactive [15]. Pop-up itself using the motion mechanism that folds, rolls, tabs, and so forth.

Based on the above understanding, the pop-up is a visualization of an object that is contained in books. Visualization object in question is a 3-dimensional shaped objects made of folds or rolls of paper. The advantages of the pop-ups according to the definition above that concretize a pop up if the story depicts a story, the interactive nature is able to communicate and visualize a story setting or background. Another advantage is the pop-up is able to raise the curiosity of the child because each page of the story gives its own surprises.

**Synthesis**

**SOJET (Story of Javanese Puppet) Character Education and Development.**

Story of Javanese Puppet "SOJET" is a concept of the development of children's stories that does not abandon the principle of making a children's story, namely: the creation of dialogue in the story, the message, as well as black and white display of the story. (Hardjana, 2006:49) argues that the dialogue in the story is important to make the story more vivid and interesting so as to give a clear picture of the nature / character's attitude [16]. The second principle of the mandate, meaning that a story would be more meaningful if it contains a positive message or teaching of goodness in it. The third is a black-and-white should explicitly distinguish good and bad deeds. Given the punishment of bad deeds and good deeds are given rewards. That bad deeds lead to misery and good deeds will result in something fun. For example, we can tell when the pre-war Baratayuda where Karna Kunti did not heed his mother's advice not to fight with the Pandawa. This resulted in the death of Karna in the hands of Arjuna, his own brother. This kind of story will give positive mandates for children to respect the advice of parents.

SOJET authors designed with the concept of making a children's story which contains a variety of puppet characters including characterizations in the story in Indonesian language. Indonesian chosen to facilitate children's understanding of the story. The story is presented in the form of pop-ups also intrigued children.

According to Cognitive-Developmental Theory of Jean Piaget in (www.erlanggaforkids.com: 2012), reveals that the play is able to activate the child's brain. At the time of playing, right and left brain functions integrated balance, nerve structures are formed and the pillars of the developing neural understanding [17]. Conditions of active brain is a very good condition to receive lessons. The intensity of emotion that takes place during the process of reading the story also affect the reception and memory so that the expected impact is not only shaping the character likes to read, curiosity, nationalism but also an understanding of the value of the story and speaking skills. Another effect is the introduction of local culture again.

Development of SOJET not be separated from psychodynamic theories of Sigmund Freud proposed. According to Sigmund Freud (Rita, 2008: 23) stated that the primary school age children 6-puberty are at the latent stage [18]. In the latent stage of a child trying to develop social and intellectual skills. This latent stage shows that children aged 6-12 years trying to assert her independence and free themselves from their parents. Context freeing itself can be interpreted that the child does not like to be restrained so that the inclusion of social values will be hit through to read their own story.

Dealing with character education character education socialization refers writer expressed (Berns, 1997 in Euis, 2005:7) that there are 6 character education delivery methods two of which are cognitive methods where the results generated through the socialization process of thinking [19]. The second method utilizes socio-cultural traditions, rituals, pressure groups, and other socio-cultural elements to get the desired results.

SOJET trying to convey character education through cognitive methods that evoke the character through the thought process of the review of the story. In addition to cognitive methods, SOJET trying to showing the story through socio-cultural methods that explore the cultural values that exist in the characterizations.

Character education that the authors developed in SOJET is fond of reading, which is the habit of making time to read a variety of literature that gives virtue for him. Second, love of country, that way of thinking, being and doing that show loyalty, and caring, and high appreciation of the language, the environment. Third, the curiosity, the attitude and actions are always working to find out more in depth and extends from not meant to be learned, seen, and heard.

Based on the above explanation, it can be concluded that SOJET is a medium of learning in the form of a book in which the story contains characters and characterizations as well as puppet story packaged in Indonesian. Excellence is the main attraction of SOJET is the figure that can be formed and played their own children. Figures shown in the form of paper toys that are tailored to the real puppet Paper toys attributes have been selected to give the impression that the puppet is very interesting and not obsolete. The characters in this puppet child will be played according to the story in the book so that the story storybook (SOJET) also serves as a board game. Another advantage is SOJET can be played individually or in groups in the form of role playing.

### **SOJET and the introduction of Local Culture**

Based on the above theoretical studies, local culture is within the scope of the local culture and local tribes.

Story of Javanese Puppet (SOJET) is a geographically local culture developing in Java and Bali. However, the story has been acclaimed puppet (UNESCO 2003) as Indonesia's cultural heritage. As a fact, it is expected SOJET be a solution for the introduction of local culture (puppet) to the children of Indonesia so that Indonesian children not only know but to love the culture. The selection of Indonesian language is also a local solution culture through introduction to all regions in Indonesia. Hope the author by the name of "Story of Javanese SOJET or Puppet" is not only known in Indonesia where the use of English language in a story book. This concept may be a start to introduce the original story from Indonesia to the wider scope so that Indonesia can boast its own cultural



attitudes that have an impact on the emergence of nationalism.

### Conclusion

Based on the description of the results of the above discussion, the authors can conclude some of the following.

1. Paper toys as a form of education toys for honing the three basic capabilities: the ability of physical - motor (psychomotor), the ability of intelligence (cognitive), social-emotional abilities (affective).
2. The advantages of three-dimensional form of the story (pop-up) that can concretize a story, the interactive nature (able to communicate and visualize a story setting or background) and is able to arouse the curiosity of the child because each page of the story gives its own surprises.
3. SOJET concept refers to some child developmental psychologists, among others, Jean Piaget and Freud Sigmud, and Berns where socialization within Sojet character education can be raised through the methods of cognitive and socio-cultural methods.

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## **SNAKE AND LADDER CULTURAL (SLC) GAME: AN EFFORT TO INTRODUCE CULTURAL DIFFERENCES TO ELEMENTARY SCHOOL STUDENTS**

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### **Abstract**

This paper discusses the use of Snake and Ladder (SLC) Game to introduce cultural differences to elementary schools students. With this games the students are expected to know the cultural differences in each country. This game could also be combined in the learning process, for example in the social science subject. This scientific paper was written in descriptive qualitative approach. *Snake and Ladder Cultural (SLC) Game* is different from the conventional game. This game uses a new face, in a big size and uses modified rules. The media has a funny design with the combination of colorful pictures of each country's culture to make students more interested. To optimize it, we can use technology to computerize the game. So, the elementary school students can play this game in their personal computer.

**Keywords:** *Cultural Differences, Snake and Ladder Culture Game, Elementary School Students*

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### **Introduction**

Culture is a very valuable heritage. Indonesian Culture can be defined through out characteristic an existing area since before the formation of the Indonesian nationality. While that includes Indonesian culture is the whole culture of the whole range of local tribes in Indonesia. Culture is a property of the identity of a nation that distinguishes a nation with other nations. Every nation and the state certainly has the characteristics and characteristic of each culture. Indonesian local culture itself is so diverse in every region. The culture must be preserved so that the identity of Indonesia as a nation rich in culture can be maintained. Indonesia itself is an archipelago country, who has various tribes. Through 2000 census recorded 101 ethnic groups in Indonesia with a total population of 201,092,238 people as citizens (Suryadinata et al, 2003: 102). The ethnic diversity also produces a wide range of cultural output, for example through traditional games.

Along with globalization and modernization, local Indonesian culture mixing with any foreign culture can not be separated in life interactions. Human beings must perform dynamic interaction

the social environment. Lifestyle, customs, habits, between the Indonesian nation and other nations into matters relating to human in interaction with the environment. Knowledge and understanding of cultural diversity between countries need to be given early.

When residents of the state have the knowledge and respect to their own culture, the phenomenon of cultural convergence of various countries in the globalization process can be filtered without affecting the existence of the local culture. But otherwise when the residents does not understand or even know about the culture, this condition can be exploited by parties who are not responsible. For example, some cases of seizure of cultural ownership rights between countries.

In fact, in the modern era, especially the existence of the local culture in Indonesia began with the displaced metropolis lifestyle. It can be seen from a wide range of phenomenon encountered such as: community, especially in Indonesia prefer to go to the shopping malls rather than visiting a cultural heritage. The adolescents are more fond of foreign music than the original richness of traditional music culture, children are

more fond of the modern game than traditional. This is basically motivated ignorance of the richness of their own culture nation. People are more familiar with the cultures that they did know from a variety of media and is becoming a trend in the world.

The cause of the seizure of ownership of cultural international conflicts as well due to a lack of understanding and recognition of the culture of each region to the world public. In addition because of the many local cultures native to Indonesia which has not been patented. The Indonesian government has recognized the importance of the actual value of existing intellectual property in Indonesian culture since they were first enacted legislation nationally Copyright 1982 (see Section 10 of Law No. 6/1982 about Copyright, which subsequently also recognized in Section 10 of Law no. 19/2002 on Copyright, and last in Section 13 Copyright draft law in 2010). In a variety of Copyright Law, mentioned that the state holds the copyright on Indonesian cultural heritage that includes the work of prehistoric relics, historical, cultural objects, folklore and folk culture results to protect it from use by foreigners. However, the lack of knowledge of the culture of Indonesia it self will make many people who use irresponsible.

Education that includes knowledge of cultural diversity between countries is important given. The concept will be very well done in the elementary school years. A primary school level of education is the basis for future students. Also according to Eka Izzaty Rita et al, (2008: 35) primary school students with an average age between 7-11 years, including childhood in the end that is in the concrete operational stage of thinking. The game of snakes and ladders is a media that can facilitate elementary students to learn through the medium of concrete objects games at once imparting knowledge about cultural diversity between countries.

Provide knowledge since this period is expected to create a young generation aware of the cultural diversity between countries. While students who do not have insight into the culture, it is possible to have no concern for the culture and it will certainly threaten the existence of culture. In providing the

culture insight to the primary school students, educators or teachers can take advantage of the media. Media can optimize the delivery of messages in the learning process.

Various media can collaborate in the learning method. One is the Snake and Ladder (SLC). Snake and Ladder (SLC) is one of the games to introduce the diversity of Indonesian culture to elementary school students. This game collaborate cultural values into the instrument being played. Snakes and ladders game also has the advantage that can optimize the development of cognitive, affective and psychomotor balanced manner through active interaction awakened in play activities.

Snake and Ladder is a game that has been modified to present the patches containing the image became a symbol of the culture of a country. Snake and Ladder (SLC) is also playing in groups. Children will playing and actively interacting simultaneously can learn about the cultures of various countries. Through fun activities students expected can understand cultural diversity between countries with better.

## Discussion

### Culture

Culture has a definitive meaning is so broad, that many experts are giving their opinions related to the culture. Literally, the word culture comes from the word culture comes from the Sanskrit *buddhayah*, which is the plural form of *buddhi* (mind or intellect) is defined as all things related to the mind and human reason. While in English, the culture is called culture, which is derived from the Latin word *Colere*, which means seeking, processing or working. Can be interpreted also as cultivate the land or farming. The word culture is also sometimes translated as "*kultur*" in Indonesian.

Ki Hadjar Dewantara, an educational and cultural experts in Indonesia found what culture means every thing related to culture. While culture is derived from the words of wisdom that maybe defined briefly as the soul has matured. Culture is the result of the human being. In other languages, cultures derived from the word cultural which is a

significant change from culture maintain, promote and extend (1951:72). In the first part of the book also said that culture is the result of mankind's struggle against two strong influences, the nature and era/nature and society (1951: 342).

According to Savage and Armstrong in Sari Rudiwati (2013: 59) is a constellation of culture (set) values, customs and beliefs as owned by a group of people. Culture can be seen as attitudes, values, belief systems, norms and prevailing traditions in a society also cultural tint group of people in an organization.

Culture according to Ki Hadjar Dewantara always be nationality (national) and embodies the national identity (1951:343). From the description above, it is clear it can be ascertained every nation or country has different cultures, even every tribe or community associations that are smaller in scope, where it is happening and the struggle of human interaction will produce also a culture that the hallmark and character of the tribe or community groups. S. Wisni Septiarti (2013:99) also argues that culture, "the total of the way of a society" is universally shared by all people in the world, though not all people of the world have a civilization. So it is clear that each country must have a culture, whether it be original culture or foreign cultures then became culture in the country. So no wonder if the culture in this world are so many and varied.

### **Cultural Differences**

The diversity of the many cultures that exist or it may be a very good potential if developed. However, this could also be a cause of conflict or even cultures that exist eroded by era and then disappear. Therefore needs to be an understanding of the cultural diversity every individual possessed by each country in the world. Diversity or cultural differences are very necessary to be introduced to students in both formal and non-formal education in everyday life. With a good understanding of cultural diversity between countries then the child will be able to behave and act better and wise. Children can appreciate cultural diversity, has a good tolerance of cultural differences, as well as to build a good social intelligence.

### **Forms of Culture**

Culture means everything produced by human reason as stated above, has three forms. Here are the forms of culture.

- a. Culture in the form of ideas, including science, customs and regulations.
- b. Culture in the form of habits, among other ways foraging (livelihoods), the association procedures, procedures for marriage, art, assortment of ceremonial traditions, and language.
- c. Culture in the form of objects are all objects which are created by humans, such as tools daily necessities, home, jewelry, clothing, heirlooms (weapons), vehicles, games, and so on.

All kinds of the culture for granted to be maintained and preserved by every citizen / nation. Culture so that it will be sustainable to be known to be seen by future generations. In addition, these cultures also need to be introduced to the next generation. So that future generations will know the various cultures of different countries can appreciate the culture. So needs to introduce the cultures of the children through a variety of media.

### **Media**

According Heinich, Molenda, and Russell (1990) in Wina Sanjaya (2008: 204) revealed that the media is a channel of communication. Derived from the Latin word for "between", the term refers to "anything that carries information between a source and a receiver". Association of Education and Communication Technology (AECT: 1977) defines as all forms of media and channels are used to convey a message or information (Azhar Arsyad, 2013:3).

According to Rossi and Breidle (in Wina Sanjaya, 2008:204) learning media are a number of tools and materials that can be used for educational purposes such as radio, television, books, newspapers, magazines, and so on. The media must be used in the learning process to facilitate the delivery of the messages to be conveyed to the students. The use of the media was seen as important in a learning process. It raises the multiple interpretations of

verbal and comprehension. So the media is very helpful in delivering messages to students. In addition, the media can also add excitement and motivation to study. Implementation of the learning process can be more interesting and interactive. In addition there are many more benefits of the use of instructional media in the learning process every day.

Media according to Anderson (in Wina Sanjaya 2008:213) were divided into 8 groups: audio, print, audio-print, visual projects silent, silent visual project with audio, visual motion, visual motion with audio, objects, and computers. To introduce the culture of a nation as well as differences with other cultures is also necessary to deliver a variety of media such messages. One of the media that can be used is through the snake and ladder game.

From the eight types of media, snakes and ladders game can be classified in the print media. The tools that used in this game form of a board is a visual medium that can be printed in a variety of materials with different sizes. For children, snakes and ladders also train some kind of intelligence such as logical mathematical intelligence, visual-spatial, and also linguistic intelligence. It caused in this game students are exposed to numbers and letters that require them to be able to read and calculate in order to enjoy the game.

Principles of learning in elementary school student should covers three aspects of study, cognitive (knowledge), affective (feeling), and psychomotor (how to do), also with three modalities of learning of children are visual (image), audio (discussion), and kinesthetic (exhibit), in addition the elementary school age children will be easier if they learn along with their peers in groups so as to cause interactions also accompanied by someone more expert. From all of the principles, snakes and ladders game can optimize these three aspects. According to Eka Izzaty Rita et al, (2008:35) primary school students with an average age between 7-11 years old, including in the end of childhood that is in the operational concrete stage of thinking. This game, snakes and ladders is a medium that can facilitate elementary school

students to learn through concrete objects by game.

Based on the explanation above, it can be concluded that the SLC is an alternative medium which can be used in learning process for elementary school students. This media has a concept that corresponds to the developmental tasks of elementary school students to think concretely. In addition, this game can develop the potential of elementary school students in terms of cognitive, affective, and psychomotor.

### Game

According to Huizinga in Sukirman (2008: 19) "the characteristics of play in human activities as: a) a voluntary existing activity out -side "ordinary" life, b) totally absorbing, c) unproductive; d) occurring within a circumscribed time and space e) ordered by rules; and f) Characterized - by the group relationships of the which surround themselves by secrecy and disguise". It means that a game or child activity of playing in every human activity, especially in children. So the game is closely related to the daily activities of a child in an effort to reach maturity phase. Play activities are carried out by a child influenced by the culture in their living environment.

There are several points of view or perspective that can be used in defining game for children. From a functional perspective, play is one way for a child to get into a mature phase. Game perspective mention that playing made as a game for children. From psychological perspective, play is seen as a form of anxiety and anger of a children. This can be caused by various conditions experienced by children, it could be also due to the impact of parenting parents to children. And from the adaptation perspective, playing seen as a means of improving the child's ability to adapt.

According to NAEYC (National Association for the Education of Young Children, 1997), playing is main tool for children's learning. It similar with the Indonesian government that has set the principle, "Playing while learning or learning while playing". Playing that appropriate with the purposes above is playing which has characteristics such as: cause

pleasure, spontaneity, motivation of the children themselves, and the rules determined by the children themselves. Playing is an activity that very essential for the growth and development of the physical, social, emotional, intellectual, and spiritual elementary school children. By playing children can get to know their environment, interact, and develop their emotional and imagination well (Rochdi Simon. 2007: 8). In the learning process, teachers can use games as a medium of learning. It cause game can make students pleasure and enjoy the learning.

There are many game in each country. The game is not only the traditional game but also some games from the other countries. Some games also come from other countries who then accepted and assimilated culture. The acceptability of the game depend on the community as the subject of the game. Not all countries have the same game, not necessarily a game that is also available in other countries can be played well and liked by the children there. So there are many types of games that can be performed by them. However, the game essentially no definite "*ngemut suraos*", or education implies that is taught in them. On this occasion we will try to describe about the game of snakes and ladders for cultural education.

#### History of Snakes and Ladders Games

Snakes and ladders game is a traditional game which originated from India. In India, this game popular named *Moksha Patamu* invented by Hindu spiritual teachers there. This game is also called "*Leela*" which reflects the Hindu's consciousness in their life. The game is also known by another name "*TanggaKeselamatan/Safety Ladder*".

*Moksha patam* is closely relaed with traditional Hindu philosophy that is: "*Karma and Kama*" or defined as "Destiny and Desire". The game is also interpreted as "Learning Effects of Good Deeds Against the Poor Deeds". Ladder represent: kindness such as generosity, faith, and humility. Snakes represent: vices and crimes such as lust, anger, murder, and theft. Moral lesson of the game it is moksha, namely : a person can achieve salvation by doing good way. While the evil act will inherit rebirth to lower life forms. In the original game,

total number of ladder less than the snake. It has own meaning, the meaning as a reminder that the good way is much harder to move than the bad way that will deliver on sin

Then the game was brought to Victoria, British. Then after entered the new era snake n ladder has created and introduced by John Jacques in 1892. Then the game was brought to America by a toy maker named Milton Bradley in 1943, the last named "Snakes n Ladder". Until now, the game is very popular and spread across several countries. In Japan there is a game called "*Sugoroku*" which is synonymous with Moksha Patam or the Snakes and Ladders game.

Snakes and ladders game is a game that played by two person or more, more player suppose there are 4 players the game will be more fun. So there will be social interaction between the players, that is the way that people done to socializw with their environment.

Snakes and ladders game can stimulate and develop aspects of cognitive, affective, and psychomotor elementary students. This game also appropriate with the stage of development in the elementary students in the concrete operational stage of thinking (Eka Izzaty Rita et al, 2008:35). Snakes and ladders can facilitate children to learn with the real object using the tools in the game of snakes and ladders. Children can think concretely with the help of media prepared by the teacher/ educator.

The game of snakes and ladders can also used to introduce the cultural diversity between countries to elementary students. Based on Nunik's research (2013), snakes and ladders games can improve students' ability to appreciate the diversity of races and cultures in Indonesia. Improvement obtained is 31% of the pre-action. It shows that the game can be used as a learning media for elementary school students.

#### Elementary Students

Based on an analysis of existing conditions, primary school students is one of the best levels in the personal formation of a quality human being.

These periods is a golden age in which the personality of students so easy to be formed from the existing environment. Rousseau in William Crain (2007:18) classifies human development entered the age of 2 to 12 years are included in Childhood. At this time the children already have a certain kind of ratios that are directly related to the movement of the body and the five senses and the things that are concrete. Based on cognitive development according to Piaget in Eka Izzaty Rita et al, (2008:35) primary school students with an average age between 7-11 years, including childhood in the end that is in the concrete operational stage of thinking. Concepts that exist in the child has begun to clear and concrete.

Piaget noted that children in the concrete operational stage is now no longer have a high egocentric in his thoughts. He had begun to think of other people in his life, so elementary school children can already invited to work well together with other friends or with their teacher. Periods of the golden age should be optimized to the maximum in order to establish a good personal in every human being.

This past primary school age are developmentally important and fundamental to the success of student progress to the next developmental phase. Primary school age children experiencing physical, cognitive, language, moral, emotional, and social. More details are described as follows:

#### 1) Physical development

In this age of physical development of children tend to be more stable. Physical changes, both in height and weight can vary. However, these changes will evolve more quickly when it began to enter puberty. Primary school age children need a lot of skill activities related to physical activity. Because at the time of the child's motor skills progress rapidly, more smoothly, and more coordinated than ever before. The physical activity is needed to help develop the body stability and stability of motion and coordination training to enhance various skills.

#### 2) The development of cognitive

At this stage the child is in the stage of concrete operations in thinking, where there is the concept that childhood is a concept vague and unclear, has become more concrete. At the primary school age, children are very substantial intellectual development, children become more logical. Children are able to react intellectual stimulation, or carry out learning tasks that require intellectual ability or cognitive abilities (such as reading, writing and calculating).

#### 3) The development of language

The development of children's language, the better its ability to understand and interpret spoken and written communication. Primary school age is a period of rapid growth and ability to recognize master vocabulary (vocabulary). At this early period, the child has mastered about 2,500 words and at the end of the period (age 11-12 years) has been able to control about 50,000 words, which will be used by the students to interact with their environment. The children have also been increasingly using the verb appropriate to explain a thing.

#### 4) The development of moral

At primary school age, children are able to follow the linkage or guidance from parents or social environment. Their thinking about the concept of justice has changed no longer rigid matching what they hear, but it can be adjusted to the circumstances. Children at this age will apply their understanding in his life day-to-day will be the norm, values, rules and manners in society.

#### 5) Emotional development

Emotional development of a child is influenced by various factors such as gender, age, environment, relationships and parental guidance. In addition, factors of race, culture, ethnicity and nation were also influenced. Elementary school age children have started learning to mengendalaikan and control the expression of emotions. Child's ability to control emotions acquired through imitation and practice (habituation) of the daily lives of students.



According to Eka Izzaty Rita (2008: 112) there are 8 characteristics of emotion in primary school aged children, namely: a) relatively short lasting emotional child, b) strong or severe, c) easy change, d) appears repeatedly, e) different, f) can be detected from the behavior symptom, g) changes in the strength, and h) changes in emotional expressions.

#### 6) Social development

Social development in children is strongly influenced by its immediate environment, especially the family and the surrounding community. The role of parents take a very important role especially in developing children's skills hang out and socialize with their environment. Elementary school age children social development characterized by the expansion of the relationship, in addition to the family he also began to forge new bonds with peers (peer group) or classmates, so that the space for student social relationships will expand, which they will use to society even up to the state.

At elementary school age (6-12 years) children are able to react intellectual stimulation, or carry out learning tasks that require intellectual ability or cognitive abilities (such as: reading, writing, interacting and counting). Robert J. Havighurs in Sumantri Mulyani (2007: 16) divides the developmental tasks of childhood are as follows.

- a. Learning physical skills necessary for a particular game.
- b. Establish a certain attitude toward oneself as a growing organism.
- c. Learning to get along in harmony with peers.
- d. Studying the role that corresponds to their gender.
- e. Establishing basic skills in reading, writing, and arithmetic.
- f. Learning menembangkan concepts needed in everyday life.
- g. Establish a conscience, morality, and values.

h. Obtain the freedom of self.

- i. Develop attitudes toward groups and social institutions.

Each individual stage of development should be in line with the development of other aspects of physical, psychological, emotional, moral, and social. So the need for an adjustment of each of these aspects of the stages of development of the individual.

Relation to culture and the game is elementary school age students are basically still like to play. Thus, in these conditions we should be able to accommodate the nature of the good and the right. It is only fitting we give them the right to play. However, do not forget to educate them in every game they do in everyday life. Because, basically, the game is part of an effort to educate children toward order. It was intended for the development of a child task can run properly and not disturbed, so it will have an impact on the development individe at a later stage.

#### **Implication the Understanding of the cultural diversity to elementary school students**

Culture is not a "given" but is the formed by social interactions that happened within a communities in a civilization. The culture is very important in society as a means to unite the community. Therefore, every country needs political culture (Harrison and Huntington, 2000). It can be concluded that the culture as a means of unifying the nation. Culture is one of the important capital in the progress of a nation.

Capital of a nation to come forward and to overcome difficulties and gain strength, especially in the globalization era. Each group or community interaction patterns, respectively. Therefore it then makes the existence of cultural diversity between countries. A nation should understand the characteristics and culture of the nation and knowing diverse culture of other countries. Education is one way to achieve this goal.

Multicultural education or education that provides an understanding of cultural diversity between countries can avoid the bad possibilities as bigotry against their own culture, to claim another

nation's culture as their culture, racism against certain countries and so forth. Elementary school student who spends their majority in setting of their own ethnic or customs is not likely a mistake in understanding cultural values.

This can then trigger a conflicts between the nation with other nations in terms of culture. Through multicultural education from an early age children are expected to able to accept and understand the cultural differences that affect the difference in usage (how people behave); folkways (the habits that exist in the community), mores (code of conduct in society), and customs (a customs community). With multicultural education students are able to accept differences, criticism, and have a sense of empathy, tolerance for others regardless of class, status, gender, and academic ability (Farida Hanum, 2005). Thus expected to create harmony in the interaction between nations to avoid conflicts.

The conflicts are essentially motivated lack of knowledge about culture and cultural differences themselves were subsequently to be fertile ground for conflict. Students' understanding of cultural diversity is good will also be able to form a successive more tolerant of differences or cultural diversity between countries. Students can also be formed into an adaptive and respect personal property rights cultures. This condition then can be made one of the things that affect the stability of internation relations.

## **Conclusion**

Character building in elementary school students need to be appropriate with their characteristic and their development steps. Provision of education on cultural diversity in the world also needs to be adapted to the task of development of elementary students. Based on Piaget's cognitive theory, elementary students entered the operational concrete stage, which means the students start to think logically about concrete events. Snakes and ladders game is one of media that in line with the concepts and purpose. Snake and ladder can be used to introduce the cultural differences from each country in elementary school students. Why through the

game? Because as we all know that children of primary school age is a time period that still likes to playing. So that we can provide knowledge about the culture inserts from each country in the game. Students are expected to know and understand.

The use of this media can also be implemented in a learning process. Thematic learning process can be done with this media to introduce the cultures in various countries. This game may be a game that has been popular in many countries. But in this game are given some sense in making models of snakes and ladders game is re-introduced to a wide variety of cultural differences in some countries in world. With innovations made in the media of snake and ladder games, is expected to make the students more interested. The concept of media snake and ladder gives a general description that is given in each figure plots the image of a country's culture. Then the overall game rules that apply are the same as snakes and ladders game normally. Innovation is given a card with lucky and resque cards. These cards contain a variety of questions about the culture of different countries cultures that exist in the game. Savior card give the player opportunities when they are "eaten by snake" to keep from falling down, if the player can answer the questions in the resque cards. Meanwhile, the lucky card give the player opportunities who can climb the ladder and then the players can take the lucky card. If those players can answer the questions on the lucky card clearly, they can play the dice once again.

Snake and ladder can be designed by some series such as dance series, clothing series, weapon series, and other series about the product of cultures. It was done by printing a variety of other cultures possessed by each country displayed. In order to follow the development of the times and also the development technology, then there should be an adjustment. This game can also be used as a game with the same concept. This can be done as an effort to provide a better understanding to the public about the culture, and cultural differences in various countries in order to increase knowledge and insight. All the efforts that our idea of innovation is an attempt to make adjustments to the existing culture with the times as well as efforts

to educate children through a path that is easier to be accepted by the children.

With a good understanding of cultural diversity between countries, is expected to create a young generation aware of the cultural diversity between countries. Students are also expected to receive the differences, criticism, and have a sense of empathy, tolerance for others regardless of class, status, gender. While students who do not have the cultural insight, they may have no concern for the culture and it will certainly threaten the existence of culture. In the situation, it is prone to conflict between countries due to lack of knowledge and understanding of the cultures of other countries.

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## CHARACTER BUILDING WITH STUDENTS IMPACT ON A TOUCH OF LOVE LEARNING PROCESS

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### Abstract

The purpose of the research was to examine the extent to which the role of the characters in the success of the learning process. The experiment was conducted in Pateken Elementary School where the researcher taught. The data were collected through observations, test, documentation, questionnaires and interviews. The data were analyzed qualitatively. The analysis showed that the formation of character with a touch of love with the process and learning outcomes increased. It can be seen from the data in the form of student observation and student activity participation in the learning process. This increase was followed by the achievement of results in the try out of grade VI. The results of the first try out with a 71.20 average increased to 77.05. The improvement of learning outcomes was not only on the cognitive aspects but also the affective aspects. In the affective aspects, honesty was shown by the students in the try out test.

**Keywords :** *character, character building, a touch of love, the process of learning*

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### Introduction

21 Century is the starting point of a reflection in Indonesia education. Reflection in all sectors of education, not only the success of the sector of the exam nation state success sector but morality or character of the nation. The change of is really fundamental to the national education system. Although late in 2010/2011 year the Ministry of National Education recalled to about the discourse the character education. The education which is based on culture and national character is inserted into the curriculum and syllabus.

Spirit toward character education paradigm implicitly affirmed in the National Long-Term of Development Plan (RPJPN) 2005-2015, in which the characters are placed as the education foundation for national development vision is "to create a society berakhlak noble, morality, ethical, cultured, and civilized by Pancasila ". Based on the vision to realize that it needs the involvement and role of the school as a vehicle for education. Since the school became a place embed, form, and develop of the positive character. In addition, the school also changed the students' bad character into the students who have superior and noble character.

Why become very important character education? Back to the past experience when much

of attacks between students, courtesy fading behavior, cheating at the time of replications, say dishonest, taking the property of others, said that was not polite, and disrupt the learning process in the classroom. The social behaviors that are not characterized will become a negative impact on the learning process.

On the other hand the negative behavior of Indonesian society both learners and students showed the fading character of the nation. The cause of this behavior is due to the maximal planting character education. The implementation of character education is actually not located on the teacher alone but needs the cooperation with the community, especially the parent. The education is a necessary science appreciation in attitude is not an exact science with high intelligence capability. Character education is to be in accordance with the required character and exemplary and habituation. Applied in the form of good deeds everyday life situations both learning, training, lessons, group learning and respect teachers as parents in the school. Attitude that needs to be developed in the learning process includes being honest, praying before learning, curiosity, discipline, hard work, responsibility, healthy lifestyle, self-confident, independent, love science, logical thinking, polite, and democratic.

Implementation of character education is considered very important in the learning process implemented in the classroom. Said to be important because the learning process takes a positive attitude towards science and admission patterns of social behavior among students, between teachers and students with the last teacher to the principal. Special on this paper the author discusses only to plant a character with a touch of love that will have an impact on the learning process. Hope to be achieved planting is flexible character without coercion and the learning process goes according to expectations. The creation of a conductive class of morality *konduksif* moral and noble towards learning outcomes that qualified.

### The Problem Formulation

Based on the background of the above problems, there are some who want to

Formulation problems solved as follows :

1. How is the role of educators in building character of students with a touch of love?
2. Is there any connection with the character education learning process?

### Purpose

In accordance with the above formulation of the problem there are several objectives to be achieved in paper entitled "Building Student Character With a Touch of Love Impact Learning Process", as follows:

1. To determine the role of teachers in building students' character with a touch of love,
2. To determine the extent to which the relationship of character education with the learning process.

### Benefits

The benefits to be conveyed in this paper, as follows:

1. For teachers in shaping the character of the students should not only teach theory but mere examples of concrete actions. In addition to

molding the character of students, teachers should show love to the students.

2. For teachers and students have the academic functions in accordance with its own portion. Students create a character class *konduksif* and learning process on target

### Discussion

#### Study Of Theory

##### Definition of Character

In Big Indonesian Dictionary of Poerwadarminta essay, character is defined as a behavior; character; psychological traits, morality or manners that distinguish one person rather than another from this sense it can be said that the character building is the process of making or sculpt one's soul to form something different from others. Character can be defined attitude that stands out from someone.

Ministry of Education the word character means, *ahklak* or character that distinguish one person to another, or significant congenital, heart, soul, personality, character, behavior, personalit, traits, character, temperament, character. Hence the term of character means that it has character, has a personality, behavior, character, temper, and character. Individual character is good or superior to someone who tried to do the best things to Almighty God, his neighbor, neighborhood, nation and the international community at large state with optimizing the potential (knowledge) itself and accompanied by consciousness, emotion, and motivation (feelings) Depdiknas, 2010

According to Doni Koesoema A. (2007) interpreted the same character with personality. Personality traits *atatu* regarded as characteristic or distinctive style or nature of a person who comes from formations received from the environment.

Meanwhile, according to Heri Gunawan (2012) character is a character of human behavior related to Almighty God, ourselves, our fellow human beings, the environment, and nationality embodied in thoughts, attitudes, feelings, words, and behavior based on religious norms, laws, manners, culture, and customs.

Based on some notion of a character it can be concluded that the character is a character or a habit of doing things that are both reflecting the hallmark of a person. This characteristic is not shared by others the most powerful.

#### Role of Educators How to Build Character in Students?

In the slogan implied specific views and expectations of the figure of the teacher. In this case the teacher's role is very important in school activities. The teacher is spearheading activities in school because dealing directly with students. The success of the students very closely with the performance of teachers in managing the learning process in the classroom. Therefore, the relationship between teachers and students should be familiar, friendly and not scary. The atmosphere in the class must be created as possible. The learning process is created to be fun or enjoy learning.

To create the enjoy learning is needed. The professional teacher is a teacher who are able to manage themselves in performing everyday tasks. It means a teacher will work as a professional manner when they are working high ability and sincerity to implement the learning process well.

In relation to the role of the teacher in the implementation of character education, the things that teachers must do (Najib Sulhan, 2006) is (1) implement management, (2) understand the character of the student, (3) identify problematic student learning (4) apply the learning mode according to the characteristics of the students.

Najib Sulhan of the opinion that the management class can describe the behavior of a complex device in which teachers use to develop and maintain the class condition that allows students achieve learning efficiently. The teachers should be understand the character of the students because every student has a different character. The difference was a character study of each teacher to analyze the behavior of their students. If there is deviant behavior, the teacher tried to prevent or even stop the problematic behavior. By training and shaping the character of students

through concrete examples, such as getting students to behave honestly. And give an explanation that dishonest acts will bring huge mistake.

#### Students Build Character with a Touch of Love

Educate the students with love. The slogan is appropriate at this time to educate students. Violence committed against the student teacher is unethical. Violence will cause trepidation for students, especially elementary age students. At this age the memory will always be attached to adulthood. Fears that happen to students will bring adverse effects are not optimal learning outcomes.

The anger teacher, vulgarity, and the punishment is an act that undesirable students. Although according to teachers for good or it can be regarded as a lesson for students. Teachers assume that students can take lesson or learn on sentencing. But the fact that occur in the field of punishment will make students vengeful. Therefore one stance in educating students is lenient with affection even in anger though.

Be gentle with students does not mean students will obey all. A teacher must be understand the character of students. Because the character of the students can not be generalized in the process of supporting them. There are children who quickly accept the lesson, there is a new capture lessons repeatedly. There's a quiet, shy, and naughty because they want to get attention. This helps the students understanding the character is helps the teacher steps in dealing with problems that occur.

In the association of education, intrinsic motives that need to exist within the teacher is compassion towards students. The teacher who have a sense of compassion for their students will always efforts, maintain, protect, guide, teach, train, assist or provide all the best. On the basis of this affection, teachers willing to sacrifice for the sake of their students even without reward.

The teacher must be have a gently toward for their student is he love them. Then, students are given the softness will immediately feel that he is loved. Instead students were brutalized resentment

will grow. If students always get tenderness from the teacher when interacting so they will reciprocate his love. Form of love for the teacher is the emergence of submissive attitude, adjacent pleased with the teachers, doing something fun teacher, making the teacher as a friend to confide in, easy to accept the decision of teacher that it will make the teacher as an source inspiration. These properties are very positive to boost the student achievement.

The main capital of love is the tenderness of love and attention. The tenderness produces love, and love will be taped teacher relationships between teacher with students. Gently apply all day for the student, the student's character undoubtedly formed by itself. Why is that ? Because of the tenderness and love that poured teacher to her students is a real practice in the formation of character. Like a wise man said that quality education is a world born from the womb of compassion and love.

Build the students' character can not be separated from the role of parents at home. Irawati Istadi gives the idea that the best way to maintain harmonious relationship between parent and children is the sweet words, smiles, laughter, hugs and touches that express physical affection. Affectionate relationship is not the same as the attitude of permissiveness. Teacher and parent still required to teach children about right and wrong, between good and bad. These boundaries should still be considered. Do not use harsh words, angry or indifferent attitude, but still be gentle. Give an explanation in affection, with attentive and sweet words.

The relationship between teacher and parent at home become a foundation to develop a strong character. The touching of love will bring a child or student in to real life. Until they become a leader who can apply a love and affection for their subordinate and has a love for their job. It has a hope that the negative things can be avoided and bravo to face the challenge of future life.

The Impact of Character Education Learning Process

According to the guide book of the issued by Kemendiknas character education which (2010) that the character education as an integration in the learning process is the introduction of values awareness of the importance of facilitation obtained values and the internalization of values into the students' daily behavior through a learning process either directly inside and outside of the classroom in all subjects. Thus, in addition to the learning activities make students has the competencies (material) were targeted, it will designed and conducted to make the students recognize, realize/care, and the values and behaviors make.

The integration of material means to be integrated character in the subject matter being taught. For example, social studies the teacher was teaching the social knowledge about the natural wealth of Indonesia, the values that are taught religious to express gratitude, love of country and concern. Or when the teachers teach reading with the theme of health so the values (character) is delivered to students are intelligent, curious, healthy lifestyle, and discipline.

The integration in the learning process means teachers instill character values in each lesson. How to cultivation of character values way by an example eg teacher slipped compelling story that it contains exemplary nature. Analysing the values of these characters is not limited to only positive values but with a negative value and impact. This is often done when a student is cheating daily tests carried out. This activity should not be separated from the observations of teachers with fine teacher reprimanding the student who did it. After doing daily examination, the teacher will be classically concluded that the activities of cheating is reprehensible attitude. First hurt yourself, do not have high confidence, deceiving himself and others. Both got the sanction of teachers, it has become a shared commitment if one of the students cheating then the value is reduced. Obviously this self-defeating actions.

The selection of instructional media adapted to the integration of character values. For example a subject about the negative impact of globalization, download pictures from internet in accordance

with the national culture. Do not just dirty pictures that do not fit the age of the students. This will be more effective because the elementary school children age have the power of higher criticism.

Actually, besides the above-mentioned integration, performed the first setting is the manufacture of the syllabus, lesson plans, learning activities, all evaluation must be have characters. Even indicators reinforced by giving the values of the corresponding character. Affirmation of the indicator with values adjusted to the character of the material is made. This activity starts from the beginning of learning activities with prayer as a form of attitude relegios. This activity is based on Permendiknas No. 41 of 2007 is divided into three stages, namely exploration, elaboration, and confirmation. In summary these are all three contain the application of character values.

The development or planting of the character is not only limited to the theories that need memorization but a form of mental effort to build character in accordance with the mandate of Pancasila. Moreover, of the character used for the happiness of living in the community with good character, of course, it be will demonstrate an adequate level of education.

Based on the explanation above about planting a character with a touch of love can be concluded that the planting or building a character education affects students' learning process. Why is that? Before answering further it will be presented about an education in the past. The students are considered an adult human who has the intellect and mind like an adult. In the past when their under seventy, much of the students are shouted, ridiculed, insulted, said with harsh words if one of the students could not answer. The teacher Just stuff sciences without look into the student personally. The physical abuse of teacher is done when there are students who are naughty. Slap, kick, slap, pinch, and tweak the ear is not unusual anymore.

Along with the times that things like that are rare in education today. Characters are echoed by the government not only the character of their

students but teachers should also be characterized. Its construction through habituation, exemplary, and repetition. Based on the results observed to have a positive impact on the character of the learning process. The condition becomes more conductive class, students are more confident, discipline and the most striking results Try Out Pateken Elementary School VI grade has increased by an average of 71.20 points have until increased to 77.05. Average value obtained from the average fourth grade subjects namely mathematics, Indonesian, IPA, and religious education. Improved learning outcomes not only on cognitive aspects but aspects related affective character also increased. In the affective aspects of honesty shown by the students in the Try Out test.

### **Research Methodology**

The research is conducted in Elemmentary School of Pateken 2013/2014. The subject which become objects are math, science, language and relegious education. There are national examination subject. The researcher took the study at grade VI because the condition is lees enthusiam in learning, less conductive class. The existence of froud in exercises. The data collection tecnuques are used in ways that answer the problem formulation. In this study, there are five data collection techniques are used, include: observation, testing, documentation, questionnaires, and interviews. The result of research is illustrated by analyzing the data with using the data triangulation. To analyze the data, partiapiation and activeness of students in leraning to use descriptive quantitative techniques.

### **Result**

The first data to find out the result of the exercise or try out test is conducted independently been some cheating. This occurs when the superintendent left the room, there is found the kids who cheat, bring a calculator during the math test, the noisy often occurs in the room. This data was obtained after an interview with the examinees. The result of the first try out is get score 70,02. That is the value of the average performance for the four subjects.



The found which find from try out is analyzed based on student interviews, questionnaires documents, observation and test scores. The analysis is followed up by planting of character values in intergrated into the learning process. The activeness and participation of students are also analyzed. After the second try out, the following data is obtained: the class average of fourth subjects achieved 72,05 with details of the average are: Indonesian language 72,61 with highest score is 90,00; religious education 80,78 with highest score is 96,00. The activeness and participation of the students in work on the matters encountered no froud.

### Conclusion Suggestions

#### Conclusion

The inistry of National Education back sprain discourse of character education. Education-based on culture and national character are inserted into the curriculum and syllabus. Spirit toward character education paradigm implicitly affirmed in the National Long-Term Development Plan (RPJPN) 2005-2015, in which the characters are placed education as the foundation for realizing the vision of national development. Development of character values and planting through the role of teachers in schools and its implications on the learning process. It turns out that building character of students through the touch of love have a positive impact on the learning process. Achieving conductive class, efficient, useful, and increased learning outcomes.

#### Suggestion

The character values is promoted again in order that students have a strong personality to the

necessary cooperation with the relevant institutions. Teachers, schools, learning programs, and parents. Instill character as early as possible, not through violence but planting with gentleness, patience, exemplary, habituation, repetition, and with a touch of love. It is the last step to realize the formidable character. Integrate the values of the characters with learning at school through the teacher's role in learning as a word to the wise saying "quality education is a world born from the womb of compassion and love

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## CDP COOPERATIVE LEARNING APPROACH IN RESEARCH METHODOLOGY SUBJECT TO DEVELOP STUDENTS' CHARACTERS OF COLLABORATION AND RESPONSIBILITY

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### Abstract

This study was aimed to reveal the impact of applying CDP cooperative learning approach in the research methodology subject towards the establishment of collaborative and responsible characters for the students in Physical Health and Recreation Education Study Program (PHRESP) in the Faculty of Sports Science, Yogyakarta State University. To achieve the objective, a classroom action research (CAR) was conducted. The subject of this study was students of Class B PHRESP. This study was carried out in the beginning of academic year of 2012/2013, i.e. from 11 October to 6 December 2012. This CAR was conducted in two cycles in order to develop the collaborative and responsible characters as well as to improve students' learning achievement in Research Methodology subject by means of CDP cooperative learning. Based on the study it can be concluded that applying CDP cooperative learning could improve the students' character for collaboration and responsibility during the learning process. In the observation of the second cycle, besides improving students' attitude in the collaboration and responsibility, it could also improve students' learning achievement in the research methodology subject, especially in doing the final assignment of making research proposals (Chapter 1) with the average result of highly satisfactory, i.e. score 87.4 (A).

**Keywords:** CDP cooperative learning, collaboration, responsibility, students

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### Introduction

There is a strong impression for most final semester students of Sportsmanship Science Faculty of Yogyakarta State University, making a mini thesis job become a scarier ghost. Fear and anxiety feeling making unable to write a mini thesis should not exist. Because, if we have been in final semester, it academically means that we are able to write and make a mini thesis alone, because provision to write and make a mini thesis has been obtained in previous semesters. A provision of students to make a mini thesis is that they obtain a course of Research Methodology. As experienced by students of Study Program of Physical Health and Recreation (PJKR), they gain the course in Semester V and Semester VII with 2 SKS of each (Curriculum 2009, Sportsmanship Science Faculty, PJKR Study Program). However, based on experiences and observation of the writer, in general, characters of Sportsmanship Science Faculty students of Yogyakarta State University are happier to enter field (playing various sport branches, being referee,

etc.), and their interest is very low in learning concepts or going to library to read. Data of central library of Yogyakarta State University show that total students of Sportsmanship Science Faculty of Yogyakarta State University visiting library were lower than students of other faculties (results of document analysis in the Library of Yogyakarta State University, September 2012).

According to Adnan (1990), reading has not been a need; it may be caused by cultural barrier. Reading has not been felt as a part of student need. Whereas, it has been a theory indicating that, if we want to write (make) a mini thesis, we must be happy to read. Moreover, in learning such as Research Methodology course with full concepts, students are required to be happy and hobby to read in order that results are optimum. However, a fact is different, there is general tendency occurring in students of Sportsmanship Science Faculty of Yogyakarta.

State University if the learn concepts, they are less active and their responsiveness is low in both action to ask for question, learn in classroom and feeling to know more things and master of them by learning alone in the library. This phenomenon seemed to make performance or achievement of theoretical courses such as Research Methodology course less satisfying. Result or achievement of learning of PJKR students of Class B who specialize in Research Methodology course in 2010/2011 showed the following results:

Table 1. Results of Research Methodology course of Students in Academic Year of 2010/2011

|            | Classification and Frequency of Scores Obtained by students |     |      |   |   |      |      |     | Quantity Total |
|------------|-------------------------------------------------------------|-----|------|---|---|------|------|-----|----------------|
|            | A                                                           | A-  | B    | B | B | C    | C    | D   |                |
|            |                                                             |     | +    |   | - | +    |      |     |                |
|            |                                                             |     |      |   |   |      |      |     |                |
| Quantity   | 0                                                           | 2   | 8    | 1 | 1 | 9    | 8    | 1   | 54             |
| Percentage | 0                                                           | 3.7 | 14.8 | 2 | 2 | 15.6 | 11.9 | 1.9 | 100%           |

The data indicate that the results of learning of PJKR students in Research Methodology course were not satisfying. None of them gained score A, their most dominant scores were B- (25.9%).

Many factors made their learning achievements less satisfying. One of them might be caused by learning approach which did not direct students to wake up to learn autonomously. Adnan (1990) confirmed that that, recently, learning in classroom was widely conducted by speech method. Lecturers were active to teach/explain materials and students were passive, sitting down, silent, or making notes. It means that, although lecturers gave opportunities to students to ask for questions, but students seldom asked for question, even they did not use questions. Furthermore, the former head of Gadjah Mada University explained wonderthat why the dialog process worked less fluently, while the students were sufficiently sensitive and vocal when discussing social problems outside campus.

As with way to give homework to summary content of reading, but, unfortunately, as the writer monitored and experienced, most students did not work the homework actually, moreover, when the students were given opportunities to ask for questions in order to discuss the homework, they were passive. This phenomenon, until now, still occurs in students generally and students of Sportsmanship Science Faculty of Yogyakarta State University specifically. This pattern makes difficulty in teaching students of Sportsmanship Science Faculty of Yogyakarta State University, students' criticism and curiosity are low. This passive attitude of students makes process of lecturing difficult for lecturers in controlling whether materials they teach can be understood or not by students. Arma Abdoellah (1990) suggested that this condition makes nervous because there is strong impression that there is decline in learning intensity of students, especially if compared to Sport College (STO) and current Sportsmanship Science Faculty.

Basic problems in this research indicate that, in learning process of Sportsmanship Science Faculty of Yogyakarta State University, students were passive in participating in learning activities, specifically activity of theoretic learning in classroom such as participation in lecture of Research Methodology course theory. Whereas, if academic interaction is meant as interpersonal relationship arrangements, such as, research and teaching, then process of teaching-learning is a part of the interaction associated with increase of academic competency of students through reception, internalization and information processing accompanied by lecturers, so that, if the process does not work, it means that students are passive, so results are neither optimum for students, as fact occurred in results of Research Methodology course mentioned above.

In terms of the problems, the writer would try to develop a new approach to teaching of Research Methodology course in order that students are active, using cooperative teaching method (CDP). Because various studies indicate that, through group assignment method with cooperative teaching cannot only make students active, but also can develop cooperative and responsibility

characters (Sharan, 2009; Johnson and Holubec, 1998). Operationally, problems in this research can be identified as follows: (1) recently conducive academic interaction in lecturing process in colleges (PT) generally and Sportsmanship Science Faculty of Yogyakarta State University specifically did not occur. Lecturers used speech method and worked in one way, it means that lecturers were active in explaining/informing, while students were passive, sitting down, listening to, and making notes. This condition affected low quality results of learning of students; (2) students of Sportsmanship Science Faculty of Yogyakarta State University in participating in Research Methodology course were passive as to affect less satisfying achievement of learning results. Teaching method used by lecturers more widely emphasized on speech so that cooperative and responsibility characters of students of Sportsmanship Science Faculty of Yogyakarta State University were not built, because aspects of evaluation were more widely emphasized on cognitive aspect by seeing results of written tests in both middle and final semester examinations; and (4) CDP-cooperative teaching approach used by lecturers during process of lecturing is not only a part of effort to make students active so that they are have high achievement, but also it is used to form cooperative and responsibility characters of students. Yet, recently, the method has not been implemented.

From the background and identification of problems, the writer would try to research how far effect of CDP-cooperative teaching approach is to build cooperative and responsibility characters of students in Research Methodology course. Cooperative learning is a learning format where students work cooperatively in small, structured, heterogeneous groups to master of lesson contents. Students are not only responsible for learning materials, but also they help groups to learn in partners. Through cooperative teaching, students can increase motor skills, develop social skill, cooperate as a team, help others increase skills, responsible for their autonomous learning, learn to give and receive feedback, and improve responsibility (Dyson, 2001).

According to Glakas (in Tommie and Wendt, 1993: 66), when developed carefully, cooperative activities or cooperation in education can bring ideas such as honesty, respecting rights and feeling of other people, care for other people, and self-discipline. Challenge of cooperative learning of students to cooperate each other in completing works. Before applying cooperative learning, usually time will be spent for helping involve students in activities which motivate positive social interaction. Applying cooperative learning, it is started well in a classroom enabling cooperation (Sapon-Shevin, 1994). Many cooperative learning models had been developed and used in learning. But, model of *The Child Development Project* (CDP) is a program in classroom which is designed to improve social, ethics, and intellectual development for students (Watson *et al* in Sharan, 2006). Furthermore, they confirmed that cooperative learning of CDP is more instant and deliberate to affect social and ethics development for students.

Observing national condition of Indonesia nation recently full of abnormal behaviors opposing to ethics and moral and social values, such as, corruptions which were widely conducted by state officials, also violations made by students and other negative behaviors. Thus, cooperative learning with CDP model is very appropriate to be given and done by educators in schools. Especially, now, the government via The Ministry of Education and Culture (Kemendikbud) is increasing character education. Therefore, it is important for education institutions starting from kindergartens to universities to teach students with skills, attitude and values of ethics and social life in our society, including basic democratic values such as equality, respecting difference and individual responsibility. Departing from the background and identification of problems as mentioned above, then the following questions are asked: (1) can CDP cooperative teaching approach to Research Methodology course build cooperative and responsibility characters of students of PJKR Study Program of Sportsmanship Science Faculty of Yogyakarta State University? And (2) can CDP cooperative teaching approach to Research Methodology course increase achievement of

students in learning the Research Methodology course?

### **Methods**

In order to achieve objectives of research as mentioned above, approach of Classroom Action Research (CAR) framework was used in the following phases of the research approach.

#### **To Design CAR Preparation**

Before CAR is performed, various instrumental inputs will be used to give treatment to CAR, namely, learning plan which will be CAR, consisting of actions which will be taken to solve these research problems, namely, by arranging learning design of Research Methodology course with CDP-cooperative approach, so that effect of teaching and potential of learning taking place in classroom will affect behavior of students as target of this activity. Material scope is limited to basic materials as knowledge and competency of students to make research proposal in Chapter I, whose components consist of: background of problems, identification of problems, formulation of problems, objectives of research, and benefit of research. Assumption is that, if students have been successful in writing Chapter I appropriately, then 50% of research has essentially been finished, because substances of next chapters, namely, Chapter II (literature review) and Chapter III (research methodology) must refer to and be developed from research problems existing in Chapter I.

#### **To Specify Research Subjects**

Subjects being action targets in this research were students of PJKR Study Program of Class B, Semester 7, Academic Year of 2012/2013 numbered 52 students, consisting of 38 male students and 14 female students.

#### **Techniques and Tools to Collect Data**

##### **Techniques**

Techniques to collect data in this research were observation, interview, and discussion.

- Observation: It was used to collect data on participation of students in PBM and

implementation of cooperative learning approach of CDP.

- Interview: It was used to gain data on success rate of CDP-cooperative learning approach implementation.
- Discussion between teachers and colleagues.

##### **Tools to collect data**

Tools to collect data in this CAR included observation sheet, interview guide, work evaluation format to make proposal of Chapter I and discussion.

- Observation sheet to measure participation rate of students in discussion showing behaviors of cooperative and responsibility characters.
- Interview guidance to understand opinions or attitudes of students on learning which uses CDP.
- Work evaluation format to make proposal to evaluate results of group work products of students such as research proposal.

##### **Performance Indicators**

In this CAR, the following performance indicators of students would be seen:

1. More than 80% of students were active in process of Research Methodology course learning.
2. Cooperative character increased, it was shown by result of research proposal compilation in Chapter I of each group, 90% of them got score more than B+.
3. Responsibility character increased, it was shown by ability to make research proposal work (Chapter I) of each group, 100% of them could be collected on time and able to be responsible well and truly when presenting.

##### **Analysis of Data**

During implementation phase, observer observed activities of lecturers (researcher) during teaching by using prepared observation sheet. This observation was conducted to understand whether,

in the process of teaching performance, the lecturers had applied cooperative teaching approach appropriately. While, to understand effect of CDP cooperative teaching application on change in cooperative character, during lecturing process, the students were observed for their behaviors during group discussion in lecturing by lecturers (team member of researcher). Whereas, to understand responsibility character, results of work, such as, Chapter I proposal containing background of problems, identification of problems, formulation of problems, objectives and benefits of research, would be evaluated appropriately and given on time. Also, they were observed when presenting the results of work whether group of students mastered of materials or not. After data were collected, further activities were to collect and analyze data of observation results and data of field notes.

Based on the techniques and tools to collect data, as mentioned above, then technique to analyze data used was qualitative analysis, the steps of data analysis to conduct were: (1) after data were collected, the writer reduced data through summary of field report; (2) systematic structure was based on specific categorization and classification; (3) making display of data in table forms; (4) making *cross site analysis*; (5) presenting findings, making conclusions in general tendency form of Research Methodology course implementation conducted by lecturers.

#### Procedure of Research

Approach to Research Methodology course generally uses assignment and speech approach. In relation to this research, lecturing approach is integrated in action research. Procedure and steps of research consist of basic principle applicable to action research. According to Kemmis and Taggart (1988), act research is recycle process, starting from planning phase, action performance and observation, and reflection, which might be followed by re-planning. In action research, collaboration and participation are main principles. Operationally, action research procedure applied to this research can be suggested as follows:

#### 1. Planning

Planning, to arrange teaching plan with CDP-cooperative teaching model, containing the following plans: (1) organization/introduction, (2) supervision/group activities, and (3) packaging/processing. Furthermore, each phase is described as follows with the following steps:

Taken steps:

- a. The researcher hold meeting to discuss and identify problems and arrange design of Research Methodology course learning with CDP-cooperative teaching approach and honesty.
- b. Specifying materials/topic of Research Methodology which will be taught through CDP-cooperative teaching model.
- c. Specifying actions of students in groups that must be observed for behaviors by observer.
- d. Explaining to observer in details CDP teaching model that had to be observed when the researcher taught.
- e. Making learning design of Learning Methodology with CDP-cooperative teaching model.
- f. Arranging learning scenario of Research Methodology course with CDP-cooperative teaching model.
- g. Arranging and explaining observationsheet to evaluate behavior of students during lecturing and examination to observer.
- h. Explaining indicators of CDP-cooperative teaching model application to observer during learning which appeared during process of learning.
- i. Arranging and explaining observation sheet for lecturers' activities in applying learning of CDP-cooperative teaching model.

#### 2. Action and Observation Performance

The researcher divided students into 12 groups. Each group consists of 4-5 students. Furthermore, action and observation performance consists of activities conducted by lecturer (researcher) as efforts to improve, or desired change in students; and other lecturers as collaborators observed results of effects of taken action. Activities

conducted in phase of performance were that lecturers were assigned to apply CDP-cooperative teaching approach in Research Methodology course. Observer observed activities of lecturers during teaching process, while lecturers taught and observed behaviors of students in each group.

### 3. Reflection

In this reflection phase, the researcher and collaborator studied and saw results and effects of action taken together.

During performance phase, observer observed activities of lecturers during teaching Research Methodology course by using prepared observation sheet. This observation was conducted to understand whether in the teaching process performance, lecturers had specified CDP-cooperative teaching approach appropriately.

Whereas, to understand effects of the approach application to students' behavior in each group, then, during teaching process took place, the students' behavior was controlled by lecturers.

## Results

### Results of research

The results of research are described in phases such as learning cycles made in teaching-learning process in classroom. In this research, learning was conducted in two cycles as described below.

#### 1. First Cycle (meeting 3 times)

The first cycle consists of four phases, namely, planning, performance, observation, reflection and re-planning as follows:

##### a. Planning

- 1) Make CDP-cooperative learning plan.
- 2) Make plan of assignment that must be brought by students.
- 3) Make instrument used in CAR cycle.

##### b. Performance

When initial first cycle of performance had not been consistent with plan. The causes are:

- 1) Some groups had not been accustomed to learning condition in groups.
- 2) Some groups had not understood steps of cooperative learning with CDP model overall and completely.

To solve the problems, the following efforts were made:

- Researcher with initiative gave notions to students on condition in groups, group cooperation, and participation of students in groups.
- Researcher helped groups that had not understood steps of cooperative learning with CDP model.

In end of first cycle from the results of observation by researcher and collaborator, the conclusions are:

- Students started to be habited to learning condition in groups and able to discuss in order to solve problems in groups.
- Students started to be habited to cooperative learning with CDP model.
- Students were able to make good cooperation in arranging Chapter I research proposal work.

#### c. Observation and Evaluation

- 1) Results of cumulative observation of students' activities (group cooperative activities)

Table 2. Results of Cooperative Observation of Students in Groups

| Group | Cooperative Activities in Groups |      |      |      |      |
|-------|----------------------------------|------|------|------|------|
|       | A                                | B    | C    | D    | E    |
| I     | 100%                             | 90%  | 100% | 100% | 90%  |
| II    | 100%                             | 100% | 100% | 100% | 100% |
| III   | 100%                             | 100% | 100% | 100% | 90%  |
| IV    | 100%                             | 100% | 100% | 100% | 100% |
| V     | 100%                             | 100% | 100% | 100% | 90%  |
| VI    | 100%                             | 90%  | 100% | 100% | 90%  |
| VII   | 100%                             | 100% | 100% | 100% | 100% |
| VIII  | 100%                             | 100% | 100% | 100% | 90%  |
| IX    | 100%                             | 90%  | 100% | 100% | 100% |
| X     | 100%                             | 100% | 100% | 100% | 90%  |
| XI    | 100%                             | 100% | 100% | 100% | 100% |
| XII   | 100%                             | 100% | 100% | 100% | 100% |

Where: A = existing in work, B= taking shift and sharing works, C = asking for questions D= listening actively, E = giving and respecting contribution

Based on the data, it can be explained that, of 12 groups of students in group learning in order to discuss work to make or write research proposal work (Chapter I) generally, each member of group was able to cooperate well. It means that each member of group always existed in work, meaning that they were able to do work being their responsibility and remaining to exist in group during group working. Taking shift and sharing works, it means that there is a readiness to receive work, give reliance to friends to complete work, and cooperate in groups and ready to help friends finish work. In the groups, there was also a process to ask for questions, namely, questions to friends or lecturers on how to work, ask for help to friends or consultation to lecturers if there was difficulty. Listening actively, it means that we considered information/opinion presented by friends in groups or lecturers, listening to friends' opinion. Also giving and respecting contribution, it means that they were group members to give entries to make groups successful, respond what were said by friends, including positive criticism, and considering what were done by friends.

## 2) Results of proposal evaluation

Table 3. Results of Work Evaluation to make research proposal

| Group | Components to evaluate |    |    |    |           | Total scores/<br>values |
|-------|------------------------|----|----|----|-----------|-------------------------|
|       | A                      | B  | C  | D  | E         |                         |
| I     | 30                     | 18 | 18 | 18 | 6         | 90/A                    |
| II    | 24                     | 16 | 16 | 16 | 7         | 79/B+                   |
| III   | 27                     | 20 | 18 | 20 | 7         | 92/A                    |
| IV    | 27                     | 18 | 20 | 20 | 7         | 92/A                    |
| V     | 27                     | 18 | 18 | 18 | 7         | 88/A                    |
| VI    | 24                     | 18 | 18 | 20 | 7         | 87/A                    |
| VII   | 24                     | 16 | 16 | 16 | 6         | 78/B+                   |
| VIII  | 30                     | 18 | 18 | 18 | 6         | 90/A                    |
| IX    | 27                     | 16 | 16 | 16 | 7         | 82/A-                   |
| X     | 27                     | 20 | 18 | 18 | 6         | 89/A                    |
| XI    | 27                     | 20 | 20 | 18 | 7         | 92/A                    |
| XII   | 30                     | 18 | 18 | 18 | 7         | 91/A                    |
|       |                        |    |    |    | Me<br>ans | 87,5/A                  |

Where:

A= selection and formulation of problems,  
B= appropriateness in identifying problems,

C= consistency between title and formulation of problems

D= consistency between formulation of problems and research objectives

E= writing language and organization

## 3) Results of First Cycle Evaluation: Mastering of lecture materials

Students mastering of lecture materials, in this case, made results of research proposal work (Chapter I) done by CDP-cooperative teaching method satisfied. Of ideal score 100, mean of each group could gain value 87.5 (A).

## Reflection

Successes achieved during the first cycle are:

- 1) Activities of students in lecturing with cooperative approach had been successful in developing cooperative attitudes or characters. Students were able to develop cooperation well as to finish group works well, namely doing research proposal works (Chapter I)
- 2) Increasing of activities of students in process of lecturing was highly supported by hard work of lecturers in applying cooperative learning approach with CDP model. Lectures were intensive in guiding students when the students experienced difficulties in the process of lecturing. It was reflected in each group discussion (all groups/100%) when they experienced difficulties, they were not reluctant to ask for help to the lectures.
- 3) Cooperative learning approach with CDP model had been successful in increasing achievement of students in research methodology course, especially in making research proposal (Chapter I) with very satisfied mean results of proposal evaluation, namely, 87.5 (A).

## Second cycle

### a. Planning

Planning in second cycle was based on re-planning in first cycle, namely:

- 1) Giving motivation to groups in order to be more active in learning.
- 2) More intensive in guiding groups facing difficulties.



- 3) Giving recognition and reward.
- 4) Making work planning to students to present research proposal work (Chapter 1)
- 5) Making cooperative learning planning instrument with better CDP model.

#### b. Performance

- 1) The lecturing performance had led to cooperative learning with CDP model. Works given by lectures to groups were presentations of group work results such as work to make research proposal (Chapter 1) could be worked well and full responsibly. Students, when they deliver presentations, could try to mutually help maintain and have responsibilities for the group work results. Students seemed to be enthusiastic to participate in process of lecturing.
- 2) Nearly all students felt motivation to ask for questions and respond to presentation of other groups.
- 3) Effective and happy learning environment had been created.

#### c. Observation and Evaluation

Results of observation during second cycle can be seen as follows:

- 1) Cumulative results of observation of students' activities (responsibilities) in process of lecturing in the second cycle prioritized to evaluation of responsibilities aspects of students in presenting and questioning the results of group works such as work to make research proposal (Chapter 1) are:
  - The results of observation in the second cycle of students' activities showed that behaviors or characters of responsibilities with indicators could finish works on time and be able to maintain the results of group work (research proposal, Chapter 1) when presenting. It proved that students in each group showed good responsibilities characters.
  - The results of rata-rata such as their appearances in presenting their results of proposals with the following indicators:

(a) competency to address their opinions logically; (b) correctness to answer questions, and (c) mastering of materials indicated that mean score of each group is 81.75. it indicates that students mastered of learning materials, competency to address opinions logically, and correctness to answer questions during presenting was found good.

Table 4. Responsibilities of responsibilities evaluation of students

| Group | Aspects of evaluated responsibilities: |                                    |                      |    |    |       |
|-------|----------------------------------------|------------------------------------|----------------------|----|----|-------|
|       | Finishing works on time                | Maintain ing results of group work | Presenting materials |    |    | Score |
|       |                                        |                                    | A                    | B  | C  |       |
| I     | V                                      | V                                  | 40                   | 28 | 16 | 81    |
| II    | V                                      | V                                  | 32                   | 32 | 16 | 80    |
| III   | V                                      | V                                  | 40                   | 32 | 16 | 88    |
| IV    | V                                      | V                                  | 32                   | 32 | 20 | 76    |
| V     | V                                      | V                                  | 32                   | 32 | 16 | 80    |
| VI    | V                                      | V                                  | 32                   | 28 | 20 | 80    |
| VII   | V                                      | V                                  | 40                   | 28 | 16 | 84    |
| VIII  | V                                      | V                                  | 32                   | 28 | 16 | 76    |
| IX    | V                                      | V                                  | 40                   | 28 | 20 | 88    |
| X     | V                                      | V                                  | 32                   | 28 | 20 | 80    |
| XI    | V                                      | V                                  | 28                   | 32 | 20 | 80    |
| XII   | V                                      | V                                  | 40                   | 28 | 20 | 88    |
|       |                                        |                                    | Mean                 |    |    | 81,75 |

Where:

A= competency to A= present opinions logically;  
B=appropriateness to answer questions, and  
C= mastering of materials

#### Reflection

Successes achieved during this second cycle are as follows:

- 1) Activities of students in lecturing had led to better cooperative learning with CDP model. Students in groups could develop cooperation for responsibilities for works given by lectures. Students started to be able to participate in activities (discussions) and their work performance was on time. Students started to be able to present their results of works. It can be seen from data of observation results for activities of students in groups that could finish works and maintain group works well. Moreover, they could present or represent the results of cooperation with mean score of 81.75 (good).

- 2) Increasing the activities of students in process of lecturing in research methodology supported by activities of lectures in maintaining and improving a lecturing sphere leading to cooperative learning with CDP model. Lectures were intensive to guide students, especially when the students experienced difficulties in process of lecturing.
- 3) Increasing of students activities in evaluation for use of materials (research proposal, Chapter 1). It was based on the mean results of evaluation for presentation of works gaining a very satisfied score, namely, 81.75. This success could not be separated from basic responsibilities of each group in working the works. This indicator was seen from their competency to maintain their works well, their results of works were given on time and materials were used well.

## DISCUSSION

The results of research during first cycle consisting of three times meetings by using cooperative learning approach with CDP model indicate that: (1) students were able to develop cooperation well as to finish the group works well, namely, making a research proposal (Chapter 1). The resulting conditions are consistent with concept of cooperative learning with CDP model, namely a program in classroom designed to improve social, ethical and intellectual developments of students (Watson *et al* in Sharan, 2006)/ furthermore, they confirmed cooperative learning with CDP model had survived and deliberately affected social and ethical development of students. Formed cooperative characters of group members are effects of this CDP model success.

The results of research also indicate that cooperative learning approach with CDP model had been successful in increasing students' achievement in research methodology course specifically in making research proposal (Chapter 1) with very satisfied mean results of proposal evaluation, namely, 87.5 (A). Success in this learning achievement was highly associated with objectives of CDP cooperative learning to not only develop social, ethical and intellectual aspects and focus on intrinsic motivation of students (Watson *et al* in Sharan, 2006); but also they confirmed

characteristics of cooperative activities with CDP model concerning the 5 aspects: (1) intrinsic interest; (2) development feasibility; (3) open end; (4) original benefit of collaboration; and (5) advantage of many skills or competencies. Success in making research proposal (Chapter 1) is a realization of characteristics with CDP model to increase skill and competency of students.

Cooperative approach with CDP model cannot only increase cooperative characters and achievement or success in doing works to make research proposal (Chapter 1) but also can improve responsibilities characters of students. The results of observation in second cycle of students activities indicate that behaviors and characters of responsibilities with indicator can finish works on time and can maintain results of group works (research proposal, Chapter 1) when presenting. It proves that students in each group showed good responsibilities characters. Generally, in cooperative learning, responsibilities of students can be understood through some ways: groups to note, lectures to monitor their role, specific skill of feedback, and skill to monitor such as students alone (Dyson, 2001). It suggests that cooperative learning, including CDP model, can increase responsibilities of students.

## CONCLUSIONS

Based on the results of classroom action research, it is concluded that:

1. Application of cooperative learning with CDP model can increase cooperative characters and responsibilities of students during lecturing process. Based on the results of observation during lecturing, it indicates that activities of students in lecturing with cooperative approach had been successful in developing cooperative characters and responsibilities. Students could develop cooperation well as to finish group works well, namely, making research proposal (Chapter 1). The results of observation in second cycle of students activities did not only show cooperative characters behaviors but also responsibilities' characters with indicators which could finish their works on time and could maintain the results of group works (research proposal, Chapter 1).

2. Cooperative learning approach with CDP model had been successful in increasing students' achievement in research methodology course especially in making research proposal (Chapter 1) with very satisfied mean results of proposal evaluation, namely, 87.5 (A). Increasing of student activities in lecturing process was highly supported by hard working of lecturers in applying cooperative learning approach with CDP model. Lectures were intensive in guiding students when the students experienced difficulties in the lecturing process. It is reflected in each group discussion (all groups/100%) when they experienced difficulties, they were not reluctant to ask for help to lectures.

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## MORAL LEADERSHIP IN BUILDING LEARNING ORGANIZATION CULTURE AT THE SUPERIOR SCHOOLS

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### ABSTRACT

The aims of the research were to find and describe (1) the characteristics of learning organization culture at superior schools; (2) leadership style in building the learning organization culture; (3) leadership in building the learning organization culture in superior schools - MAN 2 Kudus, MA TBS Kudus and MA NU BANAT Kudus. This research used a qualitative approach with study plan multi case. The data collection techniques were 1). In-depth interview; 2). participant observation; and 3). documentation study. There were two stages in this research, namely (1) individual case data analysis, and (2) data analysis rushes by case. The research findings are (1) characteristics of the three Madrasah Aliyahs (MAs) were different. In building the learning organization culture MA NU BANAT Kudus was more systematic, innovative and creative, although the infrastructure was better than MAN 2 Kudus. The quality of education quality was enhanced to be more standard ISO 9000 oriented. The transformation of leadership style using management principles to form a coordination was very strong. MAN 2 Kudus was systematic, innovative and creative, with better infrastructure, and transformation of leadership style. MA NU TBS Kudus was less systematic, innovative and creative, with worse infrastructure and charismatic type of transactional leadership style. (2). Transformation leadership style created competitiveness and the quality of graduates to support all learning activities. (3). The new model of school leadership found is the school leadership based on moral (spiritual), with various kinds of attitude, moral, and values according to Islamic values as *uswah hasanah*.

**Keywords:** *learning organization culture, moral (spiritual) leadership, superior schools.*

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### Introduction

Human potential transformation process is preeminent human that has tall competitive-ness learning organization communities true task, the especially the developers energy (the teacher). As said by David A. Garvin (1993)[<sup>1</sup>] that learning organization be skilled organization created, learn, and move erudition, and modify attitude to reflect attitude and new insight. Five principal pillars absolute there to is learning human that is (1) taste wants to know, (2) optimism, (3) sincerity, (4) consistency, (5) point of view opinion. (Danim, 2004: 6)[<sup>2</sup>]. School culture which are positive (positive school culture) can related with motivation and tall student accomplishment, increase agreement between teachers, and change teacher attitude towards the job forwards be

positive. Study practice at space learns, what attraction or monotonous, climate learns that support and distortion, voluminous or deviation, fun or boring, tall student involvement or low, power adsorbs tall student or low and other as it, very determined by what has positive attitude towards the task.

Madrasah Aliyah (MA) be one of [the] special education stage religion the same degree with senior high school education (SMA), supposed can to supply entrant educates ably belief in god and afraid to Allah (IMTAQ) and science and technology (IPTEK). Education program MA also bloom as also to SMA, even a large part conducted by private side (society) than country that conduct by government. To clarify school total at Kudus regency visible in table 1 hereunder:

Table 1 Total MA and Country (Government) Teacher Employee and Private at Kudus Regency

| No.    | District  | School State | Private | Teacher State | Private |
|--------|-----------|--------------|---------|---------------|---------|
| 1      | Kaliwungu | 1            | 2       | 49            | 75      |
| 2      | Kota      | 0            | 6       | 7             | 265     |
| 3      | Jati      | 0            | 2       | 0             | 30      |
| 4      | Undaan    | 0            | 3       | 3             | 64      |
| 5      | Mejobo    | 0            | 1       | 1             | 15      |
| 6      | Jekulo    | 0            | 4       | 1             | 87      |
| 7      | Bae       | 1            | 1       | 41            | 34      |
| 8      | Gebog     | 0            | 4       | 5             | 86      |
| 9      | Dawe      | 0            | 2       | 2             | 67      |
| Jumlah |           | 2            | 25      | 109           | 723     |

Data Source : Kemenag Kabupaten Kudus, 2013<sup>3</sup>

On table 1 above seen that a part education exertion in stage MA at carry out by private side as big as 25 MA (92,59%), and government as big as 2 MA (7, 41%). Beside that when we see farther human resource available (teacher) also a large part private as big as 723 (86, 9%) and government 109 (13, 10%). with teacher distribution total less proper, many subject that taught by teacher not yet has competence professional appropriate with study area and teacher welfare not yet proper with salary under standard work minimum wage (UMK) causes school quality is more lower.

But such there are some school at Kudus regency that belong assumed superior by society. Like MAN 2 Kudus, MA TBS Kudus and MA BANAT Kudus. School superiority a large part seen from student total magnitude, that come from within and outside Kudus regency in school besides result NEM pure that got. Special to MAN 2 Kudus really one of [the] MA country that has national level accomplishment even be one of the man sample in the field of craft from 13 MA at 10 province exist in Indonesia, MA TBS has many preeminent alumnus in the field of academic especially religious, MA BANAT NU has academic superiority and national level school administrative order management.

Based on background and characteristics difference that cling in research focus either from point of view aspect, mission, and aim with leadership in build learning organization culture in superior school by school administrators from three

schools that's that pushes researcher to do watchfulness at three schools with plan multi case.

Focus and this research aim want to find and describe, that is: (1). Learning organization culture characteristics in superior schools, (2). leadership style in build of learning organization culture, (2). leadership in build learning organization culture in superior schools.

### Theory study and research question

#### Leadership

This leadership theory is very related to effectiveness organization in achieves the aim with run management functions. Dubrin (1984: 311-312)[<sup>4</sup>] propose that effective leader has surplus in the case of: (1) intelligence level, (2) situation sensitivity, (3) effective work, (4) initiative, (5) self-confidence, (6) individuality, (7) technical and professional competence, (8) enthusiasm, (9) high ethical standard, honesty, candor, and related characteristic, (10) flexibility, (11) vision..

Islam teachings obligates necessary leader existence although have as member only 2 (two) person. Propose opinion about three approach of Islam management, like: *tauhid*, *akhlak* and *syari'ah*.

Approach unity of god is laid human for caliph (manager) under the earth and mandate caretaker, the approach character aspect is laid Islam as value

systems that socialize board and manager responsibility, has honesty, individual integrity and work seriousness; while approach sharia aspect makes Islam as rule base for the management.

#### Learning organization culture

Richard Osborn<sup>[5]</sup> quote culture definition as proposed by F.B. Taylor in book primitive culture (1871: 71) that: "culture define axis. ....that is complex hole which includes knowledge's, beliefs, art, morals, customs, and habits, acquired by man and axis member of society".

Keith Davis and Newstrom.W. (1989: 60)<sup>[6]</sup> propose that" organizational culture is the set of assumptions, beliefs, values, and norms that is shared among its members" furthermore propose that" organizational culture is the system of shared beliefs and values that is develops within denunciated organization and guides the behavior of its members". While Edgar H. (1992: 21)<sup>[7]</sup> have a notion that: denunciated organization's culture is a pattern of basic assumptions invented, discovered or developed by a given group axis it learns to cope with its problems of external adaptation and internal integration that is has worked well enough to be considered valid and to be taught to new members axis the correct way to perceive, think and feel in relation to these problems.

Based on that opinion inferential that study organization culture explanation assumption set or confidence system, values and norm that developed in organization that attitude guide for members to do organization study activity either through external and internal integration to achieve superior schools. Classification school organization culture is two that is appear (tangible) and not appear (intangible), as to aspect not appear from a culture covers value, confidence, and ideology related to question" what is should be done at this school?" the answer: realized in matters tangible (appear) good in the form of sentence (tongue or article), attitude that displayed, building, facilities with things that used.

Sergiovanni, et al. (1987: 128)<sup>[8]</sup>, quote opinion Lundberg mention that:

The artifacts, refer to the tangible aspects of culture shared by members of and organization and include language, stories, myths, ritual, ceremonies, and visible product which are considered to have symbolic value. Perspectives: the socially shared rules and norms which provide solutions to common problems encountered by organizational members and guidelines, which allow members to define and interpret the situations they face and which prescribe the bounds of acceptable behavior. Values, these provide the evaluation basic that organization's member use for judging situations, acts, objects, and people. Values represent important goals, ideals, standards, as well as taboos of an organization and are often embodied in statements of the organization's philosophy or mission. Assumption: these constitute the tacit beliefs that members hold about themselves and others which govern their relationship and define for them the nature of their connection of which they are apart.

A culture intrinsically a group phenomenon, therefore in study process the happening of organization culture can not be released from group process. Leader ability in give beginning example in implementation a point of view and mission very determine in build learning organization culture.

#### Superior Schools

Superior school that is developed to achieve superiority in product (output) the education (Depdikbud, 1994)<sup>9</sup>. To achieve superiority so input, education process, teacher and education official, management, education service, with the supporting tool must be aimed to subsidize success in program aim that planned.

Superiority dimensions as superior school characteristic as is confirmed by Depdikbud, (1994): 1). The input that is student is done selection tightly by using certain criteria and procedure that accountable; 2). tool learns student; 3). The environment creation learns that support; 4). The teacher and education official that handle must superior; 5). The curriculum is enriched with development and maximal improvisation; 6). The range of time learns longer is compared school other; 7). The process learns to teach must have a

certain quality and the result accountable (accountable) good to student, institution, also society; 8). The superior school not only gives benefit to entrant educates at school, but hams has social resonance to environment; 9). The value more superior school lays in addition treatment outside national curriculum passes curriculum development, program enrichment and extension, instruction repeats, guidance service a certain quality, creativity construction and discipline [10].

Reference base from superior school general aim national education aim as included in GBHN and national education system law, peculiarly, superior

school aims to produce education product that has superiority in matters next: (a) belief in god and obedience in god very one; (b) nationalism and tall patriotism; (c) insight IPTEK that deepen and vast; (d) motivation and tall commitment to achieves accomplishment and superiority; (e) social sensitivity and leadership; and (f) discipline tall subsidized by physical condition that wells. To simplify comprehension about watchfulness title researcher raises, so composed a sketch thinks as figure 2 hereunder:

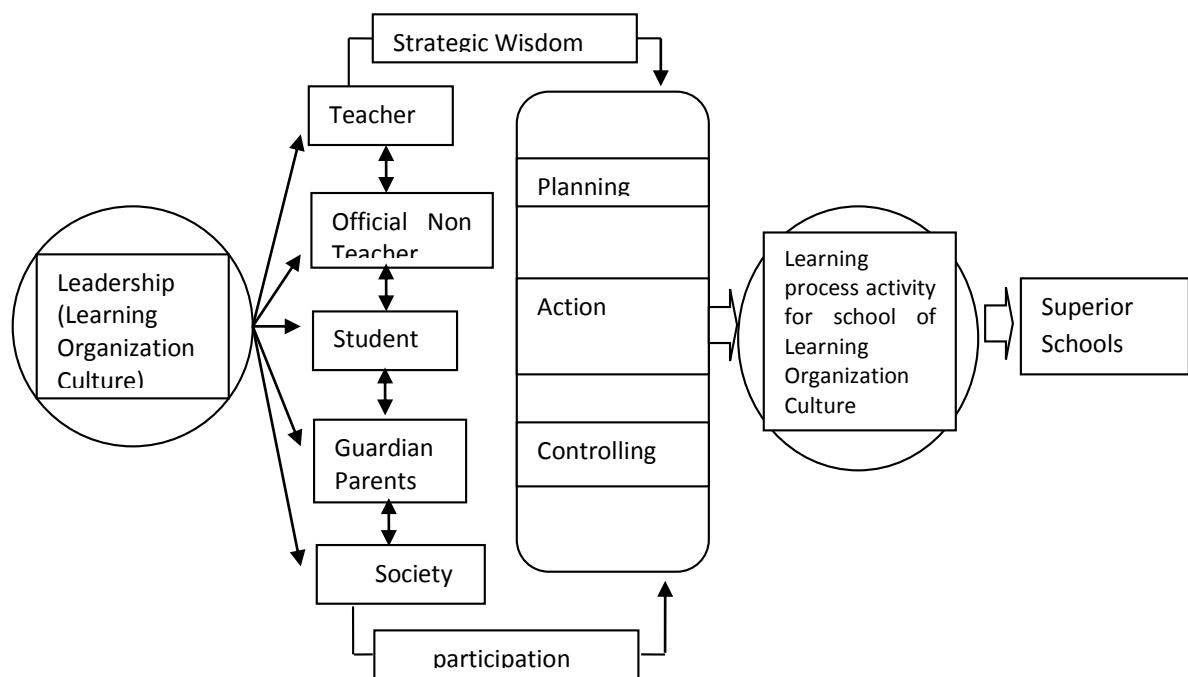


Figure 1 Sketch Thinks Research

## Research Method

### Approach And Research Plan

This research uses to approach qualitative with study plan multi case. Like to confirm by Bogdan and Biklen (1998: 62) that: when researchers study two or more subjects, settings, or depositories of their data is acres usually doing what we are call multi-case studies. Multi-case studies take a variety of forms. Some start axis a single case only to has the original work serve axis the first in series of

studies or axis the pilot for a multi-case study. Other studies acres primarily single-case studies but include less intense, less extensive observations at other sites for the purpose of addressing the question of generalization. Other researchers do comparative case studies. Two or more case studies acres done and then compared and contrasted [11].

Data that gather to pass this research appropriate data with research focus, that is about leadership in build learning organization culture in superior schools, good primary data also secondary.



Sample watchfulness researcher uses to gather data: (1). with technique purposive sampling; (2) snowball technique (snowball sampling); (3) internals sampling; (4) times sampling. Result or watchfulness finding from third this case is compared and merged in analysis rushes by case (cross-case analysis) to compose a conceptual sketch that is developed in finding abstraction from field.

Instrument in this watchfulness researcher self as key instrument, by using three data collecting technique that is: (1) in-depth interview; (2) participant observation; and (3) study of documents. (Bogdan Biklen, 1998; Nasution, 1988; Sonhadji in Arifin, 1994)[<sup>12</sup>]. Data that gather done data validity

verification is based in four criteria that is credibility, transferability, dependability, and confirm ability. (Moleong, 1994)<sup>13</sup>.

Data analysis is process looks for and regulate systematically interview transcript, field note, and ingredients other that collected by researcher. Analysis activity is done with study data, configuring, divide to be units that can be managed, do syntheses, look for pattern, find what have a meaning, and what canvassed and reported systematically. This watchfulness uses study plan multi case, with done two analysis stages, that is: (1) individual case, and (2). cross case analysis. As to simplify study description multi case visible in Figure 2 hereunder:

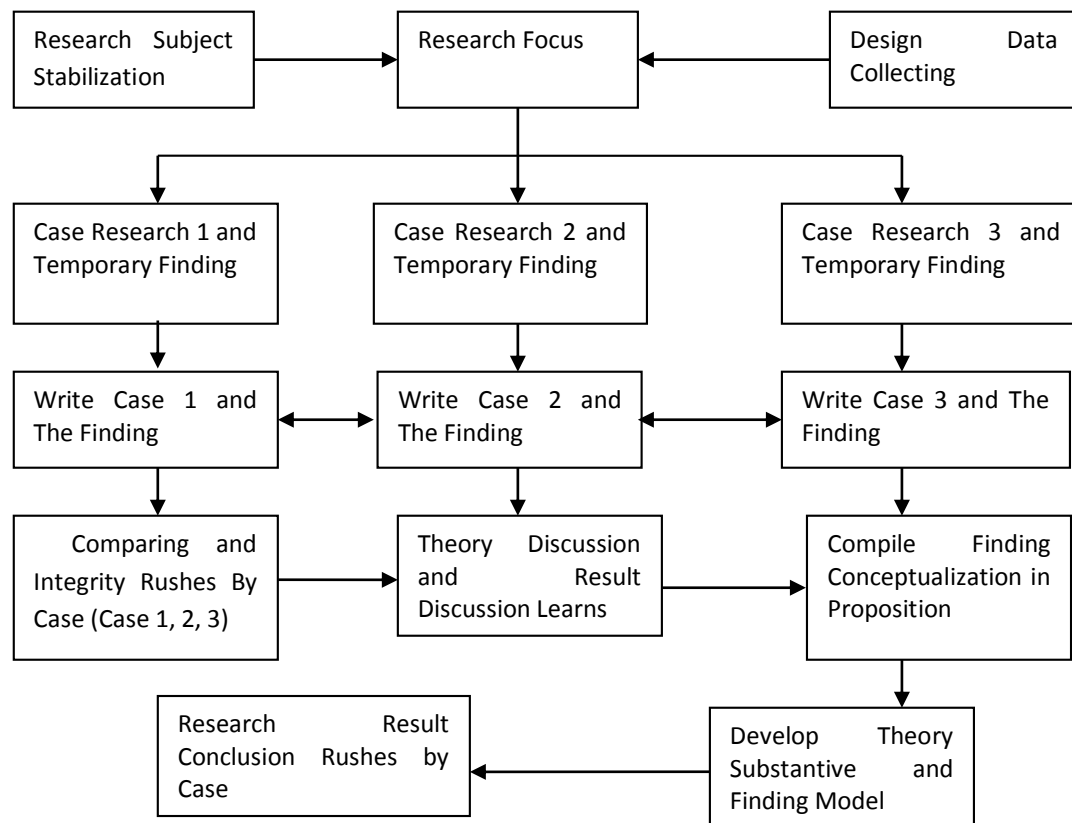


Figure 2 Analysis Steps In Study Multi Case

### Research Result Discussion

This research result discussion is done researcher with hold general exploration study and focus exploration as data that described, so researcher continues data analyzing process

according to focus by comparing and scouting rushes by case, theory discussion and result discussion learns, concept finding composition and substantive theory development. Then from the result researcher concludes as finding form. Although data analyzing in watchfulness activity is

done continual, good at the (time) of at location or finished from at location (object that canvass). As to result discussion from analyzing that is:

- a. Elegant leadership differ will cause different study culture characteristics this matter visible in table 2 hereunder:

Table 2 Leadership in Build Learning Organization Culture

| Aspect                                                   | MAN 2 Kudus                                        | MA NU TBS                                              | MA NU Banat                                                      |
|----------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------|------------------------------------------------------------------|
| Values                                                   | Islam                                              | Islam                                                  | Islam                                                            |
| Program Evaluation                                       | Systematic evaluation                              | Evaluation less systematic                             | Systematic evaluation                                            |
| Appreciation                                             | Existence reward                                   | Reward less pay attention                              | Existence reward                                                 |
| Teacher Participation, Headmaster and School Committee   | Involve participation all sides                    | Less involve participation all sides                   | Less involve participation all sides                             |
| Structure and Procedure in PBM                           | Pay attention and quality controller not yet clear | Pay attention and there is no clear quality controller | Pay attention and quality controller clear (standard ISO 9000)   |
| Innovation Opportunity and Creativity                    | High                                               | High                                                   | Very High                                                        |
| Human Resource and Nature                                | Very Proper                                        | Proper                                                 | Proper                                                           |
| Aim Personal and School Aim                              | In parallel in economy tie                         | In parallel in religion value tie and economy          | In parallel in religion value tie and economy                    |
| Professional Interaction                                 | Professional interaction is high                   | Professional interaction is middle                     | Professional interaction high                                    |
| Headmaster Leadership                                    | Elegant transformation                             | Elegant transactional with charisma type               | Elegant transformation and coordination                          |
| Teacher Recruitment And Official                         | Regulated by Kemenag                               | Regulate self considering graduate                     | Regulate self considering graduate                               |
| Money Management Model                                   | Regulated by Kemenag                               | Centrally that is Yayasan                              | Centrally that is Yayasan                                        |
| Leader Change Process                                    | Regulated by Kemenag                               | centrally that is Yayasan                              | Centrally that is Yayasan                                        |
| Motivation Teaches                                       | Governance task                                    | Religious Service                                      | Religious Service                                                |
| Tool and Education Infrastructure                        | Based on multimedia in categorization good         | Based on multimedia in categorization enough           | Based on multimedia in categorization more enough                |
| Learning Culture                                         | Awaken good begin from level student and teacher   | Less awaken begin from level student and teacher       | Awaken good begin from level student and teacher very systematic |
| Moral (Spiritual) Reinforcement For Teacher and Official | Enough systematic                                  | Less systematic                                        | Very systematic                                                  |

- b. Learning organization strength building among others determined by: condition blend and colleague that created in study organization communities circle; organization chart and management that support work process and program implementation that planned, supporter facilities fulfils total criteria and quality minimum desirable, and place learns original that created in place study or at society, has influence very strong in build learning organization culture. Leadership that can to using efficiently entire potential exist in school is leadership effective and efficient.
- c. There are some concepts in assumption and substantive theory development that is: 1). School learning organization culture can awaken, if has willing to change from time to time, good in level student self, teacher, head master and school committee council. 2). Leadership transformation more fit because, will can to use all potential be action, not materialized to be to materialized, has tall adaptation power. 3). Learning culture awake in school if there soul aspect all elements involved in development is based in value that believed in this case Islamic religion. Ability to will maximize religion value will pass routine program will be believed will can to increase accomplishment motivation in teacher the impact will bring school quality.

From concept and proportion can be developed new substantive theory that is school leadership based on in Islam values (spiritual) or in language in general school leadership based on moral. Every leader must can to give confidence reinforcement or religion that believed, give "Uswah Hasanah", and others. The moral (spiritual) reinforcement that done by leadership with put forward confidence that has will can to increase teacher accomplishment motivation, teacher performance and in the end be created school quality.

This matter is seen his aim existence teaches not merely work, but far than that is that is carry out religious service Ghairu Mahdhoh.

- d. The research result clarification rushes by case: (1) characteristics difference

existence each three schools in this matter learning organization culture is caused by blend condition and friendship, structure organization, supporter facilities and environment learns original that created, (2) elegant leadership transformation will can to created competitiveness and existing graduate quality as support form in all study activities that is with optimizes human resource and tool and existing infrastructure, found school leadership new model that is school leadership based on moral (spiritual), with assorted attitude and appropriate deed with Islam values. (3) Such leadership will can to build learning organization culture begins in level pupil, official, teacher and headmaster.

## Conclusion

After done data description and discussion, so can be pulled conclusion as follows: (1). characteristics difference existence that jut one another from third Madrasah Aliyah (MA). MA NU Banat Kudus in build learning culture systematic, innovative and creative, although infrastructure tool support better from MAN 2 Kudus. Education quality enhanced more focus in standard ISO 9000 that is standard education management. Leadership that built to aim transformation leadership style with the make use management principles that is coordination very strong. MAN 2 Kudus in build learning culture belongs systematic, innovative and creative, with infrastructure tool support better from MA NU Banat Kudus and MA NU TBS Kudus, leadership that built to aim transformation leadership style. MA NU TBS in build study culture belongs less systematic, innovative and creative, with infrastructure tool support better from MAN 2 Kudus, leadership that built to aim transaction leadership style with charisma type. (2). elegant leadership transformation will can to created competitive-ness and existing graduate quality as support form in all study activities. (3). found school leadership new model that is school leadership based on moral (spiritual), with assorted attitude and appropriate deed with Islam values, as form Uswah Hasanah.

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## ENHANCING WRITING SKILLS THROUGH THE SPIRIT OF “IGUH” PRINCIPLES

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### Abstract

One of the basic principles to enhance students' research-based and publishable papers is to provide them with appropriate form of assessments carried out within the student's cultural values. This is exactly what this study is dealing with: revealing both the general and specific problems encountered by the students of Thesis Writing and Philosophy of Science classes of PBI Sanata Dharma University Yogyakarta especially due to the existing different cultural aspects of East [Indonesian] and West [English]. Admittedly, this study supports the belief that to master English paper writing skills is to master and understand and learn English [read: a foreign] culture. Promoting the so-called “Iguh” of indigenous wisdom *Katresnanism* approach would, indeed, make them feel at home in producing their paper. It would be, thus, providing the students with comfortable setting in dealing with the following two questions: “How did the students understand the nature of a research paper?” and “How did they use their ideas to advance and develop their thesis as demanded by Thesis Writing and Philosophy of Science classes?” This study is also meant to become part of a book on the guidelines of publishable research-based paper especially under the chapter “Case Study.” It is, in fact, in line with the demand of the Indonesian Directorate General of Higher Education and Culture Ministry stated in its decree No. 152/D/T/2012, dated on 27 January 2012. It points out that one of the requirements to obtain undergraduate degree (*program Sarjana Strata I*) is for the student to have produced a paper published in a scientific journal.

**Keywords:** *scientific paper, writing skills, “ighu”, cultural values*

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### Introduction

This research paper is an attempt to look into the students' work in “Thesis Writing” [a. k. a. Proposal Seminar Writing] class of PBI Sanata Dharma University [USD] for the odd semester of 2013. This is done in the light of “Iguh” [sincerely promoting the spirit of pro-active attitudes], one of the cores and principles of the Indonesian indigenous wisdom named *Katresnanism theory* and approach (Herujiyanto, 2006: 125-138).

In this occasion, however, instead of looking into the overt (surface) and the possible silence or rather the covert content of their work, this study is meant to give a response to two problems. First, to find whether or not their work suggests their understanding on the nature of a research paper. Secondly, to examine how they use their ideas to advance and develop their thesis.

Not only will this be a kind of revisiting the objectives of the class, but it will also function as revisiting their work in terms of browsing up and

enhancing their writing skill especially in dealing with the so-called elements of writing style.

There are, thus, at least three main steps involved in the discussion. First, it is concerned with the convention that this semester (2013) “Thesis Writing” is on literature, meaning that the primary data of all students' work are taken from literary work, prose, play or poetry.

The second step is dealing with writing style with lists of reminders (Strunk & White, 1979: 66-81) and the third one is on “ighu” of *Katresnanism theory*.

In dealing with the first step, there seems to be unavoidable to mention Roman Jakobson. He was, indeed, a linguist (he is one of the founders of the “Prague school” of linguistic theory), but in this study, it is important to mention his theory of communicative functions as seen in his famous essay in “Closing Statements: Linguistics and Poetics” (in Thomas A. Sebeok, *Style In Language*, Cambridge Massachusetts, MIT Press, 1960,

pp. 350–377)." To him, not only is it about the three principal ideas (in linguistics), namely, linguistic typology, markedness, and linguistic universals, but it is a must to distinguish literary studies from literary criticism.

According to him, the three concepts are tightly intertwined: typology is the classification of languages in terms of shared grammatical features (as opposed to shared origin), markedness is (very roughly) a study of how certain forms of grammatical organization are more "natural" than others, and linguistic universals is the study of the general features of languages in the world.

Insisting on the separation of literary criticism from literary studies, he points out that Literary Studies refers to knowledge about the facts of the case as they illuminate the meaningfulness of texts – facts of authorship, biography, influence, aesthetics, the pressures and modulations of contexts, rewriting and publication, historical interpretation, and so forth.

Admittedly, Jakobson has also influenced Friedemann Schulz von Thun's four sides model, as well as Michael Silverstein's meta-pragmatic linguistics, Dell Hymes's ethnography of communication and ethno poetics, the psychoanalysis of Jacques Lacan, and philosophy of Giorgio Agamben.

### **Theoretical Framework and Methodology**

While interrogating the theoretical assumptions, however, one ought to be aware of the difference between "Literary Theory" as a subject, and "theory itself." Literary Theory is, as Deleuze and Guattari remark in *A Thousand Plateaus* (1980), an arrangement of ideas within a demarked space: one has the author, the reader, the text, society, etc., and a theoretical position will articulate the importance and the nature of the various relations among them.

This is disciplined and disciplining theory—the theory ready to hand for the practice of literary criticism—suggests be exercising and approving by the regulatory bodies of the 'discipline.'

One then has a 'theoretical position' from which, or through which, one acts, as a 'reader-response' theorist, or a 'psychoanalytic' theorist, or whatever. Theory on its own, on the other hand, is always one step off, is not to hand for criticism because it is attempting to assess the assumptions and implications of the demarked space (why it is demarked, by what process, what the demarcation suggests, on what grounds and for what reasons these are authorized, and so forth).

The practice of theory is assumed to be self-reflexive, for it includes an examination of the grounds of one's own practice, authority, and goals.

The study of literary theory as I understand it occupies a site of struggle between these two locations, "Literary theory" and "the theory itself," between the attempt to locate literature in relation to its 'components', on the one hand, and an attempt to understand the ontological, epistemic, axiological and praxis nature and implications and assumptions of the very phenomenon of 'literature' as a cultural formation and practice.

The term "iguh" of Katresnanism theory needs, thus, to be put forward underlining the belief that to master English paper writing skills is to master and understand and learn English [read: a foreign] culture. Promoting the so-called "iguh" of indigenous wisdom *Katresnanism* approach would, indeed, make them feel at home in producing their paper.

Revisiting or rather reviewing their work (for "Thesis Writing" or "Proposal Seminar Writing" class) may, then, be carried out through the following steps:

Regarding that the aim of this study is to examine the students' critical writing papers done for their midterm test (07-12/10/2013) and final test (12-16/12/2013), their papers are on their understanding on the meaning of their primary data [English literary work]. They would, thus, be faced with cross cultural multidimensionality of outlook, utilizing interdisciplinary studies in juxtaposing customs of different cultures as portrayed in their primary data. This is exercised through small group discussions carried out in the spirit of *iguh*.

The findings deal with whether or not they manage to come to the so-called “deeper meaning” of their primary data and in doing so they need to use “their ideas to advance and develop their thesis [the deeper meaning found]” (Manlapaz, 3). This is, in fact, the minimum requirement for a paper to be able to be published in a scientific journal.

*Iguh* is one the *aos* [cores] of *Katresnanism* theory, accommodating the action of sincerely promoting the spirit of pro-active attitudes. It is, to a certain extent, implementing altruism attitude as reflected in the actions commonly practiced in the Indonesian *gotong royong* [community self-help]. It deals with one of those basic concepts of intercultural communication in *Katresnanism* wisdom. It can be defined as those actions exercising “altruistic collaboration” as explained in, among others, Herujiyanto’s “Katresnan Criticism: The Nature and Who Does It” (2006: 125-138). It is unavoidable, thus, to briefly discuss Theory of *Katresnanism*.

Looking into the chronological order of how the students produce their critical writing papers done for their final test is to go through the process of *igu*h [the activities are to look into their midterm work that would be used to produce their final papers]: First, the students were divided into small group of four (as there were 16 students in the 2013 “Thesis Writing” or “Proposal Seminar Writing” class, so there were five (5) small groups). They discussed their understanding on cross cultural multidimensionality of outlook, utilizing interdisciplinary studies in juxtaposing customs of different cultures in the spirit of *igu*h. Second [in the following meetings], they exchanged their first draft of their paper. Having read it, they gave their comment and suggestion. Third, the students’ second draft paper was consulted with their lecturer. The consultation was mainly dealing with their understanding of the materials discussed. Fourth, the student conducted their midterm test: submitting their final critical writing papers. The very data resulted from *igu*h actions were, then, analyzed. Not only were they analyzed to find the students’ understanding on the material discussed in class, but they were also symptomatically read to

find whether or not the students had used their ideas to advance and develop their thesis.

Having analyzed the data, there are several tables and/or lists produced: first, it deals with the nature of a research paper, covering whether or not their papers use documentation; analyzing, discussing, and debating ideas; acquainting them with a cross section of materials; engaging them in critical, not creative, reading and writing.

Second, it deals with the idea that a research paper is not: 1) a piece of expository writing; 2) personal essay; 3) reflection paper; 4) review of academic literature; and 5) a mere reporting of facts and/ or opinions.

One can read Garnett's piece as a valuation of the text, one [must?] can read it for its theory of literature, and/or one can [must?] read it as an exercise of theory, in which case one must interrogate one's own assumptions, the very act one is engaged in, the categories one applies, the significance of the act.

## Findings and Discussion

Carrying out the *igu*h principles as mentioned above, we may see how the students understand the nature of a research paper we started with analyzing the students’ work. The nine numbers between the brackets in the examples discussed are the identity of the student (student number).

Out of the total number of groups (5), there are three (3) of them exercising documentation. It is very encouraging, however, that all of them (five groups) did analyze, discuss, and debate ideas. The other two criteria can be seen in Table1.

Table 1 shows that many students tend to think that a research paper means analyzing, discussing, and debating ideas. In the meantime, some of them do not seem to realize that the research paper is not merely another exercise in using library.

Table 1.

|                                                              |          |
|--------------------------------------------------------------|----------|
| Using documentation                                          | 3 groups |
| Analyzing, discussing, and debating ideas                    | 5 groups |
| Acquainting them with a cross section of materials           | 4 groups |
| Engaging them in critical, not creative, reading and writing | 4 groups |

The following paragraph, for example, reflects such an attitude (101214080); there is no documentation at all:

“There are so many things that people want to know in this world especially their own life. Most of people are curious with what will happen in their life. People always cannot stop in discussing about life because they may talk about everything. Actually, human have the same perception about life that life is a complex matter. They have their own strategies in facing their life. The strategies that they choose always based on their knowledge, experiences and also faith. Those characteristics can influence them in shaping their point of view of life.”

The paragraph above might be considered “fine” but if only the student knew that one of those sentences in the paragraph had been stated by one of those powerful world leaders, the reader would have been better convinced; that the writer’s thesis is correct or rather supported by a world leader.

Here is another one, neglecting documentation (101214171):

“In the real life, we know that all of us cannot live by ourselves. We need others to survive and we also make others survived. This kind of interaction is inevitable whether we realize it or not. Thus, in order to interlace with others, of course we need to understand them first. It is like in Indonesian’s proverb, *tak kenal maka tak sayang*, in English we have *no man is an island*. We have to know others to do survive. Yet, to understand others, we need to understand their personality. This personality lies within each character of us. Therefore, it is relevant to understand someone’s personality within a story of novels.”

Another thing is about the thesis that needs to be restated in the text in such a way that the writer feels the argument has been strongly presented. This can be seen in the following paragraph (101214174):

“One step higher than word is promise. Promise comes when somebody declare to do or not to do something. It can be promises for himself or other people. Once a man says a promise he should keep it till the end of his life. Once he breaks it, he will have the consequences. As a saying from *Benjamin Franklin* says promises may fit the friends, but non-performance will turn them into enemies. On the way people keep the promises, they may face problems which sometimes can break the promises.”

It is very encouraging that most students seem to realize that the nature of the research can only be one of two things, namely, analytical or argumentative. Understanding the difference between the two, however, needs to be highlighted since not only will this determine the purpose of the research, but it will also influence the strategy used.

The following is an example of the importance of avoiding making judgments on the topic per se.

Although the students have been exposed to the convention pointed by Oshima and Hogue in their *Writing Academic English* (1999, p. 94) that the generic structure of textual features are point of view/ opinion; argument/s with supporting evidence, and conclusion or restatement of thesis, but they seemed to be forgetful when it comes to writing as seen in the following two examples:

“Every human has their own characteristics which differ from one to another, whether it is physically or mentally. Those different characteristics lead into the distinction of opinions and thoughts between them. The distinction of opinions and thoughts seems to evoke conflicts or clashes. The story presented in a novel must have consisted of conflicts which drive the reader getting more interested and curious to follow the story until the very end of the page. Generally, the reader of a novel must have had their favorite character after reading the novel, whether the idolization is started from the first chapter or after they finishing read the



whole story. One school of thought identifies conflicts as a *psychological* state of affairs, a particular situation “in which the parties are aware of the incompatibility of potential future positions” (Boulding, 1962). Bercovich suggests that conflict is thus seen as a situation in which the parties *perceive* goal incompatibility, but do not necessarily engage in behavior which is naturally incompatible. In George R. R. Martin’s *A Game of Thrones*, the reader could notice multitudinous conflicts between the characters, particularly between the *houses* of each character.” (101214085)

“The benefits of the study, the reader can know what the story of this novel, as seen by another perspective. There are some major points includes in the novel. First is about struggle of life, how the character in the story face and beat the problem. Then about religiosities, which is religion can affect people when they use it wisely. The story is easy reading and has many moral values on it.” ((101214085)

“For language teaching, this novel can be used as media in class. However, it still not far away from moral value of novel itself. So, the text in the novel can be used wisely for teaching and will be an argument beneficial for student.”

In line with the opinion stated by Manlapaz (p.4), the conclusions above are personal opinion, but “they are informed personal opinions, shaped by a critical understanding of the issues at stake.

Having analyzed all the students’ work (16 students) it can be seen that there are, at least two students who seem to have done their best when they wrote:

“Moreover, death is one of the phenomena that are widely used in literary works. Death is a phenomenon that cannot be planned yet be separated from human’s life. All of people will face the death and no one can escape from it. However, death is not something that can be taken easily. It is because death is mostly associated with pain, the end and loss of the loved one. For the person who died, it will become their ending of living in this world. For the family or the closest people of the

lost, it will leave them in grief and pain because of the loss of the loved one. (101214023)

“There are many types of love. Among the type of love, Henry Lau’s “I Would” represent about Henry’s love. “I would” is describe about the meaning of Henry’s love to his special girl. Henry’s love includes some factors that influence his feeling to the girl. Henry’s love is one sided love and it is showed from the lyrics. There is no other girl that he ever wanted in his life. From the lyrics he explains that the girl is the person who made him fell in love. The girl is the person who can see him through and know Henry well. “I would” does not explain love from the girl’s side. It tells about what Henry feel to that girl. Henry feels that the girl is the person who made him have a different feeling. The girl gave affection to Henry but it is not about love which was given to her boyfriend but to her best friend or to her sibling. One day, the girl made a decision to leave Henry. To leave here does not mean that she really leaves Henry but her decision to make a distance to Henry or she has decision to make commitment with other guy because of the situation. From the lyric the girl accepts Henry’s love but only as her best friend or sibling because they have memories that Henry cannot forget. Henry’s love represents his dilemma to his special girl. This shows that Henry really loves the girl but the girl only consider that Henry only his friend who gave her affection as a best friend. In other hand, Henry wants to move on without remember the girl and all the memories. If he found a way to move on and forget the girl he would. He will do everything if he can forget the girl.” (101214084)

Although the purpose of the activities in class is to analyze and sometimes compare two or more topics, but there are hardly any students have the *iguh* to expose that as readers, they are being persuaded that the writers’ thesis or point of view is correct and that it is developed by making use, for example, a supporting argument.

It is reasonable to assume that the following three (3) students do not have a fixed or firm conclusion yet in their mind since reading the whole paper we can obviously tell that their paper can be categorized as an analytical paper or not:

"The reason why the writer chooses the topic because "I would" is interesting to examine. According to the writer's opinion the meaning of the song are Henry suffers dilemma in his life because of his one-sided love. "I would" represent love, in this case Henry's love. It is not about other guy's love but Henry's love. According to the song, Henry cannot forget the girl and he wants to keep the girl so Henry calls it is love. Love is not only between two persons but many. Love makes people feel uneasy situation. Henry's love is a kind of love that people familiar with but people forget that they never sure the meaning of love itself. It makes them confuse and they cannot solve their problem that related with love and finally they only feel lost in their life. According to physics this problem needs to solve because it causes 2 extreme effects they are sad ending or happy ending. So in this research the writer will examine about love and in this case is Henry's love so the readers know some factors that cause Henry describes his feeling as a love to his special girls, understand what kind of love is it and understand the meaning of Henry's love." (101214084)

1. Those stories are told in a novel *Mahabharata*. It is admittedly the longest, and perhaps greatest, epic poem in any language. According to its reputed author, the sage Vyasa, it was intended to be a treatise on life itself, including religion and ethnic (dharma sastra), polity and government (*artha* sastra), philosophy and the pursuit of salvation (moksa sastra). In fact two of the longest books in this epic (Santi Parva and Anusasana Parva) deals with this subjects. (Narasimhan, 1965: xv)" (101214174)
2. When reading literary works, such as poems, novels, or scripts, the exploration can go wild through many perceptions in very different way for each reader. In the education purpose, there are so many moral values that can be taken from the literary works. Also for those who learn about language, literary works can be very helpful to develop their language proficiency. The learner can learn about the variation of vocabulary. Moody (1971) states: "Literature presents the readers with a wide range of situations and predicaments, which seem to stimulate some kind of emotional response; and also that, on the whole, the

writers of literature present those situations in ways which enable the reader to explore and develop their feelings in an appropriate human way." (p. 71) (101214071)

According to Manlapaz (6), argumentative papers "demand a clear stand on a contentious issue and the use of evidence to back up your claims". Not only would an argumentative paper assert a clear and focused thesis statement at the start of the paper, but it would also "present both sides of an issue for purposes of building up and breaking down arguments in favor of one side."

Out of the five (5) groups analyzing, discussing, and debating ideas, there are 3 (three) groups meeting the three basic requirements mentioned above.

In the meantime, those two groups have used their ideas in many different ways to advance and develop their thesis. It is understandable since most of them admittedly explained that they needed to brush up on their English. Not only do they need to read much more different kind of books, but they also seem to need to write papers more frequently.

## Conclusions and Suggestions

This paper has shown that it is plausible to make use of the indigenous wisdom named *Katresnanism* based approach to enhance undergraduate paper writing skill. Not only has the approach helped the students feel relaxed in following the activities conducted in the class, but they have also improved their research paper writing skill.

This study also shows that lecturers would not be looking for how many sources were used in the students' papers or what the experts have said about their subjects but rather how well the students use their ideas to develop their thesis. As a result, this study may, indeed, be deserved to promote *Sarjana* [Undergraduate] Paper Writing Skill through the Indigenous Wisdom *iguh* of *Katresnanism* based approach.

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## CREATIVE WRITING -BASED LEARNING PERSONAL EXPERIENCE

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### Abstract

Learning creative writing cannot be separated from education or academic. Most of the educators in teaching creative writing courses are more theoretical nature. The learning is focused on more emphasis on theory and knowledge of creative writing rather than creative writing (skills) itself. It easily leads to saturation, which in turn makes the students lazy to keep on learning. These problems require a strategy or solution that is able to evoke the spirit of the students in the learning process. One strategy that can be done is to apply a creative writing class based on personal experiences. Personal experiences are able to foster a passion for learners in exploring and brainstorming because of what is written has been encountered.

**Keywords:** *creative writing, teaching and learning, based on personal experience*

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### Introduction

Writing is a creative process that involves the mind to develop the idea. Of course there are the processes through which the writing activities. In general, there are three processes mentioned, including: 1) pre-writing stage (pre - writing), 2) the stage of writing (writing), and 3) the final stage/repair (post - writing). The pre - writing stage preparation means a person before the process of writing, for example, prepare yourself (physically, mind), collecting informasi that are related to a paper to be written, formulate a theme/issue, observing certain things that have a correlation the problem to be written, read, and others. Phase means the phase of the on going process of writing writing ideas. The final stage means the stage of review and improvement over the posts that have been made.

In a creative writing class, mostly taught by teachers who are not only theoretically far from their understanding of writing, types of writing, how to write and others. It makes most of the students become bored more quickly following the creative writing classes. These conditions require the solution and the right approach so that the problem does not continue. The approach is a medium for teachers to make learning more interesting and creative. One effort that can be done to address it is with the implementation of creative writing

teaching model based on personal experience. In writing personal experiences usually involve strong emotions, so that raises the spirit and willingness to hasten to write down what they think. Thus, in the process of learning to write creatively, lecturers will be easier to teach because students will be more active to dig things ever experienced.

In this short paper, will be presented on how experience -based learning creative writing students do for studied order to follow the lecture is not easily bored and raises the spirit and passion of the fun in writing activities. Here's more exposure.

### Discussion

In this discussion, we will explore about objective and benefits writing, creative writing, writing personal experience, and shape based learning creative writing personal experience.

#### Objectives and Benefits of Writing

According to Tarigan (1994:23-24), the purpose of writing a response or reply is expected by the authors will be got from readers. Based on this limitation, it can be said that the purpose of writing is (1) paper which aims to inform or teach so-called discourse informative (informative discourse), (2) writing is intended to convince or urge referred to

discourse persuasive (persuasive discourse), (3) posts which aims to entertain or delight or aesthetic purposes that contain so-called literary writings or literary discourse (literary discourse), (4) writing to express feelings and emotions are strong or fiery discourse called expressive (expressive discourse).

According Akhadiah (in Suriamiharja, et al, 1996: 4-5), the benefits of writing are (1) the authors could recognize her abilities and potential, (2) a trained writer can develop a variety of ideas, (3) the writer may be a lot to absorb, searching, and control of information written in connection with the topic, (4) the writer may be systematically trained to organize and express ideas explicitly, (5) the author may review and assess their own ideas objectively, (6) the author is easier to solve problems, (7) the author motivated to continue to learn actively, (8) the writer becomes accustomed to think and speak in an orderly and organized.

Meanwhile, according to Dr. Pennebaker in his book entitled *Quantum Writing*, Hernowo (2005 : 54), mentions some of the benefits of writing include: clear the mind, overcoming trauma, help acquire and remember new information, solve problems, and help us when forced to write. Of writing activities can also be likely to receive additional income if the loaded mass media. It also spurred the creativity of young teens to think and continue to work. Besides, there are many benefits of writing in the mass media either to another individual or to the public benefit.

As with Brama which further highlights the benefits of writing, more specifically, the writing in the mass media. Brama Aji Putra (2010: 10-18) mentions some of the benefits of writing. He wrote it divides benefits into two categories. First, the benefits for yourself : 1) the idea of being more productive, 2) an inner satisfaction, 3) name known to many people, 4) honorarium, 5) can clear the mind, and 6) write a work for eternity (perpetuating the idea of mind). Second, the benefits to the public : 1) provide information to the general public, 2) contribute different ideas, and 3) provide a change for the better.

Creative Writing

Creative writing are inseparable relation with understanding and creative writing itself. Writing is part of the language skills that are productive and expressive. Where in these activities should be skilled writers utilize graphology, grammar and vocabulary. White and Arndt (1997, in Suwandi 2012: 2) states that writing is not a simple matter to write the language in writing emblem; writing is a process of thinking in its truth.

According to Takala (in Achmadi, 1990) is a process of preparing to write, record, and organize multiple levels of meaning in; are interactive and geared to achieve certain goals by using the conventional system of signs that can be read. In general, the definition of the activity or activities writing expressing ideas, ideas in writing using the language as a medium.

Creative writing activities related to, can be defined as the process of delivery of ideas, thoughts, and ideas and feelings we (humans) into the script or language system. This process requires the ability of the brain and mind. So creative writing is a process and activity that gave birth to ideas, thoughts, feelings to others or to himself through the medium of language in the form of writing in a different way than usual. That is, the writing itself is a creative writing activity based on imagination, turbulence thought, idea or ideas themselves or enrich other people's ideas in different ways.

Another definition says creative writing means writing that is not what it is / mediocre, wrote in favor of the change, having standpoint / perspective and was able to combine the best of several objects, concepts or phenomena in an interesting form of writing. So it can be concluded that creative writing is an effort to produce work in writing with a creative way and method, different from the usual.

Next, in learning creative writing can not be separated from elements of learning and creative writing. Learning is a process organized by the teacher to the student in learning how learning acquire and process knowledge, skills, and attitudes (Dimiyati, 2002:157). Learning is a practical activity based on a specific concept and bound in the situation, as well as tearah on a goal to be achieved,

so the learning is essentially a series of conscious human communication learning objectives.

#### Writing Personal Experience

Personal experience of an event experienced by someone be it a pleasant experience, pathetic, embarrassing, touching or other experience. Ministry of Education (2004 : 55-56) mentions, the types of personal experience there are six, namely the experience funny, weird experience, experience thrilling, moving experience, experience embarrassing and painful experience.

In writing personal experience, writing the resulting usually in the form of a narrative essay. According Keraf, (2000 : 136) is a form of narrative discourse is the primary target behavior is woven and coupled into an incident that occurred in a unit of time. In other words, narrative is a form of discourse that seeks to clearly illustrate to the reader that an event has occurred. According Keraf (2000 : 145), the narrative structure viewed from its constituent components include deeds, character, background (setting), plot (plot), and point of view.

Understanding other writing activities are recounted personal experience or the experience of having experienced events are realized in the form of writing that is intended to be read by the reader. Experienced personal experience provides convenience in a creative writing class for students to put it in writing, because the student 's own experience and live so that makes it easier to remember them.

Personal experience as study materials provide some convenience to the students because the experience itself and really into making it easier to recall. Another convenience, the understanding of the content or materials are very helpful in the formulation of the topic sentence and sentence development. Creative writing with a personal experience of the model will also facilitate students in the pouring inspiration, fresh ideas and innovation. Writing activities that appear and really feel what is written will make the results of the paper flow. Daniel Goleman in "Emotional Intelligence" refers to "Flow is a condition when a person who is fully absorbed in what he was doing,

focused on the work, together with the awareness of his actions " (Fauzil Adhim, 2004: 78). It is not one of what was said by Daniel Goleman, because any activity when there is a very strong psychological involvement, it will produce maximum results.

In a creative writing class based on personal experience, making students more active thinking and memory re- opening of the events of what happened and can be used as a material for writing. Writing personal experience usually has a higher speed to pour, write something that has never been experienced. The reason, must fabricate and imagination with a variety of ideas that flashed through the mind.

To put it in the form writing stringing sentences need to be fitted in a single article. Thus it is precisely the presence of psychological (psychological - term presence raised by Goleman ) the involvement of a strong feeling will be able to increase the concentration to a high level. The involvement of the liver and emotions in writing activities will be able to produce more optimal results than doing something half-heartedly.

#### Shape -Based Learning Creative Writing Personal Experience

Personal experience can be said to be attractive and can be used as an ingredient in a creative writing class if it contains a few things, namely: (1) experience what will be delivered, (2) when and where the experience occurred, (3) anyone who etrlibat in experience or events, (4) as a result of what arises from that experience, (5) why is it considered interesting experience, and (6) what lesson or lessons to be learned from the experience.

One of the materials used for teaching creative writing is a personal experience that is owned by the student. In general, the form of learning that can be done by faculty in teaching students to write creatively based on personal experience is as follows

a) The lecturer gave a brief explanation of creative writing -based learning experiences for students

b) Lecturer gives brief questions about personal experience I have ever experienced by the students as the initial stimulus

c) Lecturer gives examples of creative writing based on personal experience, can be taken from magazines, newspapers, or other written media

d) Lecturer asks students to analyze and criticize the writings that serve as examples, how the elements in writing a personal experience, how to model or format writing, and other posts related to them

e) From the discussion and analysis conducted by students, faculty provide reinforcement of the structure of writing a personal experience and story elements based on personal experience

f) Lecturer gives writing assignment based on their personal experiences to the students by providing themes to choose from

g) Lecturer asks students to edit posts results based on personal experience that has been produced jointly

h) Lecturer with the students doing terhasil refleksi and evaluation results based on personal experience that writing has been produced jointly

### Conclusion

Of exposure to a short paper on teaching creative writing based on personal experience, can be done by lecturers with modeling examples of creative writing based on personal experience and give assignments to students to write their own personal experiences. Believed that learning creative writing based on personal experience it is easier to do because the students experienced the event, giving rise to very strong emotions in writing what was in her mind respectively.

Shape -based learning creative writing personal experience is the best way to evoke strong feelings and strengthen the commitment to finish writing. With a strong commitment, learning more fun creative writing and the writings or works produced

will be more powerful, not boring and tiring fast as involving emotion and heart in generating writing. From personal experience, students are more easily explore the events experienced and applied in writing. Of course this is a separately in producing writings.

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## TEACHING COMMITMENTS FOR CREATIVE TEACHING IN DESIGN AND TECHNOLOGY: CONFIRMATORY FACTOR ANALYSIS

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### Abstract

Teacher commitment is a variable which is an issue that is not less important in the implementation of creative teaching in curriculum innovation. The influence of teachers' commitment as an agent of transformation of the curriculum is seen as influencing the extent of the involvement of teachers in total as agents of curriculum transformation. Teachers who are committed is a teachers have a strong commitment to teaching and have a high potential in getting the job done effectively. A general view of describing many of the teacher feel uncomfortable on the introduction of an innovation in the curriculum to teach in school for fear that the change will interfere with the comfort and affect their functions and roles either directly or indirectly. This study aims to determine the equivalence of measurement models for teaching commitment for creative teaching in Design and Technology (RBT) among national primary school teachers on the east coast of Peninsular Malaysia. Using confirmatory factor analysis to verify the items comprising the construct instructional commitment 7 items from the 16 items in the construct of creative teaching practices in RBT. Correspondence measurement model with survey data is important because it demonstrates the reliability of the measurement model for teaching creative teaching commitment in RBT. The study sample was composed of 180 teachers from a number of primary schools in the East Coast of Peninsular Malaysia. Results of the Chi Square Goodness of Fit for a significant teaching commitment  $\chi^2$  (N=180, df =4) 0891, p<0.01, (0926)] RMSEA=0.063, TLI=0.927, CFI=0.943, CFI= 0.94, TLI=0.93, SRMR=0.041 dan RMSEA value for the hypothesis that the model is smaller than 0.08 (RMSEA =0.063) indicate that a significant, hypothesis proposed model corresponds to the data collected from the survey respondents

**Keywords:** *teaching commitment, measurement model, Design and Technology.*

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### Introduction

Manuscript Commitment teacher is a teacher of internal interpretation of how they absorb and give meaning in their work.[8] Teachers also have a teaching commitment is variable becomes an important issue in the implementation of innovations in teaching in schools. In the age of globalization, teacher commitment needed to play one of the following; a) teacher as a catalyst that accelerates the process of globalization, b) teachers an obstacle to the downside as a result of globalization and c) teachers become victims of globalization because they cannot keep the rhythm and time changes. This phenomenon appeared to need a strong commitment to the teaching profession.[5] Teachers now have to be more creative and innovative to produce their teaching role as a catalyst or a barrier to the evils of

globalization proceeds and not fall victim to globalization.[6] Through this creative teaching, students can acquire the knowledge, attitude and practice to master the skills and values and to develop their creativity and innovation from various sources and methods as a result of innovation and creativity teacher.[7] However, the development of teachers' creativity should be established in line with the era of globalization, the information explosion era without borders on the present and future. Thus, the role of a good education more challenging to educators as well as to students. Studies conducted before many concluded that the work, competence of teachers and how teachers respond to their teaching practice will be more effective if the level of their teaching commitment is high.[9] Teachers have always had a strong commitment to high ability in executing their duties effectively.[8] In addition, teachers with high



teaching commitment will always have intrinsic and extrinsic motivation that allows them to generate ideas and always helped the school organization regardless of the time limit.[7]

### Objectives of the Study

This study aims to determine the equivalence of measurement models for teaching creative teaching commitment in Design and Technology (RBT) to determine equivalence of measurement models for sub construct affective commitment, continuous commitment and normative commitment to the study data using confirmatory factor analysis (CFA).

### Methodology

The study focused on several primary schools on the east coast of Peninsular Malaysia. The subjects were 180 respondents, among the teachers who teach in the school RBT in various stages of cluster sampling. In this study, researchers reported a number of fit indices are often used by other researchers using confirmatory factor analysis using AMOS software version 18, as has been suggested [3],[4] is shown in Table 1.

Table 1 Goodness-of-fit model using the Fit Index for Factor Analysis.

| EFA Model Index                                     | The proposed value * |
|-----------------------------------------------------|----------------------|
| Sphericity Bartlett Test / $\chi^2$ (Sig. <0.05)    | < 0.05               |
| The adequacy of the sample/Kaiser-Meyer-Olkin (KMO) | $\geq 0.80$          |
| Loading factor                                      | $\geq 0.50$          |
| communalities                                       | $\geq 0.30$          |
| Eigenvalue                                          | $\geq 1.00$          |
| The percentage contribution of factor variance      | $\geq 3.00$          |

Based on indicators of equivalents presented model, the researchers set of six indicators correspondence model for this study are shown in Table 2.

Table 2 Indicator Goodness of Fit

| Goodness of Fit                                    | Acceptance Goodness of Fit Value                                                                  |
|----------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Absolute fit Indices</b>                        | Value $\chi^2$ low relative to the degree of freedom with value p not significant ( $p > 0.05$ ). |
| 1. Chi-Squared ( $\chi^2$ )                        |                                                                                                   |
| 2. Chi-Squared $\chi^2/df$                         | 2: 1 (Tabachnick & Fidell 2007), 3: 1 (Kline 2005).                                               |
| 3. Root Mean Square Error of Approximation (RMSEA) | Values less than 0.06 (Harrington 2009; Ullman 2007; Brown 2006)                                  |
| 4. Standardized Root Mean Square Residual (SRMR)   | SRMR Values less than 0.08 (Hu & Bentler 1999)                                                    |
| <b>Incremental Fit Indices</b>                     | Values greater than 0.90                                                                          |
| 5. Comparative Fit Index (CFI)                     | Values greater than 0.95                                                                          |
| <b>Parsimony Fit Indices</b>                       | Model dengan nilai lebih besar adalah lebih baik.                                                 |
| 6. Parsimony normed fit index (PNFI)               | PNFI good value is greater than 0.6 (Garson 2009).                                                |

### Findings

Weighting variable regression for teaching commitment showed a significant difference in the level of 0.001. The critical rate indicates the significance of regression coefficients in the model standard measurement between the latent variables (teaching commitments) and indicator variables. The critical rate that is outside the range of  $\pm 1.96$  were considered significant at the level of  $p < 0.05$ . Therefore, all the variables of the indicator is a significant predictor variables for the latent variables.[3] The results indicated that the measurement model formed by latent variables and indicator variables is to match (fit) to the data. However, the test results using Chi Square Goodness of Fit. Significant [ $\chi^2$  (N=180, df = 5) 42 926,  $p < 0.01$ , (0.000)] and the RMSEA for the model hypothesis of greater than 0.08 (RMSEA=0.126) indicate that the hypothesis of the proposed model is not commensurate with data were collected from respondents. The results of this analysis are consistent with the correspondence index IFI, TLI and CFI in Baseline Comparisons of less than 0.90 (from 0.786 to 0.895, respectively).[1], [2].

Table 3 Model Match variable teaching commitment

| Model             | NPAR | CMIN    | DF | P    | CMIN/DF |
|-------------------|------|---------|----|------|---------|
| Default model     | 10   | 42.926  | 5  | .000 | 8.585   |
| Unsaturated model | 15   | .000    | 0  |      |         |
| Saturated model   | 5    | 365.273 | 10 | .000 | 36.527  |

Table 4 Comparison of Baseline Indicator Model Fit and RMSEA

| Model         | IFI  | TLI  | CFI  | RMSEA |
|---------------|------|------|------|-------|
| Default model | .895 | .786 | .893 | 0.000 |

As the result of the Chi Square test Goodness of Fit and the RMSEA significant hypothesis suggests that the model built does not match the data collected, the results of the analysis show the modification indicator (MI) to improve compatibility with the model data. Value M.I. for  $e1 \leftrightarrow e2$  (40 047), indicating that if the variable [e1 and e2] correlated between the partner, the Chi Square Goodness of Fit would be reduced by 0891. Measure the variables in the model diagram will reduce the probability of the hypothesis significance test Chi Square and will directly

improve the compatibility of models with the data.[3] Based on the proposed analysis (Model Fit Summary), reference is made to the PM1 and PM3 variables involved. Next model modified the original hypothesis linking variables KP1 and KP3.

Table 5 Variable Model Match teaching commitment (modified)

| Model          | NPAR | CMIN    | DF | P    | CMIN/DF |
|----------------|------|---------|----|------|---------|
| Default model  | 11   | .891    | 4  | .926 | 8.585   |
| Model tak tepu | 15   | .000    | 0  |      |         |
| Model tepu     | 5    | 365.273 | 10 | .000 | 36.527  |

Table 6 Indicators Baseline Model Fit Comparison and RMSEA (modification)

| Model         | IFI   | TLI   | CFI   | RMSEA |
|---------------|-------|-------|-------|-------|
| Default model | 1.009 | 1.022 | 1.000 | 0.000 |

However, the test results using Chi Square Goodness of Fit significant [ $\chi^2$  (N=180, df=4) 0891,  $p < 0.01$ , (0926)] and the RMSEA for the model hypothesis is smaller than 0:08 (RMSEA= 0.000) showed that significant, the hypothesis proposed model corresponds to the data collected from the survey respondents. The results of this analysis are consistent with the correspondence index IFI, TLI and CFI in Baseline Comparisons of more than 0.90 (from 1.000 to 1.022).[3],[4] Because the Baseline Model Fit Comparison > 0.09 and RMSEA values < 0.08 significantly then the hypothesis that the model is built corresponding to the data.

### Discussion and Conclusion

Challenging task of a teacher requires patience, enthusiasm, determination and determination to discharge the responsibility of educating the nation. The most important factor is the spirit to try and continue to work and trust in teaching their students. Aspects of teacher commitment (affective commitment, continuous commitment and normative commitment) to implement creative teaching is viewed from the aspect of the classroom through the involvement of teachers as agents transformation overall curriculum. This will affect the aspect of teachers' perception of the implementation of the innovation itself.[8] Next perception will influence the attitudes and behaviors of teachers in the teaching and learning process. The willingness of teachers to implement an innovation are important questions that need to be considered by the various parties.[6]

### Implications of the study and Recommendations

To maintain the quality of teachers produced by the Institute of Teacher Education (IPG), the system of teacher education has moved forward in accordance with the current world developments that require prospective teachers to be creative and innovative to ensure the high quality of teachers produced in accordance with the Standard Guru Malaysia (SGM) especially the professional domain of the love of the profession, competent, integrity, exemplary, practice teamwork, proactive, creative and innovative. Creativity and innovative creative teaching should be developed in the optimal level so inventive ability and capacity to produce quality ideas and inventions, and thus the practice and teaching of culture in the future.[9] Innovative and creative individual who holds a teacher's is a national asset that can contribute to the development of human development community, religion, race and nation.

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## CONTRIBUTION OF ENGINEERING RESEARCH IN ENHANCING ENGINEERING EDUCATION – A CASE FOR STRUCTURAL ENGINEERING

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### Abstract

This paper argues for the role of research in enhancing engineering education and will illustrate this argument through examples cited from the author's work in the area of structural engineering. Structural engineering can be defined as the study of the behaviour of structures such as buildings, bridges etc., when subjected to loads. The study has outcomes in the form of forces and deflections in members of a structure so that they can be designed to be safe under operating conditions. Research in this area by the author has involved (i) new materials technology, (ii) sophisticated computer methods of analysis and (iii) behaviour of these structures when subjected to random loads such as seismic, impact and blast loads. This paper illustrates how the author's research findings are used to contribute towards enhancing structural engineering education. This practice by the author has enhanced his teaching ability and the learning outcomes of his students, as evidenced by the excellent evaluations of his teaching. It is therefore intended to present and illustrate this practice to others in the area of education with the belief that they and their students could also benefit.

**Keywords:** *engineering research, engineering education, structural engineering.*

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### Introduction

Academics teach and carry out research in addition to performing some service related activities. Most academics chose their profession primarily for the love of teaching and for the desire of imparting knowledge to the next generations. Academic research in engineering has mostly been in response to the needs of the community and the industry. Such research has often resulted in the creation of new knowledge that leads to one of the following: (i) a new and improved product (structure) or (ii) techniques for enhancing safety, performance and maintenance of an existing product (structure). Examples of these in structural engineering include: (i) innovative composite bridges or floor structures which are light, less costly and easy to install and (ii) techniques for mitigating the adverse effects of earthquakes on a structure or techniques for structural health monitoring which enable the engineer to check and fix problems in structures and thereby prevent their failure. Academic research, often funded by either governments or industries, on the whole has provided beneficial outcomes to the community.

There is a recent trend to push research in many universities. At first, this may be viewed as being detrimental to engineering education. Academics can however, utilise the wealth of knowledge created through research to enhance their teaching and the learning outcomes of students. This will greatly benefit engineering education in general and the quality of our engineering graduates in particular as evidenced by the author's experience.

The author has been teaching and carrying out extensive research in the area of structural engineering for over two decades. This paper argues for the role of research in enhancing engineering education and will illustrate this argument through examples cited from the author's work in the area of structural engineering. This practice by the author has enhanced his teaching ability and the learning outcomes of his students, as evidenced by the excellent evaluations of his teaching. It is therefore intended to present and illustrate this practice to others in the area of education with the belief that they and their students could also benefit.

## Structural Engineering

Structural engineering is a core subject in civil engineering courses. There is normally a brief exposure to structural engineering (or structural mechanics) in most mechanical and electrical engineering courses. Structural engineering can be defined as the study of the behaviour of structures such as buildings, bridges, machines, multi-purpose towers, etc., when subjected to loads. The study will have outcomes in the form of forces and deflections in members of a structure so that they can be designed to be safe under operating conditions.

There are three major issues with structural engineering today. They are: (i) vibration problems in very tall and/or slender structures which have emerged as a consequence of new materials technology and aesthetic requirements [1], (ii) increased vulnerability of structures to random loads such as impact, blast and seismic loads [2] and (iii) safety concerns of aging structures, which suffer deterioration and/or subjected to increased loading [3]. Real world examples of the consequences of these three issues are illustrated in Figs. 1, 2, 3 and 4. Fig. 1 shows the slender and aesthetically pleasing Millennium footbridge bridge in London. This bridge was closed on the opening day as it exhibited high levels of (lateral) vibration which the design engineers did not expect. It has since then been retrofitted with dampers at a cost similar to the cost of original construction. Fig. 2 and 3 show the building damage caused by an earthquake and the damage of a bridge column by vehicular impact respectively. Fig. 4 shows the aging (almost 70 year old) Story bridge in Brisbane which needs continuous monitoring of its structural health as it is now subjected to increased and faster moving loads and in addition, might have suffered deterioration due to environmental effects.

Knowledge in structural engineering in general and structural dynamics and computer modelling in particular are necessary to address these issues and their consequences. New research knowledge in these areas will hence enhance structural engineering education in these two subjects. It will motivate the students in their learning of the relevant subjects as well as provide real world

examples of applications of the knowledge imparted through these two subjects. This is an illustration of how engineering research can enhance engineering education.

Research in this area by the author has addressed the three issues mentioned above and it has involved (i) new materials technology, (ii) behaviour of these structures when subjected to random loads such as seismic, impact and blast loads and (iii) structural health monitoring. Complex problems in structural engineering, which had hitherto remained difficult to solve, can be analysed today due to the availability of sophisticated computer methods supported by innovative testing methods.

It is very important to bring the wealth of knowledge created through research into the classroom as it will make the teaching of the subject relevant and interesting. As a consequence our structural engineers will have knowledge in these



Figure 1: Millennium Bridge (London)



Figure 2: Earthquake damage of a building



Figure 3: Impact damage of a bridge column



Figure 4: Story Bridge, Brisbane

-important areas in order to practice their profession efficiently.

It is reasonable to say that structural engineering education in most universities does not incorporate

therecent research findings into its teaching content. The author has observed that many engineering undergraduate students find structural engineering difficult and/or un-interesting. In addition, he has had inquiries from engineers on matters pertaining to the three issues mentioned above. This reveals a lack of adequate knowledge in these area among the practicing engineers, who had not been exposed to the relevant research findings in their studies. The author was hence been convinced to bring recent research findings relevant to the three issues highlighted above, into the class and illustrate them through examples. Since doing this, he has observed the changes. Structural engineering students had found the learning relevant and interesting as well as the new generations of structural engineers had been equipped with the research developments in the area to enable them to utilise the new knowledge to better analyse, design maintain and retrofit structures to perform safely and efficiently.

### Challenges

The author has been teaching structural engineering to final year civil engineering students majoring in structural engineering during the past two decades. The two subjects that he has been involved are (i) structural dynamics which can be described as the study of structures subjected to dynamic (or time varying) loads and (ii) Finite Element methods, which can be described as computer modelling and analysis of structural systems, and hereafter referred to as “computer modelling”. During the same period, he hadalso carried out a number of research projects, all of which required knowledge in both structural dynamics and computer modelling. This dual role has been beneficial and as a result, teaching and learning in both these subjects have been quite effective, as evidenced by the results of the many student surveys on these subjects. There have however, been some challenges:

1. Inadequate background knowledge of the students, especially in mathematics and structural mechanics.
2. Lack of interest among students as they have been taught simpler methods to solve

simple and unrealistic problems during the early years in their course and are unable to see the need for and benefit(s) of learning the more difficult subjects such as structural dynamics and computer modelling

3. Loss of interest early in this subjects due to their relatively difficult nature.

The author has been able to address these challenges by highlighting the three issues in structural engineering (as presented above) and using his research to provide illustrations of how these issues are being addressed today. This attracts the interest of the students and provides motivation to learn these subjects. New information from current research findings are presented during class time to make the subjects relevant and interesting. This aspect was introduced by the author’s doctoral students whose research projects use both structural dynamics and computer modelling. Some of the recent research used in this manner is presented below (for illustration purposes).

### Recent Research Findings in structural engineering

Research to address the current issued in structural engineering has progressed rapidly. This has been made possible by the availability of sophisticated instrumentation, advanced computer modelling techniques and super computers. The new information generated from this research and its applications to the analysis and design of structures must be brought into the class room and be made available to the new generation of structural engineers.

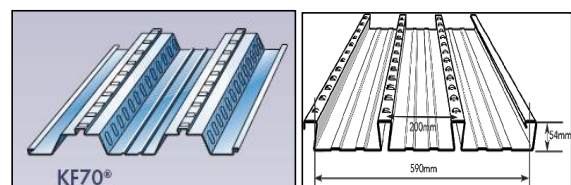


Figure 5: Typical steel-decks for composite floors

Motivated by the need to address some aspects of these issues and the knowledge gaps therein, a number of research projects have been undertaken at the Queensland University of Technology (QUT) using dynamic computer simulation techniques supported by experimental testing. The research

focused on three areas: (i) vibration in slender structures, (ii) disaster mitigation of structures under seismic, impact and blast loads and (iii) structural health monitoring of aging structures, with applications in bridge and building structures. This paper will briefly describe the main findings of some of these research projects.

### New composite floor structure and the problem of vibration

New materials technology and aesthetics have resulted in floor plates for use in buildings, bridges and cantilever grandstands. These composite structures have many desirable features, but when put into use experienced vibration problems. Due to their high slenderness ratios that exhibit multi-modal and coupled vibration. Design codes and best practice guides either do not cover such phenomena adequately or they provide simplified techniques that cannot address the complex vibration in these structures. Historically there have been instances of alarming dynamic excitation of slender structures when subjected to human interaction. The most noteworthy example is the Millennium Footbridge in London (Fig. 1) which experienced alarming levels of adverse vibration on the opening day and had to be closed for retrofitting. In Australia, steel deck composite floors used in buildings, airports and shopping centers have been prone to human induced vibration causing some concern to occupants. This paper treats the vibration characteristics and of a new steel concrete composite floor structure.

### Vibration in composite floor structure

Steel deck composite floor systems have one way spans and use high strength materials to achieve

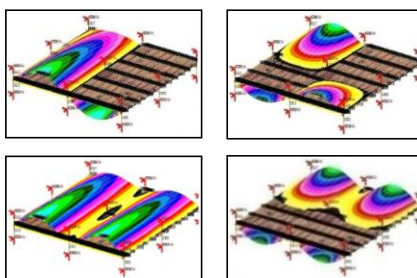


Figure 6: First four mode shapes with frequencies 4.0, 5.4, 5.9 and 6.9 Hz, L to R and T to B

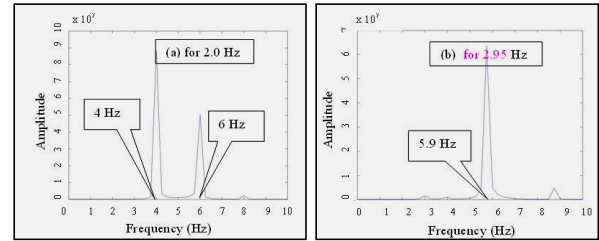


Figure 7: Response spectra under PL1 loading at activity frequencies of 2 Hz and 2.95 Hz

longer spans. Fig. 5 shows two common steel-deck composite floor systems that are in use in Australia. These types of floors are slender structures which have experienced vibration problems under human induced loads. Vibration of the dovetailed composite floor system shown on the right hand side of Fig. 5 with four equal panels and a total area of 16mx15.6m was treated using finite element (FE) techniques. Structural and material properties of the floor system and its modeling details can be found in [4].

Four load functions (PL1 – PL4) representing human activities were applied with load intensity, foot contact ratio and frequency as variable parameters. Different values of foot contact ratios to simulate high impact jumping, normal jumping, high-impact aerobics and low impact aerobics were used with two different load densities. Different damping levels and activity frequencies in the normal range for pedestrian walking, running and jumping (1.5Hz to 3.5 Hz) were also considered. Pattern loads PL1 acting on a single panel and PL2, PL3 and PL4 acting on 2 adjacent panels parallel and perpendicular to the span, and on diagonal spans respectively were applied one at a time, to capture the dynamic response [4]. Fig. 6 shows the shapes of the first 4 modes of vibration and it is evident that the pattern loads could excite all these modes.

Depending on the load case, maximum acceleration responses occurred at activity frequencies of 2.0, 2.7 and 2.95 Hz. Acceleration response spectrums of the floor under PL1 for high impact jumping at low damping are shown in Fig. 7. The left hand Fig. shows two distinct peaks at frequencies of 4.0 and 6.0 Hz corresponding to the excitation of the 1st and 3rd modes of the floor system by the 2nd and 3rd harmonics of the activity



frequency of 2Hz. The right hand Fig. depicts a single peak at 5.9 Hz corresponding to the the excitation of the 3rd mode by the 2<sup>nd</sup> harmonic of the forcing frequency of 2.95Hz. The other load cases also displayed analogous results on the excitation of higher vibration modes in this slender composite floor structure. Further details can be found in [4]. From the above results, it is evident that in addition to the fundamental mode, higher modes of vibration can be excited in steel-deck composite floors by the higher harmonics of the dynamic human activity.

Current simplified methods of assessing floor vibration are primarily based on the fundamental natural frequency and are not adequate for all operating conditions. Investigations of human activity induced floor vibration based on existing codes and practice guides are limited to either the first mode of vibration or a few uncoupled modes in the vertical direction of a single panel directly exposed to the activity. The present research showed that in slender multi-panel floor structures multi-modal and coupled vibrations under patterned load effects are significant. In addition, higher modes have an impact on adjacent panels not exposed to direct activity. The new generation of structural engineers, which is the cohort of our present engineering students, needs to be aware of this and need the new knowledge from this and similar research projects for proper evaluation of such slender floor structures to enable safe designs.

Vibration in composite floor structures, which are slender structures, can be complex under human induced loads and this can compromise safety. Comprehensive evaluation of these structures is necessary by considering their multi-modal and coupled vibration under pattern loads, as presented herein.

### Seismic Mitigation of Building Structures

There is a need to control the response of structures when they are subjected to random loads such as seismic, impact and blast loads to protect them from failure. Considerable amount of new information has been generated in this area during the past two decades. This paper summarises a part of QUT research on the use of passive dampers for seismic mitigation of building structures.

An 18 storey frame-shear wall structure with passive dampers embedded in cut-outs of the shear wall as shown in Fig. 8 is considered. The use of two different damper types (i) viscoelastic (VE) and (ii) friction dampers are investigated. Finite element models of the structural-damper systems are analysed under different earthquake records, all scaled to a common peak ground acceleration (PGA) for meaningful comparison of results. Details of modelling, structural and material details are given in [5]. The response parameters are tip deflections and accelerations of the frame shear wall structure, but only results for the former are given in this paper.

#### New research information

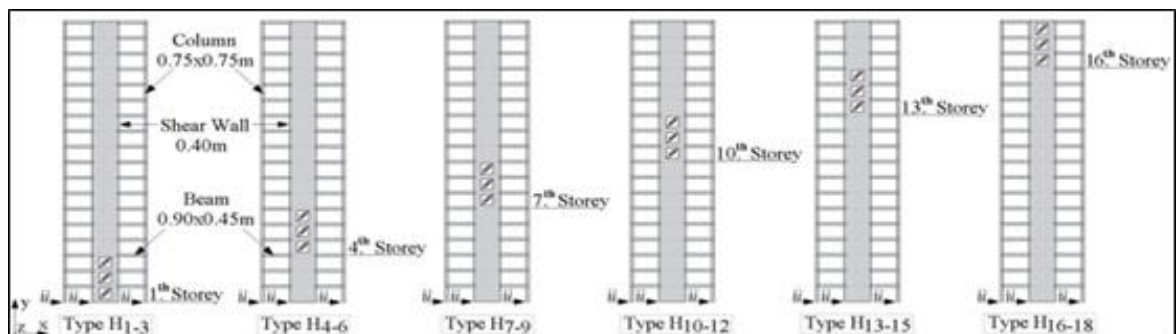


Figure 8: Damper placements in 18-storey frame-shear wall



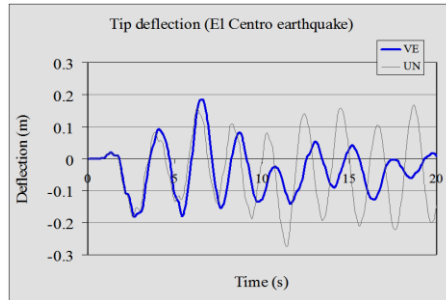


Figure 9a: Tip deflection time histories

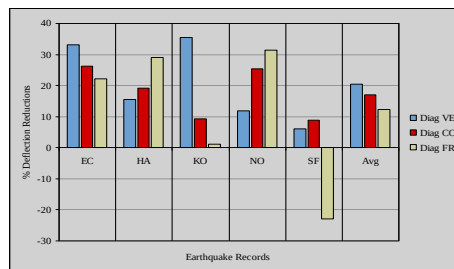


Figure 9b: Deflection mitigation

The natural frequency of the undamped structure was 0.614 Hz and in the range 0.570 - 0.650 Hz when fitted with dampers. These values are within the range of dominant frequencies of all the seismic records chosen in this investigation (varying from 0.58 Hz to 1.07 Hz) and hence this study treated the structural response under a range of seismic excitations including a resonant range. Different damper configurations and placements were considered.

The structure was analysed under five seismic records, with different frequency contents and durations of strong motion, all scaled to a peak acceleration of 0.15 g and applied for the first 20s. Evaluation of tip deflection is a reasonable measure of the overall effect of the earthquake and hence any reduction in tip deflection represents a worthwhile reduction in overall seismic design force. Figure 9a illustrates the deflection-time

histories of the un-damped structure and the structure fitted with diagonal VE dampers in the lowest three storeys under the El Centro seismic record. From these graphs as well as from numerous other results it was evident that embedded dampers were able to effectively provide seismic mitigation. Results for the tip

deflection reductions showed that reasonable seismic mitigation was possible with all damper types and in general best results for the VE dampers occurred when they were placed in the lower storeys while the best results with the friction dampers were obtained when they were placed at locations with highest inter-story drifts (generally in the 14- 18 storeys for this structure).

Based on the above findings, the effect of a combined damping system consisting of a diagonal friction damper in the 16th storey and a diagonal VE damper in the 1st storey (called diag. CO) was investigated. Fig. 9b compares the average tip deflection reductions of this system with those of the diagonal friction and VE dampers under all five seismic records. It is evident that the combined damping system can provide significant mitigation under all seismic recodes, even though it consisted of only two dampers.

#### New research information

Structural control and seismic mitigation of building structures are possible with carefully designed passive damper systems. This research knowledge must be transferred to education in structural dynamics to enable the next generation of engineers to implement this in practice and hence prevent building collapse and loss of lives during an earthquake.

#### Structural Health Monitoring

Structures such as buildings and bridges are designed to have long life spans, but changes in their loading and environmental conditions can cause damage to these structures. Vibration based Structural Health Monitoring (SHM) is the technique in which the condition of a structure is monitored through the changes in its vibration characteristics which can then be used to evaluate damage indices that can detect damage. Early detection of damage and appropriate retrofitting will prevent structural failure. Damage in a structure results in a change in its vibration characteristics and this is the basis of vibrationbased SHM techniques which are extensively used today [6,7]. There has been extensive research at QUT in this area, of which damage detection in the main load bearing

elements of bridges and buildings, was an important part. Fig.10 illustrates the detection of mid span damage in a beam, using the variations in vibration data of the beam. Further information on this can be found in [6].

#### New research information

Vibration based structural health monitoring techniques can be used to detect damage in aging bridge and building structures. This will enable timely retrofitting and prevent their collapse. SHM is relatively a new area and the new research information in SHM must be included into structural engineering education to enhance the learning outcomes of the students.

#### Conclusion

These three examples illustrate some of the recent research carried out to address the three issues in structural engineering. The next generation of structural engineers must be informed of this new research information.

The contribution of such engineering research to engineering education can be captured as follows:

- Community/industry needs → engineering research
- Findings from engineering research → engineering education
- Engineering education with new research information → knowledgeable engineers
- Engineers with research knowledge → efficient engineers
- Efficient engineers → structures with enhanced performance and safety.
- Efficient and safer structures → benefits to community

Structural engineering research has progressed very well during the past few decades due to the availability of sophisticated instrumentation, super-computing facilities and comprehensive computer modelling techniques. The research presented in this paper addressed three important issues in structural engineering and has generated a wealth

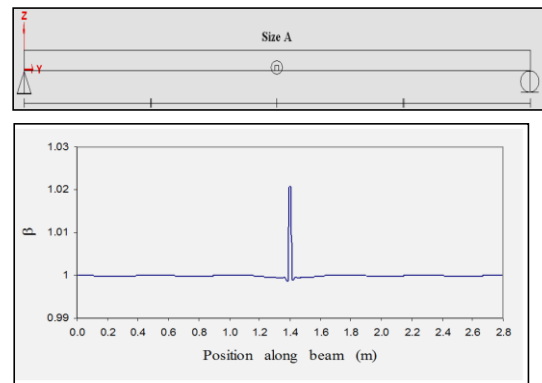


Figure 10a: Mid span damage in beam

Figure 10b: Damage detection using vibration data

Knowledge. This paper argues for the case for using this new research knowledge to enhance structural engineering education and hence provide benefits to the community. This proposition is illustrated through three examples of the author's research. Some of the important information from this research are: (i) composite floor structures must be designed with due consideration to the excitation of higher modes of vibration under human induced loads, (ii) seismic mitigation in frame shear wall structures can be obtained through strategically placed passive dampers and (iii) vibration based structural health monitoring techniques can be used to assess damage in bridge girders. The new generation of structural engineers must be made aware of these findings so that they can be used for the benefit of the community. This can only be achieved if these engineers are equipped with the new information from current research findings. It is hoped that the proposition made herein will be acceptable to most if not all academics so that the emerging structural engineers have the capability to design and construct our structures to function safely and efficiently.

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## DECONSTRUCTION OF KERATON CIREBON BATIK MOTIF: 'INFLUENCE OF KERATON ORNAMENTS IN CIREBON BATIK MOTIF'

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### Abstract

The research was aimed at finding out how Keraton Cirebon ornaments were deconstructed into Cirebonan batik motif and whether the philosophical and symbolic meanings of the Keraton batik motif also deconstructed after transformed into batik Cirebon. This research was a descriptive qualitative study that acknowledged the glamour of keraton Cirebon batik motif which was thought to have been 'dead' for years. The data collection was done by observation, interview and documentation. The data analysis was done by using the semiotics deconstruction theory approach by Jacques Derida and Ferdinand de Saussure. The study of the language and symbolic meanings was approached by Ferdinand de Saussure's theory, while the interpretation of 'logos' was approached by Jaques Derida's semiotics deconstruction theory (Piliang, Yasraf Amir: 1999, p.266-269). From this study, it is hoped that we can gain accurate and correct information on deconstruction process of ornaments to keraton batik motifs, including on how it became the building character of Batik Cirebon and its rich meanings, supported by the present theories.

**Keywords:** deconstruction, motif, karaton batik, cirebon

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### Preliminery

Classical batik or batik palace made to realize the values of Javanese culture. In Javanese culture, especially in the palace there are provisions concerning the royal family and palace officials to act, speak and dress to conform to the rules of the palace. Kraton deems it necessary to make rules so that the position remains strong and absolute monarch.

Mental attitude that specifically treat certain people because of their age or position expressed Hasanuddin (2001: p. 22) as feudalism:

Feudalism look at Java language stratified coarse (low), medium and fine (high). To communicate with people who are older or of higher social status *kromo* language used, and otherwise to communicate with people younger or lesser used languages *ngoko*.

Smoothness 'Java' not only in the language as a communication tool, but also embodied in visual language. Choosing fabrics, defines the style, depicting decorative, and choose a color associated

with the goal of achieving the more subtle (politely) especially for the palace. Provisions concerning the king's royal fashion can be interpreted as a command to increase the skills, crafts, precision and smoothness in a particular fashion palace batik cloth. Rules of the palace which is a refinement efforts in daily life in the royal palace reflected in the Ten Principles: *ngadi Saliro, ngadi Busono, ngadi Jiwo, ngadi logo, wisastro, udo negoro, toto kromo, toto coro, susilo, and utomo*. In practice it has to be an integrated whole sila together as a refinement.

Philip Kitley a Dutch citizen researchers stated that the rules prohibiting certain batik motifs are based on the consideration of feudalistic, and the following quotation:

King argued that batik has lost its eksklusivity properties formerly, because of the batik made by Java crafters (outside the palace). Base or position is no longer associated with the product itself, and the royal household was forced to make a design pattern is done carefully and in detail to show the users batik from royal ancestry and distinguish them from other users (Philip Kitley, 1987)

Opinion was highlighted by Sudjoko (1983) that one of the rules that prohibit the use of certain batik patterns expressed by Pakubowono III (Kasunanan Surakarta), as follows:

Anadene kang arupo jajarit kang kalebu ing larangan ing sun: batik sawat, lan batik parang rusak, batik cumangkiri kang calacap modang, bangun tulak, lenga teleng, daragem, lan tumpal. Anadene batik cumangkiri kang ingkang acalacap lung-lungan atawa kakembangan, ingkang ing sun kawenangaken anganggoha papatih ing sun, lan sentanan ing sun kawulan ing sun wedana (The jarit that I was included in the prohibition; sawat batik and parang rusak, in the form of batik motifs cumangkiri Modang, bango tulak, sesame pupil, daragem and tumpal. As for the form of batik motifs cumangkiri scrolls, or kekembangan (floral motif) let me use the duke family and nobles and courtiers district officer).

Smoothing decorative batik palace is also the influence of cultural values that is more about the soul of Java. Embodiment forms a clear, orderly and formal in batik patterns are shown by the lines of symmetry and regularly built, connecting the dots is definitely in the structure of the wind. Regularity is usually legible in the arrangement of repeated patterns, the rhythm and the line shape becomes illusion style frame.

The popularity Batik in the palace of Mataram (Ngayogyakarta) and Paku Buwana III palace (Keraton Surakarta) is not followed by the development of batik in Cirebon palace. Precisely at that time the palace of Cirebon batik experienced a period of low tide due to the occurrence of various kinds of problems such as hunger, disease, social unrest, and mass emigration. This incident occurred because of the occupation of Japan and the Netherlands are changing the cropping pattern of rice plants replanted with coffee, sugar, Tarum, tea, and clove. So Cirebon suffered a prolonged period of difficulty. Cirebon batik activities in the palace in those switched to *Trusmi* village 7 km to the west to avoid hostility, the batik made in *Trusmi* was originally a group of people who study science tarikat and incorporated in *Tarikat Naqsabandiah*

*Wal Qodiriah* led Panembahan Trusmi later known as Prince Tjakrabuana: (Irianto, Bambang: 2009).

Cirebon batik Trusmi conducted in the village by local artisans in the present has been a business - oriented and is economical. Even in this place is now a center of batik industry. Over time the popularity of batik palace began to fade, batik bookings only made by the royal palace, artist or collector, but Trusmi batik activities in the rapidly growing area.

Regarding with this degradation of identity, there is a paradox that is the legacy of the discourse of national development (modernization) since the last four decades. Development has established integrity (uniformity) of social and national normative system which in turn will weaken the normative and customary systems locally. But in fact the social and normative systems nationwide is not strong enough to withstand external influences as it did in the era of information in today's global economy. The discourse about identity in the era of pluralism is now becoming increasingly complex because of the identity only becomes an issue when he was in crisis, when something is considered steady, stable and replaced by an experience that is full of doubt, when the next generation does not consider them again on anything handed down by previous generations. In relation to the identity of social relationships is a key element in the formation of social reality that has to be a dialectical relationship with society. Identity in this case is formed through a social process. Social relationships will be able to modify, maintain, or even modifying identity. Such identity formation will be determined by the patterns of social change. Is the identity will be maintained, modified or altered at all in society, is highly dependent on the structure of society itself.

Jurgen Habermas and Ernest Gellner have different views on identity. He saw that the integrity or even the identity crisis is highly dependent on the presence of the integration of social and normative system which has the legitimacy and become the consensus in the social system. Identity crisis arises when the social structure offers the possibility of solving a smaller problem than the one that should be available to the identity system. The crisis can be

considered a disruption to the social system integration (Habermas and Gelner; 1988). Furthermore, they say that the identity of the system can be said to be in critical condition when members of a society experiencing a structural change that is critical for the existence and continuity of their social identity. A crisis in this case is the space outside the boundary of social representation in which the existing system of social representations can no longer secure identity, an identity insecurity space. The threat to the integrity of identity, it is more due to the structural weakness of the system, namely the lack of control values and normative rationality. This raises not only the crisis of rationality, namely the inability of the power to a certain extent control the economic system, but also a crisis of legitimacy, namely the inability of the existing administrative system to maintain or establish a normative structure that is effective, as is the case in Cirebon Kraton. In the discourse of pluralism breeding and growing identities possible degradation as a result of ideological taboo as a boundary for the existence of an essential identity. Taboo actually have functions that are central in the effort to form the formulation and creation of the world, due to its function as a reference in the process of social representation. Taboo is a social mechanism that is abstract and serves to give the limits for a particular community in expressing or representing themselves through the objects they create, or through a language they created. Taboo is the imaging to provide guidelines on what is appropriate, not appropriate and inappropriate to be seen, done, or represented through images of an object in a social system. Taboo integrity keeps the social system and the permanence of one's identity. the degradation value of morality, taboos, spiritual and mythological has paved the way for the development of cultural forms and art is an expression of the desire for deconstruction (deconstruction >> construction) and break away from what is considered normal - ethical, the intellect, the aesthetic. Culture and art in this escape moral identity, intellectual and aesthetic and original but still essential identity discursively brought into fully identity by the properties of abnormality, aberration, blurring, masking, and identity hijacking. As well as the development of

Trusmi batik began rising 'nut that left his skin'. Batik Trusmi has *deconstruction* onstancy, reliability, presence of palace culture that is represented in the motif of the palace. Normalization of the abnormal phenomenon that has actually been going on since long, but it is a dominant element in the culture and contemporary art in Cirebon, the razing of the categories and logical oppositions previously received validation in general and nothing abnormal and the forbidden becomes normal and is not taboo. Release of culture and art of the taboo and normality has shaped the face of culture and art of batik Trusmi that obscures the identity and fool reality. The question is that true that the Trusmi batik is true that the development of, Plumbon batik, Kenduran batik, Paoman batik (belonging batik Cirebon) in produce has exceeded taboo boundaries are considered normal - ethical, the intellect, the aesthetic (from a technical perspective, motives and coloring) to Cirebon palace culture that are represented on the ornament of the palace of Cirebon?

### Problem

The research on the development of batik Cirebon except examines the various palaces of Cirebon batik and batik Cirebon also concerns the study of symbolic meaning and philosophical motif itself. Examines the philosophical significance and symbolic meaning would be done with an approach. Approach to interpretation by John Sturrock (1979) cites the opinion of Jaques Derrida, performed by two approaches. First, retrospective interpretation approach that reconstruction efforts for the original meaning or truth. Second, prospective interpretation, namely that explicitly accepts the uncertainty of meaning. In connection with the study of the philosophical and symbolic meaning palace motif both approaches can be used as a study. Retrospective approach is more appropriate in the study of the logos is called absolute truth. Prospective interpretation freer understanding without being tied to the dogma. To the interpretation of the two approaches are expected to be able to answer the following research questions:

1 How Cirebon Kraton decorative patterns experienced deconstruction into the palace of Cirebon batik motif ?

2. Is the philosophical significance and symbolic meaning Kraton Batik motifs deconstruction after experiencing rapidly expanding into batik Cirebon ?

### Discussion

Batik is one of Indonesian native culture that has come a long time ago. Alleged that since prehistoric times already begun making batik is based on the fact that the ancient tradition of batik is still used in the interior of the alienated. 'simbut Priangan' is an example of the original batik made from starch materials as barrier fabric which is then dyed with natural dyes from vegetation types has been done since prehistoric times. If the type of decoration is seen, many Indonesian batik ornaments sourced from prehistoric times which geometric decoration and ornamentation logos (Yudoseputro, 2009). Decorative geometric patterns are also found in many ornaments for traditional houses in the interior such as Toraja, Dayak, Minang, Batak, and in other areas. Decorative pattern for the traditional house always recurs in the traditional fine arts.

At the time of the existence of Hindu art of batik increasingly clear, even *gringsing* motif and *ceplok* already known in the art *Dongsong* and inland Banten. Unless it Singosari statues and Majapahit kingdom when discovered already realized by wearing batik as court dress.

In keeping with the times of Hindu art environmental art of batik as an art palace with standardization tradition continued in the days of Islam. The results that have been achieved both in terms of time of the Hindu batik techniques and aesthetic continued until the Islamic era with influences by new elements. At the time of the Hindu decoration design batik motifs enriched with a new addition to the development and refinement of various geometric patterns and motifs of plants. Based on the historical development, Cirebon batik grouped into Keraton Cirebon and Cirebon batik coastal. Both batik pesisiran and batik Cirebon palace, influenced by the culture of Cirebon. It is not

independent of the collision, union, assimilation with the culture of ancient kingdoms, foreign cultures such as Chinese, Indian, Arabic and Persian as well as the culture that comes out of the colonial culture (Europe). The geographical position of Cirebon is also shaping the culture, Cirebon is located in the path of a cross between the eastern and western continents. Shipping traffic passing along the northern coast of the island of Java and Silk Land lines, so that the products formed in Cirebon culture is the result of a cultural plurality nations who stopped in Cirebon (Irianto, Bambang, 2009:4)

### Result

#### 1. Kraton Batik Cirebon

Keraton Cirebon batik is batik palace decoration is derived from either the physical form of the building, manuscript sources, as well as philosophical contained therein. Batik Kraton Cirebon is a traditional art form that is still preserved as a tradition in the art of Kraton Cirebon although in itself has no activity batik. Activities batik has been developed by the villagers Trusmi. Many batik Trusmi craftsmen who had orders for motif Kratonan of the family palace of Cirebon.

The influence of Chinese art contained on Majapahit art motif reappears in batik. *Wadasan* motif, *mega mendung* motif, *burung funiks* motifs, most often used in Cirebon batik motif. The lines are dynamic and rhythmic in Cirebon batik ornament shows similarities with the value of the line at China painting.

Each decorative motifs and designs in the classic art of batik is closely with its useful function. In a sense every kind of decorative batik particular spiritual meaning associated with the user when wearing batik and batik. Decorative motifs on batik batik classic has symbolic meaning, symbolism happiness to both the wearer and happiness for others. *Truntum* motif symbolizes the descent because this motif is recommended worn during marriage ceremonies. *Parang rusak* motif, *parangbarong*, *parangKusumo* should only be worn by the kings of Mataram. Continuity of the tradition

of batik look at the symbolism that refers to the cultures of pre - Islamic.

New decorative ornaments shown in Islam batik originated from Islamic decorative art and the influence of Chinese traditional arts. Breath of Islam that is felt in the ornate batik is the application of Arabic calligraphy on *macan ali* as batik ornament emblem flag (banner) Cirebon palace. *Macan ali* decorative motifs that appear on the banner of ornate batik Cirebon palace Kasepuhan ornate

Arabic calligraphy is laden with symbolic value of the kingdom. The application of Arabic calligraphy decoration does not detract from the symbolic values of the old cultural traditions.

Decorative motifs of batik palace consists of geometric decorative motifs, stylized motifs of flora, stylized motifs of fauna, and motifs of human and natural motifs objects. The batik motifs Kraton Cirebon categorized into several types that are presented in a table; 1.1 below :

Table 1.1: Keraton Cirebon batik motifs and symbolic meaning

| No | Motive                 | Type                                   | Symbolic Meanings                                                                 |
|----|------------------------|----------------------------------------|-----------------------------------------------------------------------------------|
| 1. | Geometric motifs       | motif tumpal<br>'pilin berganda' motif | Stability, reliability, stability, still, powerful, dynamic, etc.                 |
|    |                        | Meander<br>Swastika<br>kawung          |                                                                                   |
| 2  | Floral stylized motifs | Rumput/oyot                            | Humans should not spit lust                                                       |
|    |                        | Pandan wangi                           | Humans should be able to adapt to any situation and always useful for the people. |
|    |                        | Kembang teratai                        | Allah is the creator of souls in the universe                                     |
|    |                        | Kangkung                               | Which has advantages                                                              |
|    |                        | Punglu/ duku                           | Fused unambiguous                                                                 |
|    |                        | Jambe                                  | Allah is most powerful                                                            |
|    |                        | Sulur-suluran                          | Struggle and dynamic properties                                                   |
|    |                        | Pohon beringin                         | Protecting and nurturing                                                          |
|    |                        | Pohon manga                            | Always logically and analytically                                                 |
|    |                        | Pohon kelapa                           | Useful for people                                                                 |
| 3  | Motif stylized Fauna   | Akar/oyot                              | Has the meaning struggle                                                          |
|    |                        | Pohon hayat                            | Macrocosm and microcosm relationship                                              |
|    |                        | Daun Kluwih                            | Human nature do not 'ngluwih-ngluwih' (not excessive)                             |
|    |                        | Quadruped:                             |                                                                                   |
|    |                        | Kijang mas                             | Humans are not fascinated by the world in order not to slip in trouble            |
|    |                        | Kancil                                 | Do not underestimate other seven as smart as any.                                 |
|    |                        | Macan                                  | Symbolizes courage, strength and power                                            |
|    |                        | Sapi dan Kerbau                        | symbol of purity                                                                  |
|    |                        | 'Unggas' animals:                      |                                                                                   |
|    |                        | Burung/ Manuk                          | Symbolize the world over                                                          |
|    |                        | Burung Garuda                          | Coat the continent over                                                           |
|    |                        | Burung merak                           | cupid                                                                             |
|    |                        | Burung fhuix                           |                                                                                   |
|    |                        | Types of Chicken:                      |                                                                                   |
|    |                        | 1) Chicken pedestal                    | Courage, strength, fertility                                                      |



| No | Motive | Type                       | Symbolic Meanings                                  |
|----|--------|----------------------------|----------------------------------------------------|
|    |        | 2) Chicken <i>kate</i>     | Humans should apply beautiful, kind and courteous. |
|    |        | 3) Sawunggaling            | refuse reinforcements                              |
|    |        | 4) Stork (bangau)          | Virtue and wisdom                                  |
|    |        | Insect type:               |                                                    |
|    |        | Kupu-kupu/ <i>buterfly</i> | Welfare and prosperity                             |
|    |        | Tawon/ <i>bee</i>          | Good or bad is still useful                        |
|    |        | Semut/ <i>ant</i>          | Cohesiveness and mutual cooperation                |
|    |        | Capung/dragonfly           | Relationship with the world's stop                 |
|    |        | Water Animals Type:        |                                                    |
|    |        | Fish                       | Between Allah and man united                       |
|    |        | Shrimp                     | clarity of mind                                    |
|    |        | Snake                      | Coat the ruler of the earth                        |
|    |        | Crab                       | Being able to adjust to                            |

## 2. Batik Cirebon (Pesisiran)

Reduced symbolic values in line with the reduced value of batik art by tradition ' new culture. The new value that contributes to the development of batik art as art is the classic economic value. Batik is no longer solely a ceremonial dress or heirloom palace. Batik in its development into a kind of everyday clothes which extends in ordinary society. From this emerge the need to produce batik doubled in production. This need resulted in new ways of procurement batik, both from the technical and marketing management. In terms of procurement techniques are no longer using the batik technique using a stamp write but can not replace the cap although batik. Marketing patterns also have changed from word of mouth booking into modern management. According to Hasanuddin in the book ' Batik Pesisiran ' said ;

Coastal batik trade ethos is covering ; will of god, trust, effort, knowledge, charity and trust, which are all intertwined with each other. Trade ethos ' students ' have encouraged batik entrepreneurs Pesisiran (Cirebon) for a more active, dynamic, innovative in trade and doing business of batik (Hasanuddin, 2009, p. 249)

Cirebon batik motif (*batik Pesisiran*) tend to use decoration that does not lead to shirk that is not idolatrous/Shirk to God. :

- motif Calligraphy
- geometric motifs
- stylized flora
- Stylized flora and fauna
- natural landscape
- Nature motif objects

## 3. Deconstructive Semiotics

According to the philosophy of structuralism Ferdinand de'Saussure nature is that he is not paying attention to the causal mechanism but the mechanism in which the totality of the complex can be understood as elements of the device itself, but rather the relationship between other elements. Saussure big idea is that no one expression language that can be understood on the expression itself, but only in relation to the structure and contexts disclosure. From his studies, language as a structural phenomenon, Saussure saw that the arbitrary nature (*diada - adakan*) of sign language is important in the creation of value. For Saussure language is simply a matter of distinction (defference) any marks something meaningful, because the other signs do not have a similar meaning.

Deconstruction is a term used by Jacques Derrida as one of the demolition of the opposition Binner such as speech / writing. Derrida argues that the thought of writing as an alternative language, with a break

away from dependence on speech / logos, writing can be a free game elements in language and communication

Writing is a process of continuous movement of meaning, and this movement is eternally placed further away from the truth end / logos, therefore it tends to look at the writing (like scripture) as the text changing and plural due to the original text (in the form of greeting) has disappeared (Baudrillard, 1990:64).

Another important term in deconstruction is dissemination. Dissemination is a state of emptiness of meaning has caused tearing down marker / logos. By unpacking meaning markers also function then disappeared from the language of communication. In the absence of marker / logos that language develops through its own energy and creativity (Levin, David Michel, 1988:5)

In deseminasi system language has been demolished or deconstructed, turned into an anarchic exploration of expression through language. Language becomes a form of subversion and parody of all the meanings which are considered established at the level of ordinary social control. Thus deconstruction that has been able to dismantle the dominant view in semiotics (signs, meanings, concepts) can no longer functioning as a language of social discourse, the discourse of meaningful communication between subjects (Baudrillard, Jean. 1990:25).

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## MULTIPLE INTELLIGENCE-BASED TEACHING: AN ATTEMPT TO GAIN EQUITY IN EDUCATION

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### Abstract

Over years, researchers have been indicating that Education for All is not merely about equality for all students to get access to educational resources. It also entails equity, which means teachers treat each individual according to their individual differences and provide them according to their requirement or need. Thus, all groups of students can ultimately master the goals of the curriculum to approximately the same degree. In fact, students in a certain class might have a number of differences in terms of learning style, interest, physical condition, level of comprehension, and types of smartness which affect the way they learn. The common ways of teaching in Indonesia, nevertheless, still treat students like they are entirely the same, without considering their uniqueness. Because teachers educate students to be humans, not robots, they have to adjust their teaching according to students' different ways of learning and not to force students to follow teachers' ways of teaching. This paper looks into the probability, feasibility, and practicality of using Multiple Intelligence theory in teaching practices as a real implementation of gaining equity for all students to be educated well. It is expected that the idea can contribute to the change of and the development of school practices.

**Keywords:** equity, Multiple Intelligence (MI), teaching, techniques.

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### Introduction

Education plays a critical and strategic role in achieving upward human investment to improve people's life in particular and countries' economical, political, and social accomplishments in general. This awareness underlies the formulation of Education for All (EFA) in 1990 to be carried out by many countries worldwide.

The conception does not only involve equality for all citizens to get access to education but also entails equity to ensure that all students can get knowledge in equal parts. The idea of equity arose from a deep consideration that students come to school bringing a number of differences in terms of strengths, interests, learning styles, and readiness to learn. Hence, students regardless of background or personal circumstances – must be given every opportunity to reach their full potential and reduce achievement gaps.

Multiple Intelligences theory, proposed by Howard Gardner, with its eight types of cleverness promotes a shrewd understanding that essentially there is no stupid student. These intelligences are:

verbal-linguistic intelligence, logical-mathematical intelligence, musical intelligence, visual-spatial intelligence, interpersonal intelligence, intrapersonal intelligence, and naturalist intelligence. MI test goes beyond IQ tests which merely covers logical-mathematical and linguistic abilities. Thus, teachers cannot simply judge that a student is stupid only because he/she has a low mathematical ability (Wijaya, 2013).

This is crucial for teachers to find each student's intelligence and a class's dominant intelligence as their teaching orientations. MI-based teaching works through changing teachers' ways of teaching based on students' ways of learning. This system is different from the outdated one, where students passively listen to teachers' explanations, do some exercises, discuss the answers, and finally still results in students gaining low understanding. When teachers are aware of the existence of MI, they will be motivated to vary their teaching techniques to ensure that students with different learning orientations can follow the lesson well. It means, they try to embrace students' diversity and treat them with respect and dignity, which is overall

a real action of gaining equity in the learning process.

#### Education for All and Equity in Education

Education for All (EFA) is a strong commitment to provide quality basic education for all children, youth, and adults. In Dakar, Senegal, in April 2000, 164 governments pledged to achieve EFA and determined six goals to be met by 2015. The goals are: (1) expanding early childhood care and education, (2) providing free and compulsory primary education for all, (3) promoting learning and life skills for young people and adults, (4) increasing adult literacy by 50 percent, (5) achieving gender parity and equality, and (6) improving the quality of education (UNESCO, 2008).

The vivid reflection to define access to educational opportunity for all students entails two central aspects – **equality** and **equity** (Cizek, 1999). Equality means treating all individuals similarly despite of their individual differences. Equity means treating each individual according to their individual differences, providing them according to their requirement or need. Some people maybe get a bit confused with these. For an illustration, a father gives a T-shirt to each of his child. This is what is called equality. He gives size 'S' to all of his children. In this case, however, the children might have bigger or smaller body than size 'S'. If only the father gives his children the sizes which they need then this is called equity.

In terms of educational practices, equality means the same opportunity for every student's access to educational resources. It must be ensured that all students are provided equal education programs and services regardless of race, creed, colour, nationality, origin, ancestry, age, marital status, sexual orientation, gender, religion, disability, or socio-economic status (Wijaya, 2014).

Education is rather a means for knowledge and skill transference. While equality focuses on students' access to educational resources, equity tends to focus on students' access to knowledge and skills (Cizek, 1999). It is attained when all group of students master the goals of the curriculum to approximately the same degree.

Students differ in terms of their socio-cultural, and socio-economic backgrounds, and their life experiences, which may have differential influences on their educational outcomes. However, the principles of equity suggest that any differences in educational outcomes should not be dependent on factors such as student background, or quality of educational input, over which students have no control (Perry, 2009).

The concept of equity in school education is still poorly defined. Equity means different things to different people, resulting in debate that is often at cross purposes, leaving little prospect for moving beyond long-entrenched positions. Usually, non-government schools sector pursues equity through a commitment to providing the opportunity for all students to achieve their full potential more than government schools do.

The Public Policy Institute of Australian Catholic University for the Independent Schools Council of Australia defines equity in education as follows:

#### a. Equity as fairness

Fairness is the most widely understood and accepted meaning of equity in education. This is the circumstance where personal and social circumstances are not obstacles to achieving education potential. This implies that specific instances of disadvantage, different ways of learning, level of comprehension, interests will be addressed and overcome respectfully.

#### b. Equity as minimum standards

This means either a *basic minimum standard* for all – circumstances of birth should make no difference and every student, regardless of social background, should have equal prospects for educational achievement – or *equal outcomes* for all, regardless of social and family background.

#### c. Equity as means of excellences

By treating students based on their learning preference, teachers can maximize students' excellences.

Ontario Ministry of Education even states that greater equity means greater student success.

The strategy is developed to help educators across the province better identify and remove discriminatory biases and systemic barriers to student achievement. These barriers — related to racism, sexism, homophobia and other forms of discrimination — may prevent some students from reaching their full potential.

Thus, ensuring equity in education for all students is crucial. An ongoing teaching-learning process and assessment might be the most perfect times to implement it. After all, Levin (2003) proposes several reasons that educational equity is a must. First, there is surely a human right imperative for all people to have a reasonable opportunity to develop their capacities and to participate fully in society. Second, insofar as opportunity is not distributed fairly there will be an underutilization of talent; some people will not develop their skills and abilities with consequent loss not only to them but to the society generally. We cannot know how many outstanding scientists, writers, artists, or teachers are lost because a significant number of people are not able to obtain the necessary learning. Third, higher levels of education are associated with almost every positive life outcome, which involves different fields of expertise.

### 3. The Classification of Multiple Intelligences

Stemming from the research carried out by a French psychologist, Alfred Binet, early in the twentieth century, intelligence has traditionally been described and measured in terms of linguistic and logical-mathematical abilities only. At that period of time, intelligence tests are created as diagnostic tools to measure human capabilities and to predict academic success. However, Gardner claims that although IQ tests are valid prediction of one's academic achievement, they cannot predict success in life outside school. Besides, they cannot determine what intelligence is or how intelligent a person is.

Gardner (1983) views human intelligence for more than merely the notion of IQ. In his book *Frames of Mind*, he proposes a new theory called multiple intelligences. He claims that everyone has

multiple intelligences that he or she combines and uses in his or her own unique ways. He also says that IQ tests only measure a small range of these intelligences; and each intelligence develops at its own rate. Moreover, he believes that the intelligence profile can be strengthened and improved through education. Gardner's theory of multiple intelligences shows that people are different in terms of types of intelligences they own. Among the all types of intelligence he proposed, there is one intelligence that is more pronounced in each person, that makes him or her smart in that certain domain.

Gardner (1993) suggested seven kinds of intelligence initially in 1983. Additionally, he suggests the eighth intelligence, namely naturalist intelligence to the original list of the multiple intelligences. Recently, Gardner considers the possibility of adding other intelligences such as existential-spiritual and moral intelligences. The description of each intelligence from Gardner's book *Intelligence Reframed* (1999) are shown below.

#### a. Verbal-Linguistic Intelligence

Verbal-linguistic intelligence involves the sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals. It also includes the ability to understand patterns of a language in terms of grammar use or appropriateness of language. In other words, this intelligence includes the ability to effectively use language to express oneself rhetorically or poetically; and language as a means to remember information.

Yaumi (2012) mentions that verbal-linguistic students like reading many kinds of printed media; writing down information that they hear; keeping in touch with their friends and relatives through letter, email, or SMS; conveying ideas to others; writing journals; completing crossword or word puzzles and playing word games; writing only for pleasure; learning various languages; joining debate and/or sharing rooms.

b. Logical-Mathematical Intelligence

It involves one's capacity to analyze problems logically, to reason well, to carry out mathematical operations, and to investigate issues scientifically. It entails the ability to detect patterns, to make predictions, sequencing, problem solving, scientific investigation, deductive reasoning and to think logically. This type of intelligence is most often associated with scientific and mathematical thinking. There are some professions which need this type of smartness, such as mathematicians, engineers, accountants, scientists, and computer programmers.

In classrooms, these students are greatly helped with well-ordered instructions. They tend not to stop trying and answering task until it is completely done. In addition, they can imagine mathematical calculation in their head easily. They also like answering puzzles which need rational reasons. Basically, they think of something according to the cause and effect.

c. Musical Intelligence

Musical intelligence involves skills in performance, composition, and appreciation of musical patterns. It encompasses the capacity to recognize and to compose musical pitches, tones, and rhythms (Cristison, 1996). According to Gardner (1999), musical intelligence runs in an almost structural parallel to linguistic intelligence. Musicians, composers, conductors, and singers are kinds of profession, which highly require this intelligence.

In life, out of people's awareness, children and youths like to spend their time learning and playing music instruments such as guitar, piano, drum, bass, and so on. Parents, particularly, consider it as wasting time and unbeneficial for their children (Yaumi, 2012). This belief clearly not only blocks children's creativity and confidence to learn more, but also forces them to do things irrelevant to their true talent.

d. Spatial-Visual Intelligence

This intelligence involves the potential to recognize and to use the patterns of wide space and more confined area and to form mental and/or

graphical images about it. More specifically, people with this intelligence have "the sensitivity to form, space, color, line and shape" (Christison, 1996: 11).

Students in spatial intelligence area tend to think with images and are good at learning through media such as movies, pictures, photographs, videos, and presentation with visual aids. Harmer (2004: 62) adds that "pictures can be used to awaken students' creativity for those who are stimulated by visual input." In addition, they usually have great imagination, like daydreaming and deep thinking, which can help them a lot in developing ideas in speaking and writing lessons.

e. Bodily-Kinesthetic Intelligence

This entails the potential of using one's whole body or parts of the body to solve problems and to perform things such as expressing ideas, thoughts, and emotions through movements and gestures. People with this intelligence cannot sit quietly for a long time since it is much more comfortable if they move their body actively. Athletes, dancers, acrobats, and actors are some examples of professions which are strong in bodily-kinesthetic intelligence.

Students are labelled as bodily-kinesthetic intelligent if they are able to use their body to solve problems and/or create something. They process information through body movements, touching, and modelling or demonstrating. The term "learning by doing" best represents this intelligence in which it points out the importance of physical activity in demonstrating something being learned to get a deeper understanding (Yaumi, 2012). At a glance, teachers can indicate that students who like moving around, touching things, and cannot sit calmly during a lesson suppose that they have this intelligence.

Some educators relate the implementation of bodily-kinesthetic intelligence to Total Physical Response (Freeman, 2000). Teachers who use TPR believe the importance of having their students enjoy their experiences in learning something new. In fact, TPR was developed in order to reduce the stress that students feel when studying a subject.

f. Interpersonal Intelligence

Interpersonal intelligence is related to one's capacity to understand the intentions, motivations and desires of other people. It allows people to interact and to work effectively with others. Educators, sales people, religious and political leaders and counsellors all need a well-developed interpersonal intelligence. Smith (2001) reveals that empathy as an aspect of interpersonal intelligence involves the ability to understand people and to respond to them appropriately. And those with higher degree of empathy seem likely to be more successful in learning second language. Yaumi (2012) states that these typical people are able to work cooperatively in a team because they are flexible with the situation.

Generally, teachers can observe their class to find students with interpersonal intelligence. Yaumi (2012) mentions some of the characteristics such as these students can bring themselves in line with the situation around them. Besides, when they are asked to be leaders, they can handle it. These students are talkative, love interacting with others and have many friends. So, in selecting appropriate tasks and activities for interpersonal intelligent students, teachers should make sure that they need high cooperation with one another; otherwise students will be bored and are not enthusiastic to participate in teaching-learning process.

g. Intrapersonal Intelligence

Intrapersonal intelligence entails the capacity to know oneself. People who own this must be able to understand their own emotions, motivations, fears, goals, self disciplines, and be aware of their own strengths and weaknesses. These people are also good at doing self-reflection, self-awareness, and introspection. In detail, Yaumi (2012) elaborates that intrapersonal people have some indicators. First, they spend their time regularly on meditation, thinking, and daydreaming. Second, they like attending personal development seminars or counselling to better understand themselves. Third, they are quite patient in facing

life problems. The next, they have hobbies to be enjoyed alone. Besides, they keep thinking about their dream or ideal future life, and they put hard efforts to gain it. In accomplishing a task, they believe that it can be done alone. Lastly, intrapersonal people usually keep writing diaries to express their feelings and/or experiences.

h. Naturalist Intelligence

Naturalist intelligence refers to the ability to understand and to organize the patterns of natural world. People such as biologists, geologists, pet lovers, botanists, foresters, adventurers, and mountain climbers, are mostly great at their naturalist intelligence. These people are able to demonstrate expertise in the recognition, categorization, and classification of species found in nature such as plants, animals, and minerals (Christison & Kennedy, 1999).

Specifically, Connell (2005: 68) in Yaumi (2012: 200) elaborates that Naturalistic people have a deep interest in the environment. They like to be in nature and they want to protect it from pollution. They can navigate easily in the natural world. They see the patterns in nature, recognize the different flora, fauna, rocks, and birds. As teachers, they bring nature into the classroom and their students outside with more regularity than teachers who are not strong in this intelligence.

The theory of multiple intelligences has some implications in education. Based on the explanation of human intelligences as a theory developed by Gardner above, teachers are expected to have deeper understanding that students' minds are different from one another. Moreover, teachers should look at what students can do, instead of what they cannot do. With an understanding of Gardner's theory of Multiple Intelligences, educators will allow students to explore and to learn in many ways, direct their own learning, and understand and appreciate their own strengths.

In conclusion, there are at least four key points of the MI model that are important to remember (Armstrong, 2009: 15-16):

1. Each person possesses eight intelligences
2. Most people can develop each intelligence to an adequate level of competency.
3. Intelligences usually work together in a complex ways.
4. There are many ways to be intelligent within each category.

Overall, by looking at one's logical-mathematical and linguistic intelligences only, people in general and teachers in particular see merely a portion of the total capacity of human mind. Campbell and Campbell (1999) state that with multiple intelligences, educators can identify and affirm a wider spectrum of students' competences. In line with this, there will be so many talents arise in a school and it will also develop students' confidence toward learning and expressing themselves.

#### 4. MI-Based Teaching Techniques

New information is easily understood when teachers help students to build the background knowledge and tell in what context it is used. In reality, teachers' ways of teaching are mostly the same and monotone –“listen to my explanations, read the text, do the exercises, discuss the answers.” Chatib (2009: xxi) states:

“...many schools consciously or unconsciously kill students' potencies. I name this book Human's School as the inverse of Robot's Schools... Human's School is a multiple intelligences-based school, which respects various intelligences... I am sure that nobody is stupid if the teacher serves students according to their intelligences.”

Below is the elaboration of some teaching techniques based on MI theory that can be applied to teach various national standard subjects. The techniques are adapted from the concepts proposed by Richards and Rogers (2001), Armstrong (2003), Yaumi (2012), Chatib (2009), Chatib (2011) and Berman (1998).

Table 1: Teaching techniques for different intelligences

| Intelligences        | Teaching Techniques                                                                                                                                                                                                     |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Verbal-Linguistic    | Brainstorming, reading biography, story-telling, writing journals, developing vocabulary, tape recording, making list, creative writing, making report, publishing, wall magazine, memorizing.                          |
| Logical-Mathematical | Critical thinking, Socratic questioning, analysing, calculating, rational thinking, comparing, experiment, problem solving, categorizing, making syllogisms.                                                            |
| Musical              | Discography, music super memory, listening to and/or making song related to a content-area.                                                                                                                             |
| Spatial-Visual       | Flash cards, picture cues, describing photographs, watching videos/movies, drawing comic/ illustration,, imagination, designing, mind-mapping/ charts/ labels/ diagrams, colouring, visual presentation.                |
| Bodily-Kinesthetic   | Field trip, pantomime, demonstration, role play, puppet story-telling, moving around, learning by doing (practice).                                                                                                     |
| Interpersonal        | Jigsaw, group working, teaching friends, peer and/or pair correction, group discussion, interviewing, team project.                                                                                                     |
| Intrapersonal        | Individual project, free-choice time, one-minute reflection period, self-reflection, feeling-toned moments, goal-setting sessions, writing diary, connecting concepts to real life, camrecording individual observation |
| Naturalist           | Observation, using scientific gadgets, recycling waste things, environment related activities, “windows for learning”, “plants as props”, “pet-in-the-classroom”.                                                       |

According to Wijaya (2013), multiple intelligences theory offers teachers in general an opportunity to develop innovative teaching techniques that can be easily implemented in classrooms. Based on the basic concern of MI, no one set of teaching technique (task and activity)



works best for all students at all time. Although the technique might not represent each intelligence equally in each meeting, there would always be a time during the period or day when a student has his or her own most highly developed intelligence(s) actively involved in learning.

### Conclusion

With regards to the above discussion, some conclusions can be formulated. Education for All does not only concern on equality but also equity in education. While equality means treating all individuals similarly despite of their individual differences, equity means treating each individual according to their individual differences, providing them according to their requirement or need. Individual differences entail many aspects, including different types of intelligences which further influence students' ways of learning.

Gardner's theory of multiple intelligences presents a new point of view that there are at least eight types of intelligences (verbal-linguistic, logical-mathematical, musical, spatial-visual, bodily-kinesthetic, interpersonal, intrapersonal, and naturalist). It has great implications in education in which teachers can have a deeper understanding that students' minds are different from one another. Moreover, teachers can look at what students can do, instead of what they cannot do.

The awareness of various intelligences brings about the innovative teaching techniques to suit students learning preferences. As a result, students can optimize their learning potential. Overall, matching teaching techniques based on students' intelligences or classroom's dominant intelligences means respecting differences among students, which is one of the concern of equity in education.

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## IMPLEMENTATION OF PAYMENT WITH BILLING SYSTEM

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### Abstract

Payment of all kinds of fees in Universitas Terbuka has used Billing system (electronic billing system) since the registration period of 2011. The fees are paid in the bank in the latest date as listed on the bank bills and office hours of the local bank. The billing system is effective in solving registration problems experienced by students, such as lack of academic fee payment, errors in noting the course codes, and the dilemma in which the students have paid the course but in fact the tests are conducted at the same schedule. The weakness of the billing system is that the procedure is not effective in the financing and time for the students. This paper will discuss implementation of payment with billing system and its impacts.

**Key words:** implementation, payment, billing system

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### Introduction

Distance universities are institutions effective to give the public bigger chance in having higher educations. Compared to conventional universities, distance universities can reach out areas that are difficult in accessing education. Online learning can also help in situations where the students are spread out over a vast geographic region [2]. Distance universities also answers the needs of working people that are difficult to split time with regular schedules of study. In Southeast Asia, almost all member countries of ASEAN, (Association of Southeast Asia Nations), except Brunei, have the institutions and run distance universities system[5].

As an institution of distant open higher education in Indonesia, Universitas Terbuka or the Open University of Indonesia (UT) has provided distance education service for 28 years. UT has much experience in serving the students' needs. *Open education, or open learning, is a vision of an educational system accessible to every individual with minimal restrictions* [1]. UT always increases its ability in developing a complex and widespread service system [6]. The need of increasing the knowledge and skills in the society is a challenge for UT to make use of its management in order to be more effective and efficient and ease the students

either in the new registration or in the re-registration process.

#### 1. Payment with the Billing System

Payment of all kinds of fee in UT has used the billing system since mid of 2011. It is implemented in order to improve the service to students and perfect the payment procedure of tuition fee. Billing system aims at increasing the data accuracy so that there will be no students that cannot have final test, and/or there will be no score that cannot be processed because of the lack of payment or errors in writing the registration code of certain courses [8].

The deadline of the tuition fee payment is the date listed on the billing slip and the working hours of the local bank. If the students pay the fee after the deadline, UT application cannot process the payment and the students will be regarded as not paying. Consequently, they are recorded as unregistered students and cannot take final test. Service Unit of Distance Learning-Universitas Terbuka (UUPBJJ-UT) cannot put the students' registration data after the deadline and the last registration hour listed on the academic calendar and is not allowed to process the registration before the application is set and well-functioned [3].

Preparation that thirty seven UPBJJ-UTs should do is: ensuring the registration application is ready to function, preparing the registration form, and preparing the personnels that will input the students' registration data. The followings are the implementation of the billing system for various kinds of payment in UT

1.1. Payment of Tuition Fee

a. For new students

1. Student fills in the first registration form. Other people cannot fill it in order to avoid the errors of filling personal data.
2. The student submits the first registration form (including the codes and the name of the registered courses) and the requirements to UPBJJ-UT.
3. UPBJJ-UT checks the completeness of the first registration form.
4. Student receives the print-out of personal data slip, and check the content of it. If there are errors of personal data entry, the student should contact UPBJJ-UT to revise it.
5. The student receives number of a billing slip (LT) containing fees that must be paid including tuition fee, course fees for each semester credit system, and fee of study orientation for new student
6. The student checks the correctness of the data content of billing slip and sign it if the data is correct. If the data are not correct, the student can confirm it to UPBJJ-UT. Billing slip lists some things:
  - Number of bill containing 20 digits, which consists of: the first 5 digits showing the registration period, the next 9 digits showing the student's number, and the last 6 digits showing the code of payment kind.
  - Courses being registered
  - The amount of fees that should be paid

- Deadline of the payment

7. The student pays the tuition fee with the following ways:

- Come to the bank that has cooperated with UT, and bring slip of registration billing
- Pay via automated teller machines (ATM)
- Pay in UPBJJ-UT with debet card through electronic data capture (EDC)

8. Accept and save the slip validated by the bank as a proof of having paid all fees (billing slip that has not been validated by the bank is considered invalid)

9. Come to UPBJJ-UT and submit the payment evidence of the study orientation for new students in order to obtain the student card.

b. For old students:

Students that have been registered as UT students must do the course registration in order to follow academic activities such as tutorial, practicum, and final semester examination. Students register the courses to UPBJJ-UT, and they will get slip of registration billing which is used to pay the tuition fee in the bank. Slip of registration billing validated in the bank is used as registration evidence. If there are courses that the students have not passed yet in the previous semester, the students can register those courses as repeated examinations in the same semester.

Every course is given a code showing a password of study program, level of study, academic year, and course sequence. For students of basic education program, the maximum amount of courses the can be registered in each registration period is 24 semester credit system with 10 courses. For new students of basic education program, the registered courses are in one package [7].

If students register 2 or more courses whose test schedules are overlapped, one of the courses will be cancelled (based on alphabetical order of the

courses). The students are only allowed to take the test of a course, and the registration of the other course is cancelled. However, if this course is offered as a course in Online Test System (OTS), the course can be registered for OTS test.

Determination of the registered courses is run by computer based on alphabetical order of the course code. The cancelled course can be replaced with another course before slip of registration billing is paid in the bank. If there is no replacement, the course is considered being cancelled, and the paid tuition fee cannot be re-requested. The followings are the steps of using billing system for old students.

1. Determine the courses that will be registered (including the course of re-examination) and the courses that will be taken with online test system if available.
2. Determine the nearest test place.
3. Fill in the form of course registration and submit it directly to UPBJJ-UT, or the students who do not have time to go to UPBJJ-UT can send the registration form via post office or fax to UPBJJ-UT's adress.
4. Accept billing slip directly or via post/fax.
5. Check the correctness of billing slip data filling, and sign the billing slip if the data is correct. If it is incorrect, confirm it to UPBJJ-UT.
6. Come to the bank or via automated teller machine that has coordinated with UT to submit the billing slip or mention number of the billing.
7. Accept and keep the billing slip validated by the bank as the evidence of paying all the fees. Billing slip that has not been validated is considered invalid

UPBJJ-UT prints the billing slip of the course package for students that are in the on-going study and predictably will do the registration (e.g. not on an academic leave). Then, UPBJJ sends the slip to the students or via the board of the study group. Next, the students register the course of re-examination after the announcement of the test score and before the payment deadline. The payment of tuition fee for course package should be

paid first. Meanwhile, tuition fee for re-examination can be paid after the exam announcement, and the payment does not pass the deadline.

Simultaneously, students do not have to jostle to pay tuition fee in the bank because they can do it in ATM, either in UT partner banks or in the EDC machines available in UPBJJ-UT all over Indonesia. Ways of doing payment transaction in ATM:

1. Insert ATM card
2. Press the button "Next"
3. Enter personal identification number
4. Choose other menu
5. Choose menu 'payment'
6. Choose menu 'education'
7. Choose menu 'universitas terbuka'
8. Choose menu 'online tuition fee'
9. Enter number of billing slip, press 'yes' (enter)

After the inquiry appears on the ATM screen, it proceeds to payment process by pressing the 'pay' button. If the transaction succeeds, the ATM receipt will get out of the machine. Since the writing on the receipt easily fades, students are expected to copy the receipt and save it well as complaint evidence in case of problem.

- c. For students with scholarship (partnership):

Procedure for packaged courses is that billing slip is printed automatically and validated by UPBJJ-UT (students do not need to pay to the bank). Billing slip that has not been validated yet by UPBJJ-UT is considered invalid. Billing slip is sent to the student via the board of the study group or via post office/fax. The student checks the correctness of billing slip data. If the billing slip data is not correct yet, the student confirms it to UPBJJ-UT. Meanwhile, for the courses of re-examination, the steps that the students or UPBJJ-UT should is the same as the steps for old students.

## 1.2. Payment of Non-Tuition Fees

Payment of non-tuition fees include the payment of credit transfer, the student's academic progress sheet, substitution of student card, graduation, ceremony of certificate handover, certificate taking. The procedure of using billing system is the following:

1. Students come or send fax or email, or call UPBJJ-UT to get number of payment billing of non-tuition fees;
2. Get billing slip or notes the number of billing (for student that contacts UPBJJ-UT through telephone/fax/email);
3. Pay the bill to the bank or via the nearest ATM in accordance with number of billing given to UPBJJ-UT
4. Submit billing slip validated by the bank or payment evidence via ATM to UPBJJ-UT.

### 1.3. Procedure of the payment of the extension test fee

Every UPBJJ has many test locations in which the students should not pay for the location determined by UPBJJ. However, because of the geographic location, extension test is charged. The following is the procedure of the payment of extension test fee by using the billing system.

1. UPBJJ-UT inputs the test period and the total amount of extension test fee per location (after being confirmed by the board of the study group) to the billing application in order to print billing slip.
2. UPBJJ-UT sends billing slip to the board of the study group.
3. The board of the study group pays BILLING SLIP to the bank.

Table 1. Billing Recapitulation

| Program             | Registration Period | Billing Printed | Scholarship | Billing Paid | Unpaid | DROP  |
|---------------------|---------------------|-----------------|-------------|--------------|--------|-------|
| Basic Education     | 20112               | 79342           | 5904        | 51630        | 11456  | 10430 |
|                     | 20121               | 444168          | 37269       | 367555       | 645    | 38692 |
| Non Basic Education | 20112               | 21169           | -           | 16371        | 3824   | 983   |
|                     | 20121               | 103790          | -           | 88190        | 14818  | 170   |

Implementation of the billing system use from 2011.2 till 2012.1 can be seen in Table 1. It can be seen from the amount of billings that has not been paid by the students. It presumably happens because the billing system is still new and needs socialization and improvement. Ideally, registration system for distance universities can be undertaken independently as mentioned by Knowles who said that distance education is *self-directed learning, self-planned learning, independent learning, self-education, self-instruction, self-teaching, self-study and autonomous learning*.

### Conclusion

*Billing system* is effective to use to solve registration problem that students often experience

such as lack of tuition fee payment, errors in noting the course code, and dilemma in which the course has been paid but its test schedule is overlapped. The weakness of the billing system is that the procedure is not effective either in the cost or in the time for students. Payment of tuition fee via internet online or telephone banking can be expectedly realized soon.

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## THE LOCAL GOVERNMENT POLICIES IN REDUCING THE COST OF THE NINE YEAR COMPULSORY EDUCATION PROGRAM IN SALATIGA - INDONESIA

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### Abstract

This study was aimed to identify policy on Salatiga city in improving the budget allocation in solving the problem of shortage of school operating costs. The study was conducted according to the procedures of qualitative approach on policy research. The subjects of the research were the mayor, the head of parliament, office of education, regional planning agencies, regional inspectorate, principals, school supervisors, parents, and school committees. The research data collection was conducted by the study of the documentation of the budget for education and schools, depth interviews, and FGD. The research findings showed the education budget (2012) has allocated approximately 35.31% and in 2013 increased by 38.44 % of the total budget. In 2013, based on the research in the education office, the average operating cost at the elementary schools was as much as 774 065 (IDR) and 1354.615 (IDR). While the operating cost assistance to students from the central government for was as much as 580,000 and junior high schools 710,000. While the operating cost assistance to students from the Central Java Province was 710,000 and 50,000 To reduce the costs to be paid the government allocated operating costs students for up to 48,000 (elementary schools) and 175,000 (junior high schools). This study concluded that the nine year compulsory education in cities Salatiga was not free. For the operational costs of the entire aid school, every student of elementary schools still had to pay as much as 116 065 (IDR) and every student of junior high schools 419 615 (IDR)/year.

**Keywords:** *The nine year compulsory education, reduction, school operating cost*

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### Introduction

Education contributes to the development of the nation. according to Schultz (1963), the outcomes of education may be classified into two categories : consumption and investment. The consumption aspect is related to the joy, pleasure, and similar benefits derived by students, their families, and society as a whole. The investment component includes a variety of outputs are related to the enhancement of an individual's or society's productive skills and future well-being (Cohn : 179: 168).

The Law Number 20 Year 2003 states that education means conscious and well-planned effort in creating a learning environment and learning process so that learners will be able to develop their full potential for acquiring spiritual and religious strengths, develop self-control, personality, intelligence, morals and noble character and skills that one needs for him/herself, for the community, for the nation, and for the State. Law Number 20

Year 2003 on the National Education System is perceived as the legal basis of democratization of education in Indonesia (Firman : 2008: 82). The education reforms in Indonesia were determined by the enactment of Law Number 20 Year 2003 on the National Education System as the legal framework for the development of education. The Law guarantees that students in the basic education program are free from any fees in order to facilitate easier access to education.

The right of education for all in Indonesia has been mandated in some articles of the Indonesian constitution. Article 31 the 1945 Constitution states that 'Every citizen is entitled to basic education and the government shall be obliged to finance such education'. Similarly, in article 34 of law 20 of 2003 on the National Education System, it is stated that 'The central government and local governments shall guarantee the implementation of compulsory basic education at least to the level of basic education without charging any fees'. To fulfil this



mandate, the Indonesian government emphasises the implementation of the compulsory basic education program for all children. This is also in line with the international agreement on the Millennium Development Goals (MDG), which has as a goal that all children by 2015, wherever, men and women, can complete their basic education.

Compulsory nine-year basic education is a constitutional mandate that needs to be guarded together. Government, family, and community need to synergise. Thus, compulsory basic education involves various parties: government agencies and non-government institutions, and community groups. The national goals can be achieved, but there are still small areas that will present difficulties in achieving completion, either because of geographic, social, economic, or cultural barriers. (Handayani : 2009:201)

Decentralization of education is an opportunity Salatiga government in formulating policies that can enhance the quality and competitiveness of human resources. More than 35 years on the New Order government, education is centralized planned and budgeted. This resulted education programs cannot solve the problems of education in the local government.

The two legal pillars of regional autonomy are: (i) Law 32/2004 on Regional Governance, which focuses on administrative and political decentralization and includes the guiding references to the devolution of expenditure responsibilities; and (ii) Law 33/2004 on Fiscal Balance governing the distribution of resources across regions. (Usaid, 2007: 2). In addition, there are four organic laws which govern planning and budgeting, accounting and financial reporting, treasury and audit for local governments in the decentralization era: Law 17/2003 on State Finances provides the legal framework for a unified budget; Law 1/2004 on State Treasury prescribes a variety of financial management functions; Law 15/2004 provides for the audit of all governmental units; and Law 25/2004 on developmental planning sets out the authorities and responsibilities for various local government officials related to planning. In all, there are at least 5 laws, 9

government regulations, 5 presidential decrees, and 22 ministerial decrees that impact more or less directly on issues of planning, budgeting, accounting, financial reporting and accountability for local governments in Indonesia.

Decentralization of education is the implication of regional autonomy in Indonesia that began in 2001. Decentralization of education at the unit level of education/school based management is implemented in the school. Principal with the School Committee and stakeholders have the opportunity to optimize resources in achieving the vision, mission and goals. Resource management is done based on the principles of good governance include participation, transparency, and accountability (Ismanto:2014:462).

The central and regional governments, to achieve the aims of the policy and program, have made various efforts, so that the constitutional mandate (of quality basic education for all residents) may be fulfilled. There are other programs: the School Operational Assistance (BOS) program, which has been conducted since 2005; the Special Assistance for Students (BKM) program since 2005, and BOS Book since 2006. However, these policies and programs have not been implemented as fully as expected, so there are still many gaps to be filled (Handayani : 2009:192)

The limited resources of the central government, provincial and local, carries implications participation (public) in the planning, implementation, monitoring budgets and school education in the city of Salatiga. At the planning stage, the community participated in the preparation of the school budget, the education department budget, the budget discussion in Parliament (Ismanto:2014:464).

## **Method**

The study was conducted by qualitative descriptive approach. The Subjects of research were Walikota, The head of Parliament, office of education, regional planning agencies, regional Inspectorate, principals, school supervisors, parents, and school committees. Research data collection is done by the study of the documentation of the

budget for education and schools, depth interviews, and FGD. This research is also supported by the analysis of quantitative data on participation in education, the unit cost of education, education budget and school operational assistance.

### Finding and Discussion

Salatiga has a natural strength in the formation of regional competitiveness, namely: are at the crossing of goods transportation in Central Java Province corresponding to Salatiga function as a city of trade and services, supported by agricultural production and industrial precincts. While the services sector education industry is growing rapidly as a result of the large number of schools and colleges.

Vision Development of Salatiga (2011-2016) is: "Salatiga yang Sejahtera, Mandiri dan Bermartabat", abbreviated as SMART. Vision Salatiga on putting people at the same time as the subject and object of development. In this case the local Government acts as a facilitator and dynamist development. The vision set out a public desire Salatiga, which focused on the main issues and problems in the area, so the government and regional development can be done effectively, efficiently and sustainably, and to guarantee the existence of regions in the future.

Education is a priority in the mission of the Basic Needs Fulfillment in the medium term development of Salatiga. Preferred education program is improving the quality of education at all levels, development of educational facilities, the availability of quality educational services and equitable access to education, and the availability of scholarships for disadvantaged students, while other development priorities are the health and development of small and medium enterprises.

The success of primary education development in Salatiga indicated by an increase in enrollment rates and HDI. Average gross enrollment ratio (2010-2013) SD = 124.45% and SMP = 107.45%. While the net enrollment ratio (NER), SD = 99.38% and SMP = 94.05%. Meanwhile, the average HDI Salatiga (2008-2012) is 76.48. Education is one indicator of HDI measurements.

Table 1. Education Participation in Salatiga

| Year | GER    |        | NER    |        |
|------|--------|--------|--------|--------|
|      | SD     | SMP    | SD     | SMP    |
| 2010 | 114,91 | 82,63  | 97,52  | 94,37  |
| 2011 | 117,49 | 94,59  | 100,00 | 94,59  |
| 2012 | 139,85 | 132,76 | 100,00 | 100,00 |
| 2013 | 125,55 | 119,92 | 100,00 | 87,23  |

Source : Department of Education, Youth and Sports

Intervention Model for Education Programs and Activities carried out in the form of scholarships for needy elementary school children, junior high, high school; The nine 9-year Basic Education Program; and Non formal Education and Informal. Salatiga education budget in 2009 to 2013 experienced an average increase of 32.80%. The following is presented the budget exists and the amount of the education budget allocation of Salatiga.

Table 2. Local Government Education Budget in Salatiga

| Year | Local Budget – APBD (IDR) | Education Budget | %     |
|------|---------------------------|------------------|-------|
| 2009 | 485.111.548.463           | 127.850.990.000  | 26,35 |
| 2010 | 403.923.537.000           | 121.848.850.000  | 30,16 |
| 2011 | 477.422.922.676           | 177.438.788.000  | 37,17 |
| 2012 | 571.682.186.000           | 196.001.367.000  | 34,28 |
| 2013 | 639.359.500.000           | 245.796.581.000  | 38,44 |

Source : Department of Education, Youth and Sports

According to the National Education Standard Agency, unit operating costs of education, the elementary school is 774.065, and the junior is 1354615. Central Government support operational costs through BOS was 580,000 at the elementary and junior high was 710,000. While the Central Java province adds BOS for elementary students is 30,000 and the junior was 50,000. In this scheme, primary school students still have to pay 173 791. While the junior high school students have to pay 199 409. Local government and parliament have agreed to reduce the cost to the students in participating in compulsory education.

In budget year 2013 an additional set of BOS for 48,000 elementary students. and junior high school students get the BOS of 175,000 per year. By calculation BOS central government, provincial and central java salatiga boss received the total elementary school students is 658,000. while the

junior high school students is 935 000. thus, the implementation of compulsory education, students pay up to 116 065 and junior high school have to pay.419 615 per students.

Disadvantages cost of basic education is the responsibility of society. This is in accordance with Government Regulation No. 48 of 2008 which states that education funding from the Government, local governments and communities. This is the implication of the conception that education investment will benefit the state and the individual and society. Although it is the duty of primary education. however, education was not free. decentralization of education as an opportunity for local governments and communities in a participatory manner to improve the quality and competitiveness of human resources through education.

### Conclusions

Education is a shared responsibility of the central government, local governments and communities. In realizing the priority of access to basic education, the local government of salatiga provide additional BOS to elementary and junior high school students. Limitations of the sources of revenue in the budget as a problem to free of charge on the nine-year compulsory education in Salatiga.

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## EDUCATIONAL MARKETING STRATEGY IN BETHANY ELEMENTARY SCHOOL SALATIGA

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### Abstract

The purpose of this study was to describe the marketing strategies undertaken by Bethany SD Salatiga. This research was conducted in Bethany Elementary School, Salatiga. The research was conducted through in-depth interviews and observation techniques to the principal and teachers. The data were analyzed by using "Fish Bone Analysis" with 7Ps education services marketing mix (Product, Price, Place, People, Promotion, Process, Physical Evidence). The analysis showed that the strategy used at Bethany Elementary School was a community-based marketing. The marketing was done both internally and externally. The internal categories include improving the quality of education, the cost is in accordance with the financing that learners get, adequate infrastructure, and competent educators, while external categories cover various social media campaigns and activities aimed at the public. The results of togetherness-based marketing strategy is able to increase the number of students expected for the academic year 2014/2015.

**Keyword:** educational, marketing strategy

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### Introduction

Nowadays, "marketing" term is not only used for business. It is now widely used in education. The fact that many schools, especially private schools, offer various programs, create a stiff competition among them. To survive, private schools have to think about creative and effective marketing strategy to promote their school.

The appropriate marketing strategy is needed to influence the results and maintain the customers. According to Wijaya (2008:42) educational strategy is necessary because; first, as a nonprofit institution in the field of services requires convincing the public or the customer of educational services that the institution exists. Second, educational strategy is used to assure the public that the educational services are appropriate or relevant to the needs of society and third, school marketing or socialization is required to introduce the school programs. Octavian (2005) also stated that in order to attract society's interest, schools have to implement strategy that relates to markets' need.

Kotler & Fox in Oplatka & Hemsley-Brown (2012) stated marketing as the analysis, planning, implementation, and control of carefully formulated programs designed to bring about voluntary exchanges of values with a target market to achieve organizational objectives. Educational marketing is now important for all schools to implement.

### The implementation of educational marketing

Oplatka & Hemsley-Brown (2012) stated educational marketing strategy as indispensable managerial function without which the school could not survive in its current competitive environment, on the grounds that it is not enough for a school to be effective, it also needs to convey an effective image for parents and stakeholders.

In order to create effective educational marketing implementation, the educational marketing strategy must be planned and prepared. To determine an effective educational marketing strategy, schools have to consider some elements. As Kotler and Irianto & Prihatin (2009) suggested, marketing education has 7 main elements, namely:

Table 1. The Seven Ps of Marketing

| <b>P1 : Product</b>                                                                           | <b>P2 : Price</b>                                                                      | <b>P3 : Place</b>                                                             | <b>P4 : Promotion</b>                                                 |
|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Quality<br>Feature<br>Options<br>Style<br>Packing<br>Sizes<br>Services<br>Warranties<br>Brand | List price<br>Discount<br>Allowances<br>Payment<br>Period<br>Credit terms              | Channels<br>Coverage<br>Location<br>Inventory<br>Transport                    | Advertising<br>Personal<br>Selling<br>Sales<br>Promotion<br>Publicity |
| <b>P5 : People</b>                                                                            | <b>P6 : Physical Evidence</b>                                                          | <b>P7 : Process</b>                                                           |                                                                       |
| Service Provider<br>Costumer being service<br>Other employees and customer                    | Arrangement of objects<br>Material used<br>Shapes/lines<br>Colour<br>Temperature noise | Policies and procedures<br>Factory/delivery<br>Training and rewarding systems |                                                                       |

Source :Kotler et al (Irianto & Prihatin, 2009:343)

P1: Product is a fundamental option for the customer, which aims to meet the needs and desires. This product is divided into 5 levels, (1) core benefits (education), (2) basic product (knowledge and skills characterized), (3) the expected product (curriculum, syllabus, educators), (4) augmented product (the output of an institution that is able to speak English well oral and written, computer, arabic, etc.), (5) potential product (the quality of the graduates).

P2: Price is an element that goes along with the quality of the product. Some things to consider when setting up prices is to consider some of the goals to be achieved, namely: (1) profit-oriented goals that aim to achieve a target return on investment and to obtain the maximum profit, (2) sales-oriented objectives aimed at increasing sales volumes, maintaining or increasing market share, and (3) target-oriented status quo which aims to stabilize prices and deal with competitors.

P3: Place is the location of the school which has an important role. Environment is important in determining the choice. In this case the factors to be considered are: access (ease of reach locations), visibilities (apparent physical presence), traffic (congestion level), large parking area, land

availability, competition (taking into account the location of competitors), and government regulations (government regulations on land use).

P4: Promotion is a form of marketing communication that attempts to spread information, persuade the consumers, and remind the target market to accept, buy, and be loyal to the products. The communication above must contain advertising, personal selling, sales promotion, and publicity. Cowell in Irianto & Prohatin (2009) suggested an outline promotional purposes are (1) to build awareness and interest to the products and services provider agency, (2) to differentiate the services and the competitors, (3) to communicate and illustrate the advantages of the services, (4) to persuade customers to buy and use the services.

P5: People. This fifth Ps includes teachers and school staff, however, the most important is the teacher. Teachers must have a wide teachers competences, i.e. pedagogic competence, professional competence, personality, social fields. The delivery of educational services supports institution to achieve the commitment to the costumers.

Table 2. Physical Evidence Elements

| Servicescape                                                                                                                                                                                   | Other tangibles                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Facility exterior Exterior design Signage Parking<br>Landscape<br>Surrounding environment<br>Facility interior<br>Interior design<br>Equipment<br>Signage<br>Layout<br>Air quality/temperature | Business cards<br>Stationery<br>Billing statements Employee dress<br>Uniforms<br>Brochures<br>Internet/web pages |

P6. Physical evidence. As Zeithml and Binter argued in Irianto & Prihatin (2009: 345), physical evidence is the enviromental in which the service is delivered and where the firm and customers interact, and any tangible components that facilitate performance or communication of the services. Zeithml in Irianto & Prihatin (2009) suggests an element of Physical evidence, i.e Table 2.

P7: Process is the core of the entire education which means to deliver the learning materials. The quality of all educational elements becomes important to determine the success of the learning process as well as the evaluation of the educational institutions. The process is also important to create an image toward the institution.

## METHODS

To answer the research question considering educational marketing strategies done by Bethany Elementary School, the study was conducted by interviewing the principal, three teachers, and one school staff of Bethany Elementary Schools. This study used primary data and secondary data. The primary data gathered through the interviews and the secondary data collected through observation and documentation study. The interviews, observations, and documentation study were held in the last February 2014. The data gathered was analyzed using Fish Bone analysis. The fishbone analysis is used to plot the relationship between various factors that contribute to some events (Mobley, 1999).

## FINDING AND DISCUSSION

Bethany Elementary School is a new-established private school governed by Anak Terang Foundation. It was established in 2006 and has just received "A" accreditation in February 2014. The vision of the school is becoming top-notch and top achiever school which implements school-based management and Christianity values (Highly Spiritual – Highly Intellectual – Highly Influential).

The results of the research is categorized into three sections, which are before the marketing strategy initiatives, the initiatives, and after the marketing strategy initiatives are implemented.

The situation before the marketing strategy initiatives.

The marketing strategy was implemented since the school was established. However the implementation was lack of direction, coordination, and motivation among the school members and it made the marketing was not effective. Moreover, the location of the school is not visible from the main streets; it is located in a dense environment, hidden in church area and wedged by local people houses. At the first year, the school only had one floor with limited playground for the students. The first year students was only 16 students while in the second year, the number of the students was 26. Based on the interview, the main challenge the school has is the public stereotypes spread in society say that Bethany Elementary School is an expensive school.

The Initiatives and The Marketing Strategy Implementation.

The strategy was first implemented in 2011/2012 academic calendar. The principal becomes the motivator that gives all of the school members support to market the school. The marketing strategy done in Bethany Elementary School is a togetherness-based marketing strategy. It involves all the school members to have active roles in the strategy. It builds a good relationship among the school members, such as the principal, the teachers, the school staff, and the students.

The data results was categorized into two, internally and externally. The internal marketing strategies include:

(1) Mobilizing the school members as the marketing agents

The school did not have a special department, such as Public Relation, to manage the marketing strategy. In order to overcome that challenge, the initiative done in Bethany Elementary School was mobilizing all the school members as the marketing agents. They worked hand in hand to promote the school to society through various actions and events.

(2) Increasing the school quality

The school believes that by increasing the quality of the school, it will automatically promote the school. As the results, the school implemented various strategies to increase the school quality:

a. Implementing National Plus Curriculum

The curriculum used is a combination curriculum; which combines national curriculum from Indonesian Ministry of Education and International curriculum from Cambridge and Singapore. The learning process emphasized on the usage of English as the language of instruction and English as a daily language. Not only the teachers should speak in English, but also the students have to communicate in English in daily conversation at school.

b. Character Building

Since Bethany is a private Christian school, the school also emphasized in building the students' characters based on Christianity values. Various ways were done to support the character building, such as daily devotions before class and monthly religious ceremony in church regularly. The school also developed students' characters through motivational posters put on the school's walls. It is aimed to always remind the students about Christian values which is the main school's foundation to develop students' character.

c. IT based learning

The school is also equipped with free WiFi service to support the learning process. All the school members can access internet through the free Wifi. The school members were given username and password to be able to connect. Besides the free WiFi, Bethany also has website for the students and the parents. The website is used by the teachers to upload materials', schedules, and announcements for the students and the parents. The parents can access the website to check the students' material or to download the summary of materials. However, this service is restricted for public. Only Bethany school's students and parents can access and download the materials uploaded.

d. Teachers' trainings and workshops

Teachers trainings and workshops were held to improve the competencies of the teachers. Some trainings, such as IT trainings, English training, Math trainings, Science trainings, and educational seminar from the experts were done in order to improve the teachers' skills and competencies.

e. Offering various extracurricular activities

The school also concerned in developing students' talents and interests. Some extracurricular activities offered in Bethany Elementary School are tambourine and dancing, kulintang ansamble, swimming, football, basketball, robotic, taekwondo, science club, english club, and Boy Scouts.

The coaches for the extracurricular activities were not the school teachers, but they were specifically hired to train the students. The coaches were experts and qualified in their own fields. The extracurricular activities were held in nice and comfortable place. The school cooperated with hotel for swimming extracurricular activity and rented football field and basketball field for football and basketball extracurricular.

f. Field-Trips

School enhanced students' competencies by organizing field trips to connect the school materials with worldwide concepts. The students and the teachers went to some public places, such as a post office, a bank, a traditional market, a supermarket, and open spaces, such as Tawangmangu to experience natural learning. The students conducted activities such as sending letters, bargaining at traditional market and buying goods at supermarket.

(3) Providing adequate school facilities

To support and maximize the learning process, the school has developed the school's facilities. The school has developed the building into four floors and added the classrooms. Each classroom has AC and LCD to sustain the learning process and each classroom only contains for 15 students. Another facilities offered i.e. laboratory, library, toilets, photocopy service, WiFi, free students shuttle service for extracurricular activities and free extra tutorial for slow learners.

Not merely providing school facilities, the school also provided monthly parenting class. This class was regularly held once a month in the last week. The purpose of this parenting class is to build good communication between teachers and parents. The teachers usually give reports about students achievements and also give monthly material themes for the following month.

(4) Offering affordable tuition

The school sets up "all in one tuition." The tuition also covers the costs for extracurricular activities. Parents are not required to pay extra fees for

students' activities. The amount of tuition is for about Rp.400.000,- to Rp.550.000 per month. In addition, the school also supported underprivileged students by cross-subsidies. Some underprivileged students were funded using cross-subsidies and they were given free education from the school.

The school also implemented an external marketing strategy, such as doing promotion to society. Some promotions done by Bethany Elementary School to market the schools are:

(1) One-way promotions through brochures, leaflets, school's bulletin, and school's website to promote and communicate the school's programmes to society.

(2) Conducting regular open house and bazar for society, especially parents from local kindergartens. The school also held BEST or Bethany School Today that cooperates with local kindergartens. The school invited some local kindergartens students to have a trial classes in Bethany Elementary School. The trial classes cover a Science class, Math class, and English class.

(3) Radio Broadcasting. The teachers and the students conducted weekly radio broadcasting in two radios in Salatiga. (4) Organizing school's profile presentation and students' show performances in the school's church. The principal held some presentations during Sunday Service in Bethany Church. The presentations were held in order to promote and introduce the school's programmes, the school's facilities, and the school's tuition to the congregations. Students also held performances in Sunday Service, such as singing and dancing. It is held in order to promote the school's concerns to maintain the students' talents through extracurricular activities.

(5) Organising Charity Events. The school held regularly charity events for local people, such as free daily-needs and free medical treatment for underprivileged local society. The purpose of this events were not merely to promote the school, but also develop student's character through social events.

**The situation after the initiatives**



After the initiatives have been implemented since 2011/2012 academic calendar, some achievements were achieved by the schools, both academic and non-academic. Besides the achievement, the marketing strategy has succeeded in increasing the number of new students every year.

For academic achievement, Bethany Elementary School won some English Competitions, such as story telling and spelling-bee competitions in the municipal level. They also got the first and the second ranks for Science competition in the provincial level. Another academic achievement was about the results of their first National Examination in 2013. The school was successful in preparing the students for National Examination, which is proven by their achievement on the school's rank among all schools in Salatiga. The Bethany school's national examination result was in the third rank for all private schools in Salatiga and was in the fifth rank among all schools (public and private) in Sidomukti district. In February 2014, the school also awarded "A" accreditation from National Accreditation Board. It shows that Bethany Elementary School is successful to prove their quality among all schools in Salatiga.

For non academic achievement, the school won some competition, such as the first and the second

ranks for swimming competition at *Pekan Olahraga Pelajar Daerah (POPDA)* Salatiga, Taekwondo champion in the municipal level, and *Teladan III* Students Choir PESPARAWI X Central Java.

Besides the academic and non academic achievements, the marketing strategies are succesful in increasing the number of new students every years. The increasing numbers can be seen in the Figure 1.

The total numbers of students increased every years. The new students are not merely in grade 1, but also in other grades. In addition, based on our data gathered through documentation study, the quota target for new students in the following 2014/2015 academic calendar have been fulfilled.

## CONCLUSION

Based on the data analysis, this study found that Bethany Elementary School performed two maketing strategies, i.e. internal marketing strategies and external marketing strategies. Internal marketing strategis performed by the schools were (1) Mobilizing the school members as the marketing agents, (2) Increasing the school quality, (3) Providing adequate school's facilities,

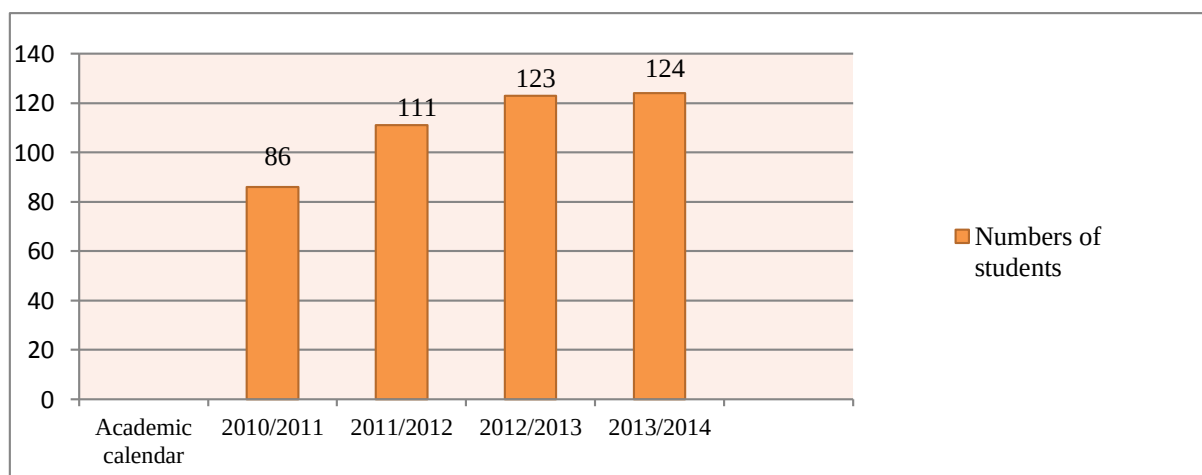


Figure 1. Total number of students

and (4) Offering affordable tuition. Along with internal strategies, the school also performed external marketing strategies, i.e. (1) One-way promotions through brochures, leaflets, school's bulletin, and school's website, (2) Conducting regular open house, bazar, and trial classes for local kindergarten, (3) Radio Broadcasting, (4) Organising school's profile presentation and students' show performances in local church, and (5) Organising Charity Events. While the results of the marketing strategies were increasing both the academic and non academic achievements and increasing the number of new students in Bethany Elementary School.

Eventhough the school did not have a Public Relation department to organize the marketing strategies, the school was successful in marketing their school through cooperation among the school members. It is proven that a strong bond and a good relationship among the school members is effective to advertise the school. This study hopefully can give valuable inputs and inspire other institutions; both public and private institutions or new established and old institutions, for marketing their institutions.

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## COST-EFFECTIVENESS ANALYSIS: A COMPREHENSIVE EDUCATION COSTS EVALUATION APPROACH

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### Abstract

This paper presents a detailed framework for conducting cost-effectiveness analysis. Cost evaluation in education is mainly carried out by various parties which directly involved to it because every year through the annual budget issued, education was allocated among the greatest. Cost evaluation involves several types of cost analysis that differentiated by the objective of the evaluation. There are cost-benefit analysis, cost-utility analysis, cost-feasibility analysis and cost-effectiveness analysis. [1] The study explains comprehensively on cost-effectiveness analysis which refers to the evaluation that takes the cost into account and impact of various alternatives (Levin & McEwan, 2001). This assessment tool is results-oriented and is designed to determine the most effective way to achieve an educational goal. There are several requirements to be fulfilled before conducting this kind of cost analysis. Several criteria and steps in conducting cost-effectiveness included to provide a clear understanding. Findings from previous studies may also provide a more detailed picture of the main goals of the implementation of cost-effectiveness studies for future research.

**Keywords:** *cost evaluation, educational cost, cost analysis, cost-effectiveness*

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### Introduction

[2] The policy of education for all requires all countries to provide early education to every citizen (UNESCO, 2007) in which every person is entitled to education, regardless of economic status, social status, ethnicity, religion and gender. Malaysian Government through the Ministry of Education has an important role to provide educational facilities in order to produce high quality human capital in the long run and it should begin as early as the childhood stage. Primary education takes six years from the age of seven to twelve years old while secondary education takes five years from the age of thirteen to seventeen. [3] One of Malaysia Education Blueprint (MEB) 2013-2025 highlights is to maximize students excellence for every dollar spent. The outline has stressed that education plays an important role in national development because it is a tool to achieve national unity and to create a generation of knowledgeable, competitive, well balanced human and harmony in facing rapid globalization nowadays. Despite being involving high investment by the government, education is seen to be a medium that can lead to change and

successfully bring returns that will benefit the country.

According to a report in the Malaysia Education Blueprint 2013-2025, operational and development expenditure issued by the Ministry of Education that spans pre-school to post-secondary education involves a big amount, where compared with other countries around the world, Malaysia is ranked 16th (2008) and became more than twice than other ASEAN countries by 3.8 % (in 2011). This amount includes all costs incurred that cover the cost of personnel and operating costs as well as development costs. However, in moving forward to be a competitive country, there are many other aspects that need to be considered as dependence on a higher level of spending will not necessarily give better returns.

In terms of performance in Programme for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS), Malaysia had left behind other countries with similar levels of expenditure. For example, the education system in Thailand and

Chile had relatively lower per pupil investment but their student achievements are comparable and better than Malaysia (MEB, 2013-2025). This gives the impression that the allocation of funds has to be used more effectively and efficiently in order to maximize its use thus giving a better return of investment rate. Education is said to be the main agenda in a country and reflected by the big allocation in the national budget. The government's policy is to ensure that the education sector is allocated a significantly higher proportion than the social sector and security in the country regardless of the economic conditions. Educational expenses are considered as expenditures on human capital investment to produce a quality workforce in the future.

Cost is an important aspect in economics and trade as it explains how limited resources are exploited to satisfy unlimited human needs. The importance of cost analysis is basically to find out the average cost or total cost for a programme or

organization but is more meaningful to identify how costs vary according to the characteristics of students in the education system. [4] For example, how costs vary by school location, school level and field of study (Ministry of Education, 1998).

### The Concept of Cost in Education

Cost evaluation is one of the branches in the field of measurement and evaluation. In education, the process of measurement, evaluation and assessment is an important element to ensure that the ultimate goal of education is attained. Measurement and evaluation process generally consists of three components namely psychometric assessment, program evaluation and cost evaluation. Compared to other assessments, cost evaluation is carried out to find out the information of detailed expenditure by looking at the type of cost analysis performed.

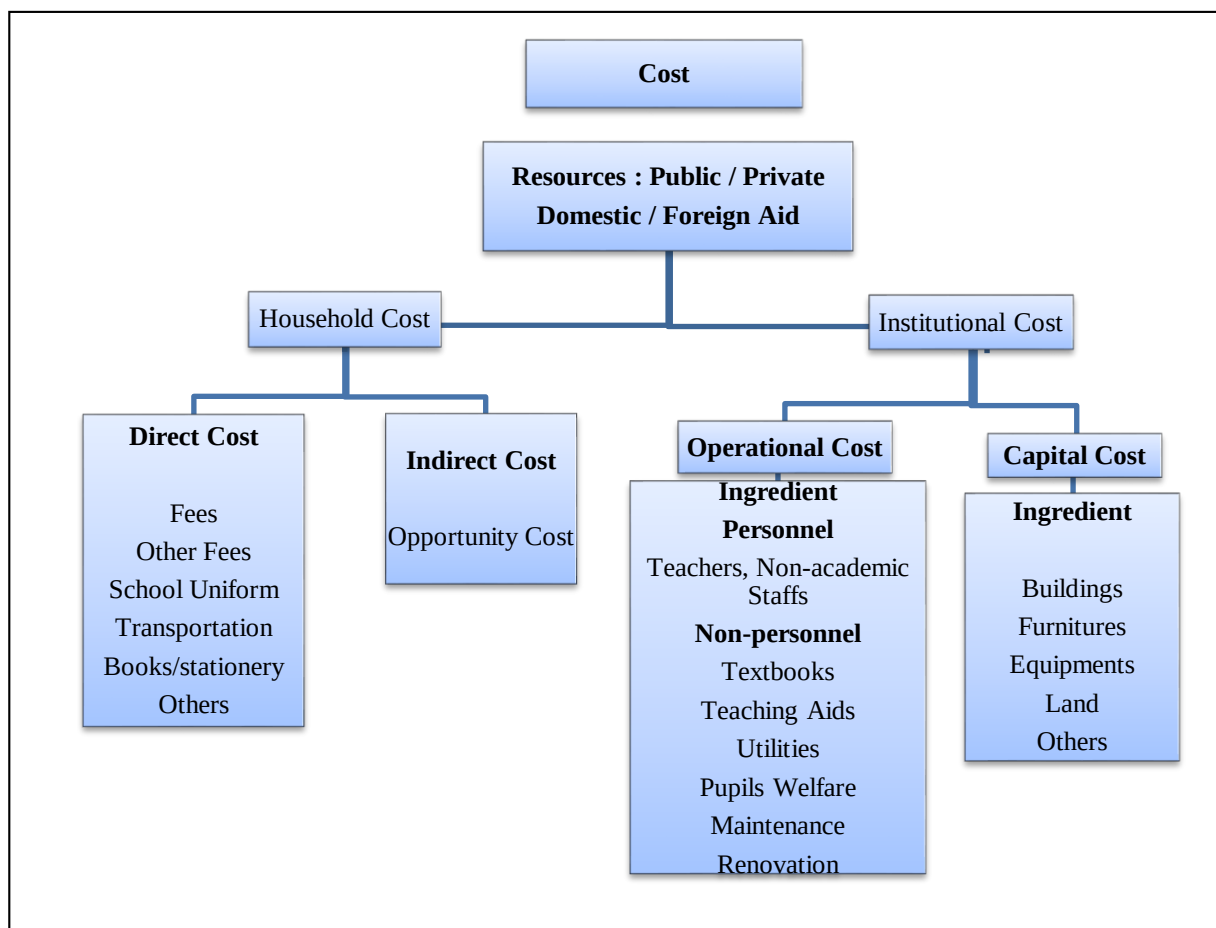


Figure 1. Tsang (1994) Cost Classification Model

Cost is generally an amount to be paid in order to get something. [5] According to Psacharopoulos and Woodhall (1985), cost of education can be classified into certain criteria, either in the form of the economy (real resources involved), institutions (secondary sources), finance (estimated expenses) and technical (functional inputs into education). [6] Yunus (2010) defines cost as the value in dollars spent on infrastructure and operation of a program. Education costs refer to the resources used in the effort to deliver education. These costs include public expenditure on education household expenses, donations and contributions to educational institutions from private sources and opportunity costs of education (Levin, 2001). [7] In addition to the costs incurred by the government, the cost of education is also borne by households cost which consist of any direct expenses such as school fees, uniforms, textbooks, stationery, school bags, transportation, shoes and as well as indirect expenses or opportunity cost (Tsang, 1995). [8] Earlier, Tsang (1994) had classified costs according to the criterion of public resources, private fund and foreign aid, institutional costs, household costs, opportunity costs, recurring costs and capital costs. Tsang (1994) Cost Classification Model is illustrated in Figure 1.

Generally, Tsang (1994) financial resources in education are classified into three categories: public, private and foreign sources. [9] In order to achieve the goal of education and social for a community, school funding plays an important role and is closely related to the resources owned by the community (Levin, 1995). A country is always tried to provide a good school system to the population by utilizing all the resources that can be generated. The government has allocated substantial funds through the annual budget to provide the best education to the people. [10] Considerable resources are to be allocated and borne by the society as a minimum level of investment in education has to be made in order to achieve national development goals (Benson, 1995). From the diagram above, public resources are from the government and private sources are the expenses spent by parents and students themselves. Foreign sources include Parent Teacher Association (PTA)

fees, Non-Governmental Organisations (NGOs) contributions and private donations and sponsorships.

The cost of education is divided into two categories; the household cost and institutional costs. Household costs are costs incurred by private individuals to obtain benefits from it. This cost combined both direct costs and indirect costs. Direct costs are costs incurred by students, families and the public to fund such things as fees, uniforms, transportation, books, stationery and other charges. Indirect cost is the opportunity cost which have to be incurred by the student and the family to let go of the price (in terms of time and energy to work) to attend school.

The institution cost is classified into operating costs and capital costs. Operating costs are the costs associated with personnel and non-personnel services incurred in a financial year and it is a recurring cost while capital cost includes the cost of tangible fixed assets as land, buildings, furniture and equipment. All fixed assets will generate long-term benefits if they are properly maintained. [11] The cost of repairs and maintenance are also categorized as capital costs because the spending will prolong the life span of the building (Coombs & Hallack, 1987). For the purpose of calculating the capital cost, it is important to set the price and date of purchase of fixed assets and take into consideration the depreciation value through the annualization process. This is to ensure that all fixed assets are estimated at their net value.

### **Cost Analysis in Education**

In the era of globalization and advanced nation these days, the demand for education is very encouraging and cost analysis becomes an important tool in decision making. [12] Hummen - Rossi and Ashdown (2002) presents the rationale and the need to improve the use of multiple assessment strategies including the cost evaluation. There are several types of analysis on the cost analysis of a program. Each analysis was conducted according to the objectives or goals of the cost evaluation. There are several types of cost analysis to be chosen by researcher in order to obtain cost

information according to the objectives of such evaluation and its research questions. An assessor may conduct a basic cost analysis or cost-feasibility analysis to find out the exact amount of the cost of a program and determine whether it is feasible or not. In addition to cost information, the assessor can also get a summary of the effectiveness and usefulness of the program through cost-effectiveness analysis, cost-benefit analysis, cost-utility analysis and cost-feasibility analysis. Each of these terms represents different methods to analyse cost information economically and comprehensively.

Cost-feasibility analysis is used to answer research questions about the financial ability of a program to achieve its goal by using available resources. It allows the evaluator to stop any program immediately regardless of the evaluation results because the program cannot be accommodated by the given budget. This analysis is also used to describe the data economically and decide on economic data described above. For example, cost-feasibility analysis is able to determine to which extent a program can be successfully implemented using a given budget constraints.

Cost-benefit analysis was conducted to compare the programs that can provide the highest level of benefits by using the lowest cost or the allocated. This analysis can be used to assess the overall program easily because the results are assessed in monetary and comparisons can be made in a broader scope.

Utility cost analysis is used to evaluate a number of programs that give high individual satisfaction from the results of a program. In choosing the best program, consideration is based on the highest level of satisfaction that can be achieved with the lowest total cost. Studies in this analysis are usually carried out by researchers in the field of health because it is easier to see the level of utility for example the health and quality of life.

Cost-effectiveness analysis is used to answer questions about which program is the most effective and most appropriate when the

comparison is made to the measurement of specific criteria such as which programs are able to provide highest results (outcomes) with the lowest cost. It is an assessment that is similar to the utility cost analysis, but differs in terms of the measurement results. More information will be explained next.

### **Cost-Effectiveness Analysis as An Evaluation Tool**

According to the Oxford Dictionary (2014), effectiveness is the degree to which something is successful in producing a desired result; success. It depends to which extent the accuracy of an objective is achieved. Effectiveness in the context of this study is seen as student achievement or outcomes in every aspect, as measured by student achievement records after. [13] The concept of cost effectiveness is closely linked to the concept of 'efficiency' that is the ratio of input to output (Rumble, 1977). An effective organization is said to be effective when it can produce output that meets the needs and demands of customers. Cost-effectiveness analysis refers to the assessment that takes into account the cost elements and the elements are varying effects in the selection of alternatives. These alternatives are comparable in cost and effectiveness at any cost comparison of effectiveness would result in a value that is cost-effective rates'.

Cost effectiveness ratio refers to the cost per unit of achievement. An assessor will be able to determine the effectiveness of program with the lowest cost or a program that provides the highest degree of effectiveness with the given cost. Cost-effectiveness analysis a results-oriented assessment tool and it was designed to determine the most effective way to reach the education goal. Most evaluation studies in the field of education are more focused on the determination of comparative effectiveness regardless of the cost factor. Thus, a cost analysis without the evaluation of the effectiveness is not suitable in decision making by managers of education (Levin and McEwan, 2001). [14] Levin and Schwart (2007) then stressed the importance of cost-effectiveness approach in decision making. The approach describes in detail every step and actions to be taken by policy makers

in making decision to determine the effectiveness and cost-effectiveness of a program.

In conclusion, cost-effectiveness analysis is an assessment tool by decision makers that often used as the information but are rarely used in educational evaluation using its real method. [15] According to Thomas (1990), cost-effectiveness analysis contributes to quality improvement if it is handled properly because cost-effectiveness ration in schools may reflects the relationship between pupils learning with physical and financial resources which assist in learning process. [16] Cost-effectiveness are particularly useful in providing comparative program cost frameworks that produce the same output unit systematically and test the sensitivity of the findings to various assumptions about the quality (Psacharopoulus and Woodhall, 1985).

[17] According to Levin and McEwan (2000), cost-effectiveness analysis is a method used to compare the costs and outcomes of various alternatives of education programs. He added that a good effectiveness analysis should have the following characteristics:

- i. Identify alternatives involved
- ii. Clarify the effectiveness
- iii. Clarify the alternative costs by identifying each ingredient costs
- iv. Discounted revenues and costs at a certain rate
- v. Assessing the distribution of revenues and costs
- vi. Calculate and interpret the cost- effectiveness, and
- vii. Consideration of the uncertainties

[18] Levin (1983) interpretation of cost-effectiveness analysis is to compare several alternatives in terms of cost and the effect in achieving the program objectives. This approach does not require all variables to be measured in monetary unit compared to cost-benefit analysis

which requires all aspects to be calculated in monetary unit.

Rossi and Ashdown (2002) found that the cost-effectiveness studies are more widely used in the fields of health and medicine, while its use in education is still undiscovered. They suggested a few things about cost-effectiveness studies in education such as:

i. Cost-effectiveness analysis is a support element in making decisions about where resources will be allocated,

ii. To see the effect of a program, experimental design studies can be used with good sampling, randomly controlled group and appropriate statistical analysis,

iii. Calculation of the time effect through adjustments made to the net value of fixed assets by annualization process,

iv. Sensitivity analysis such as regression should be made to ensure that all dimensions of the variables were examined to see how changes in dimensions affect the conclusions of the cost-effectiveness, and

v. Cost analysis should not be the sole criteria in decision making because some values of the community like learning opportunity and students' progress is not consistent with the economic efficiency.

Basically, cost-effectiveness is measured by comparing the effectiveness of a program or an alternative program to the cost of the program using the ingredient method (Levin, 1983). This technique is used to estimate the cost of a program systematically. Before carrying out cost-effectiveness analysis, evaluators need to consider four things: namely the real problems that require decisions to be made, how the effectiveness can be measured, alternatives that being considered and finally the effects of those alternatives (Levin, 1983). He also proposed a method for making an educational activity to be a cost-effective way by maximizing the impact of an educational strategies or using the input provided

and minimize costs by choosing the least cost of a strategy or intervention education in order to achieve its objectives.

### Steps in Cost-Effectiveness Analysis

Basically, Levin (1995) has outlined three basic steps in cost-effectiveness analysis. They are effectiveness evaluation, cost estimation and then cost-effectiveness ratio comparison. [19] The course paper 'Cost- Effectiveness Evaluation' (SEAMEO INNOTECH, 2002) lists a number of requirements that must be met to enable the implementation of cost-effectiveness analysis as follows:

- i. At least two or more alternatives to be compared
- ii. The alternatives should have equivalent effectiveness indicators, and
- iii. Evaluation design must be able to compare the alternatives in terms of the effectiveness indicators.

After all conditions are met, the evaluator can conduct cost-effectiveness analysis according to the proper guidance. Here are the steps in conducting cost-effectiveness analysis:

*First:* Identify the decision makers and their value.

*Second:* Define alternatives to be evaluated

Alternatives have been identified directly comparable with each other to determine the best alternative. Relative comparison between the programs is to ensure that the analysis has accurately reflects the opportunity cost or any interest that might be gone when allocating total resources to a program only.

*Third:* Measure the effects in monetary unit.

*Fourth:* Measure the in monetary unit.

*Fifth:* Measure other effects.

*Sixth:* Determine the most appropriate unit of output to estimate the non-monetary values.

*Seventh:* Describe all monetary effects or one unit of output is not measured (excluding the impact of the future).

*Eighth:* Calculate cost-effectiveness ratio (C / E)

To compute this, the cost of a given alternative (C) is divided by its effectiveness (E).

$$CE = C / E \quad (1)$$

Equation (1) is the formula to find the CE ratio (Levin and McEwan, 2001:133) with;

CE = Cost Effectiveness

C = Unit Cost

E = Effectiveness

*Ninth:* Perform sensitivity analysis

Sensitivity analysis involves the computation of the test and the overall result by replacing the values of alternatives in other parts of the calculation. It will determine how sensitive the cost-effectiveness ration (C / E) to the changes that may occur in the parameter assumptions in this analysis. Sensitivity analysis shows how the findings of the analysis can be affected due to the possibility of inaccurate data on the assumptions that have been made, it will also give an idea of how much uncertainty associated with cost-effective rates were calculated.

### Previous studies

In measurement and evaluation field, there are several main branches that can be explored including psychometric assessment, program evaluation and cost evaluation. In Malaysia, education cost evaluation has yet to be explored more extensively despite it is critical because it involves substantial allocation from the government, while the studies that have been conducted on this aspect are more focused on the cost analysis study itself. Cost-effectiveness related studies are still very few although theoretically it can provide information about the effectiveness of the program in achieving its objectives and in terms of cost. Cost-effectiveness analysis refers to the assessment that takes both cost and output component into account



on the selection of alternative. This analysis is a tool that is results-oriented and it was designed to determine the most effective method to achieve an educational goal. Research using cost-effectiveness analysis as an evaluation of the program carried out in Malaysia is still lacking. Following are brief on the findings of the study and cost analysis studies on the cost-effectiveness analysis was conducted within and outside the country.

[20] Through a survey conducted by the Education Planning and Research Department (EPRD) in 2000, Cost Analysis Study on Sekolah Menengah Kebangsaan Agama (SMKA), there are SMKA operating nationwide. The study is to estimate the cost of each student according to school location, school enrolment, financial resources and expenditure by the government and parents. The sample involved 49 SMKA and data collected through questionnaires, interviews and analysis of relevant documents. The results showed that average cost for each student borne by the government is RM3, 482.26 a year while the cost incurred by the parents is RM1, 860.70.

[21] Cost Analysis of Sekolah Kurang Murid (SKM) by EPRD, 2003) is conducted to estimate the average cost of a student at the school. This type of school is mainly build in rural area to cater the needs of the rural communities. It has less than 150 pupils and facilitates a very limited infrastructure compared to those schools in the city. Data collection is based on the method of using the technique of micro ingredient. Survey study involved 490 schools and field studies including a total of 25 schools. The results showed that the average cost of a student is RM 2,646.12.

The findings of the study by [22] Mayo et al., 1975 showed that the use of educational television as a teaching tool in rural areas is more cost-effective than the traditional teaching methods. It was due to the use of television in teaching has been able to produce the same output with lower cost. However, [23] Carnoy and Lewis (1975) criticized the study because it is too dependent on assumptions that are questionable as to assume that all schools have access to educational

television and went on to receive a broadcast program with open arms.

[24] The study by Hartman and Fay (1996) was to find the cost-effectiveness of the Instructional Support Teams (IST) in Pennsylvania. In this program, students with learning disabilities assisted by the specialized teaching approach in regular classrooms and are not referred to special education classes. In the study, researchers compared the recovery cost of students with special needs using IST and traditional method. A more efficient method is the method that successfully achieves better results with the same cost or less, or successfully achieves better results with lower costs. The results showed that short-term cost of traditional methods is lower at 62 per cent compared to the cost of IST for the first year. However, long-term calculations show the cost for the IST method is lower after a period of 10 years.

[25] In Malaysia, Matriculation Programme Cost Effectiveness Study was conducted by EPRD in 2005 aimed to look at the cost effectiveness of the matriculation program which took the overall cost including capital costs and operating costs and see comparison of the cost-effectiveness between Ministry of Education (MOE) Matriculation Programme, Majlis Amanah Rakyat (MARA) and the private sector as well as Form Six classes. The results showed Matriculation College is a college that cost-effective in terms of cognitive, affective and psychomotor especially The Matriculation College in Kedah, Pahang and Malacca, while for the accounting courses, MARA Matriculation College Kuala Nerang is a cost-effective college. The study also showed that the percentage of variation contributor to cost effectiveness is higher in the input institution source rather than student's. Predictor variables that contributed significantly to cost-effectiveness is gender and Cumulative Grade Point Average (CGPA) at students level while the ratio of lecturers towards student and the units cost of operating contributed at institutional level.

Philosophy Doctorate (PHD) thesis by Mohd Yunus (2009) titled Cost Effectiveness of Ministry of Education(MOE) Preschool and Community Development Department (KEMAS) Preschool in

Pahang was to assess and compare the effectiveness of preschool education under the Ministry of Education and the Ministry of Rural and Regional through KEMAS preschool located in Federal Land Development Authority (FELDA) in the state of Pahang. In other words, this study was undertaken to identify some aspects of the preschool education program operated by MOE and KEMAS and covering things such as program input, program costs, program effectiveness and cost effectiveness of the program. The results showed MOE Preschool has received 95.1 percent of government financial support for preschool education program operating costs as compared to the 61.8 percent received by the KEMAS preschool. Wages is the largest input cost with 60 per cent of total operating costs for both the operator of the program. Overall, this study found that the effectiveness of preschool education for the cognitive domain, affective, psychomotor and overall high mean score (mean = 3.92 - 3.95) for both MOE and KEMAS preschools. The study found that KEMAS is a preschool program operator that has the lowest cost-effectiveness of RM 278.07 per unit achievement while the cost-effectiveness of MOE is RM 592.04 per unit achievement. Relatively, unit input cost and unit capital cost are high for MOE compared to KEMAS otherwise unit household cost for MOE is lower than KEMAS preschool. In terms of sensitivity analysis, the input cost that sensitive to the program cost unit are type of preschool operators, pupils per teacher ratio and enrolment.

### **Summary**

Costs evaluation is an important aspect that needs to be carried out by each organization or program; whether in the public or private sector, especially for programs involving large financial provision. This is because every objective of a program in the education field (that is non-profit oriented) has to be achieved using the financial resources allocated. To ensure that each program runs according to the budget available and produce the desired output, evaluators can conduct a cost-effectiveness study and perform a sensitivity analysis to see any aspects that may significantly contribute to the criterion variable. In determining

the components of the costs to be taken into account, evaluators use the ingredient method introduced by Levin and McEwan (2001) with a cost classification model by Tsang (1994). The model put all the necessary cost components in obtaining the total cost. Adjustments are made to all fix assets to get their current value, and then the evaluator can compute unit cost to be proportionate by the outcome. Measurement of the results is made by determining the output unit to be taken as the effect to obtain the effectiveness. It should be comprehensive covering all aspects required. For example, the output or effect of a student in education may consist of cognitive, affective and psychomotor and social domains. Cognitive aspects can be measured by grades, performance or school achievements. In Malaysia, research in cost evaluation is still lack whereas it can also assist policy makers in making more informed decisions. It should be explored with greater intent to the Ministry of Education to produce high quality human capital for the long term.

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## EFFECT OF 'THE RECOGNITION OF PRIOR LEARNING AND EXPERIENCES' ON THE PERFORMANCES OF 'THE BACHELOR EDUCATION IN-SERVICE TEACHERS PROGRAMME' AND ITS RELATED FACTORS

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### Abstract

The Bachelor Education In-service Teachers Programme (BEITP) in Indonesia has been conducted by various universities. To improvement of qualification of primary school teachers through the S-1 Elementary School Teacher Education Program, the distance learning system, known as BEITP-ICT based is used. The purpose of this study is to describe the performance of the BEITP and its RPLE as one of the factors determining as well as other relevant factors. The study was conducted by the alumni of the BEITP assessment program. The data source was 32 people. Data was collected through a self-assessment scale that has been proven valid and reliable. Data analysis used regression analysis (single and multiple stepwise model) SPSS for windows version 20. The analysis showed that the performance rate of graduates are in high level (81%) tend to be very high (19%), as well as its RPLE (high = 50%, very high = 37.5%). RPLE contribute to the performance of the BEITP of 27.3%, which at the same time with qualified lecturers contributed 46.2%. While 8 other factors were not affect. Determinants of efficiency, effectiveness, and accountability as well as offer access to broader educational services without sacrificing quality of BEITP and will only be realized if the quality of RPLE and lecturer who handle are of high quality.

**Keywords:** *The Bachelor Education In-service Teachers Programme (BEITP), Hibride Performances, Recognition of Prior Learning and Experience (RPLE), Qualified Lecturers.*

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### Introduction

Acceleration program to increase teachers' academic qualifications to Bachelor's Degree (S-1) in Indonesia has been conducted by various universities; (55 universities since 2009). One effort to support the acceleration of academic qualifications for in-service teacher was publishing The Rules of Ministry of Education No. 58 of 2008 on the Bachelor of Education In-service Teachers Programme (BEITP). Implementation the regulation states that college organizers can provide Recognition of Prior Learning Outcome and Work Experience (RPLE) of students. That is especially given to teachers who are program participants in higher education organizers which have been regulated by the Minister of National Education No. 015/P/2009 on the Establishment of Higher Education organizer of Bachelor of Education program for in-service teacher.

The long-distance yatem which is known as ICT based Primary Teacher Educational Program was

used for improving the qualification of elementary school teacher' academics through the bachelor degree program of Primary Teacher Educational Program. Besides, monitoring and evaluation was conducted in 2010, 2011, 2012 and 2013 for finding and measuring program implementation and achievement. One result of the monitoring and evaluation was the in significant of the development of the number of participants. It was proven by the fact that in 5 years, it can only produce 76 605 graduate out of 86 454 teachers [1]. Therefore there are some people who doubt the RPLE in the completing Bachelor's Degree (S-1) academic qualification.

The Bachelor of Education Programme for In-service Teachers (BEITP) constitute implementation program which was designed for in-service teacher who haven't got the bachelor degree. In particular, this efforts are conducted to accelerate the improvement of in-service teacher qualification. Programs offered in education scholars is the

possibility for the teacher to have a greater opportunity without interfering the duties and responsibilities [2]. Furthermore, this program is expected to realize the implementation of the teacher education system that is efficient, effective, and accountable as well as offering a wider educational services access without neglect the quality. Graduation of BEITP Program was regulated and fixed by the organizers in accordance with the university academic regulations/guidelines applied. Students who have completed the program are entitled to get bachelor degree certificate from the university organizers.

RPLE is a system of rewards to the insight, knowledge, skills, values, and attitudes reflecting the work experience and learning outcomes teachers owned by BEITP participants as a reduction of credits that must be taken [3]. Work experience is related to the period of service, the ability to prepare the lesson plan, and certain achievements obtained in the form of awards, while learning outcomes is related to academic qualifications obtained, the trainings followed, and academic performance achieved. Various types of work experience and learning outcomes previously obtained by the teachers can be in the form of: (1) academic qualifications; (2) teacher training considering the equivalence semester units of credit per semester; (3) academic achievement recognized and taken into account its equivalence of units of credit per semester; (4) teaching experience with a particular period of service and achievement. All evidence of work experience and learning outcomes of the teachers are prepared in a document called a portfolio. Portfolio assessment is used as a basis by the college towards the program participants to obtain RPLE BEITP. In the context of RPLE, the portfolio constitutes physical evidence or documents that describe work experience and learning outcomes acquired during the professional education duty in one unit and trainings followed.

New Admissions System is the system used to conduct the recruitment process for new students include: registration, exam process, selection process, the announcement of the new students, and new student registration [4]. The purpose of the organization is to support the efforts BEITP

acceleration of academic qualification for in-service teacher, hence the new admissions process is done through a credible selection procedures in accordance with the requirements of the academic and administrative requirements that are applied in each university organizers. Participants BEITP is permanent teacher who are both a civil servant and not a civil servant; having a service life for at least two years and noted as a permanent teacher on one unit that have permission from the government, local government, or the organizers of educational units that are legal; Having a Unique Number of Teachers and Education Personnel, and a Study Permit from Local Government, or the organizer of educational units that are legal.

Learning instrument constitute learning activities device which is systematically arranged and used by the teacher in the learning process, such as lesson plan, syllabus, student worksheet etc. Learning devices are a number of materials, tools, media, instructions and guidelines used in the learning process that should be prepared to face a lecture in the classroom. The learning tools could be: lesson plan, student book, teacher handbook, and the student activity sheets and test results [5].

To organize BEITP, the organizers are required to have qualified faculty as specified in the policy and legislation in force. Lecturer serves as custodian of the course with the basic tasks responsible for the entire lecture and development of learning tools such as course descriptions, syllabus, lesson plan, preparation of assignments or exam questions, as well as teaching materials.

BEITP is a personnel manager in charge of managing the implementation of BEITP. Program managers need to have managerial skills and self-management of learning. The number of personnel tailored to the needs and conditions of university organizers.

According to Law No. 20 of 2003 [6], the curriculum is a set of plans and arrangements regarding the purpose, content, teaching materials and methods used to guide the organization of learning activities to achieve national education goals. Curriculum programs BEITP together with the

regular should be stuck to Competency Standards. The curriculum used in BEITP is applicable curriculum in each high university organizers. The competency Standards cover the four core competencies, namely: pedagogical, personal competence, social competence, and professional competence.

The learning process is learning activity undertaken integrating the system with face to face lectures and/or mediated, and self-learning systems. Face-to-face lectures are scheduled process and the direct interaction between faculty and students in achieving objectives/competencies. Mediated lecture is scheduled interaction process between faculty and students in achieving goal/competency through the use of various types of media and technology. Self-regulated learning is the process of student interaction with learning resources which is done by using self-learning materials, either with or without the tutor assistance. Tutorial/assistance is a form of academic study that is directly related to teaching materials, and can be carried out face-to-face or mediated.

Self study material is the substance of learning developed in the form of printed materials, audio, and audio-visual equipment that can be used for student self-learning process. As per the demands of the curriculum, teaching methods should be able to attain the quality of achieving the competency standards. The learning process in BEITP implemented through the integration of lectures/learning and face-to-face on campus or mediated lectures and independent learning activities. In face-to-face activities in the campus system development of teaching materials left entirely to the lecturers at the university course organizers, while the self-learning system using the Self-Study Materials. Self study material designed specifically to be studied independently by students. The shape can be a module as the main teaching material and non-print media (media audio/video, computer/internet, radio and television) as a support material or a combination of both.

The process of learning is a form of communication that is communication between students and educators, between students and

lecturers. The communication contained the transform and the transfer of knowledge, skills or attitudes and values of the communicators (teachers, lecturers) to the communicant (subject learners, students) in accordance with its intended purpose [7].

Assessment of learning outcomes is giving value to the process and the results of student achievement, both in face-to-face lectures and/or mediated and independent learning; Assessment of learning outcomes is conducted on the process and outcomes of student learning, both in face-to-face lectures and/or mediated and independent learning [3]. Learning outcomes assessment carried out in accordance with the provisions applicable in each college, such as: assessment of the course activities, assignments, Mid-Semester Exams, and Semester Final Exams.

Since 2009, bachelor's degree of Elementary School Teacher Education Program in Satya Wacana Christian University has embarked on organizing BEITP. Improvement program of elementary school teachers' academic qualifications through S-1 Program of Elementary School Teacher Education Program uses distance education system, as S-1 Distance Learning Elementary School Teacher Education Programme, known as BEITP ICT based. Although a part of the monitoring and evaluation ever conducted by the Ministry of Education, there are still certain groups who doubted this program; so far have not done studies that specifically explore the various factors associated with the success of this program. Thus it is necessary to be made this study.

### **Statement of the Problem**

The problem of the study are:

1. How is the level of achievement of BEITP?
2. How is the role of RPLE in determining BEITP success ?
3. What are the determinant factors of the BEITP success?

RPLE factors is limited: 1) new admissions system/Recruitment, 2) the lectures, 3) faculty

qualifications, 4) managers, 5) curriculum, 6) lecture material, 7) teaching and learning, 8) assessment and or 9) a degree.

### Research Methods

This study was conducted based on the assessment of alumni who had attended BEITP. The data source is 32 SWCU bachelor's graduate of Teacher Education program. Data was collected through a self-rating scale consisting of 32 items that have been proven valid and reliable; Validity score 0,199 to 0,827, with a Cronbach 's Alpha reliability index = 0.93. Data analysis using descriptive and regression analysis (single and multiple stepwise model) use SPSS for windows version 20.

### Results

A descriptive analysis is done after collecting data and the results are shown below.

Table 1. Description of all variables

| Variabel            | Mean   | Median | Sd.    | Min  | Max  |
|---------------------|--------|--------|--------|------|------|
| Performance         | 3,1250 | 3,0000 | ,33601 | 3,00 | 4,00 |
| RPLE                | 3,4063 | 3,0000 | ,61484 | 2,00 | 4,00 |
| Admissions System   | 2,9479 | 3,0000 | ,51577 | 2,33 | 4,00 |
| Learning Tools      | 3,1875 | 3,0000 | ,39656 | 3,00 | 4,00 |
| Lecture Qualified   | 3,2500 | 3,0000 | ,43994 | 3,00 | 4,00 |
| Manager             | 3,0625 | 3,0000 | ,56440 | 2,00 | 4,00 |
| Curriculum          | 3,0313 | 3,0000 | ,50701 | 2,50 | 4,00 |
| Course Materials    | 2,6563 | 3,0000 | ,60158 | 2,00 | 4,00 |
| Teaching & Learning | 3,0625 | 3,0455 | ,26873 | 2,73 | 3,64 |
| Assessment          | 2,9438 | 2,8000 | ,33014 | 2,40 | 3,80 |
| College Degree      | 2,9063 | 3,0000 | ,81752 | 2,00 | 4,00 |

Based on the analysis presented in the table above, average value variables: Y (Performance),  $X_1$  (RPLE),  $X_3$  (Learning Tools),  $X_4$  (Lecturer Qualifications),  $X_5$  (BEITP Manager),  $X_6$  (Curriculum),  $X_8$  (Teaching and Learning) is larger than the middle/median, it means that the spread of each variable has a tendency toward higher; except  $X_2$  (Admissions System),  $X_7$  (Lecture Material),  $X_9$  (Assessment) and  $X_{10}$  (Bachelor's Degree).

Table 2 BEITP Performance

| No | interval  | f  | %   |
|----|-----------|----|-----|
| 1  | Very high | 6  | 19  |
| 2  | High      | 26 | 81  |
| 3  | Average   | 0  | 0   |
| 4  | low       | 0  | 0   |
|    | total     | 32 | 100 |

The analysis showed that the performance of BEITP graduate was at the high level (81%) tend to be very high (19%), as well as the RPLE (high = 50%, very high = 37.5%).

Table 3 RPLE

| No | Interval  | f  | %   |
|----|-----------|----|-----|
| 1  | Very high | 12 | 37  |
| 2  | High      | 16 | 50  |
| 3  | Average   | 3  | 10  |
| 4  | low       | 1  | 3   |
|    | total     | 32 | 100 |

After normality and homogeneity testing, then performed a single regression analysis of RPLE influence on the BEITP performance, the results obtained shown in the following table.

Table 4. Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | ,588 <sup>a</sup> | ,346     | ,273              | ,31721                     |

a. Predictors: (Constant), RPLE

RPLE contribute the performance of the BEITP = 27.3%. Further analysis is done to find the determinant of performance of the BEITP; Summary of the results can be checked in the following table.

Table 5 Model Summary

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | ,588 <sup>a</sup> | ,346     | ,273              | ,29831                     |
| 2     | ,723 <sup>b</sup> | ,523     | ,325/462          | ,27609                     |

a. Predictors: (Constant), RPLE

b. Predictors: (Constant), RPLE, lecture qualified

In model 1, RPLE is the only determinant of BEITP performance that contribute 27.3%, which at the same time with qualified lecturers (model 2) is a

determinant which gives a contribution of 46.2%. While 8 other factors do not determine the performance of BEITP, ie: student admission system, lectures device, BEITP managers, curriculum, teaching and learning, course materials, assessment and bachelor's degree.

### Discussion

BEITP performance program was satisfied, the analysis showed that the performance rate of graduates are in high level (81%) tend to be very high (19%). The succes of BEITP performance is as the result of the hard work of higer organizer and supported by many factors. One key factor that is only found in BEITP program is RPLE. RPLE Contribute to the performance of the BEITP of 27.30%; This is consistent with the goal of RPLE wich is to reduce the credits that must be taken to accelerate the completion of the study as an effort to increase teacher qualifications. With RPLE allows teachers to have a greater opportunity which will not interfere the duties and responsibilities.

RPLE as a determinant of BEITP performance with qualified lecturers contributed 46.20%. Faculty will determine the quality of the high - low quality of a university; lecturer qualification is part of the improvement pillar of quality and competitiveness in education. Lecturer is a human resources in a college that has a central role in all activities and strategic in college [8]. So qualified lecturers and BEITP RPLE are the decisive factor of BEITP. While 8 other factors were not affect. Determinants of efficiency, effectiveness, and accountability as well as offer access to broader educational services without sacrificing quality of BEITP and will only be realized if the quality of RPLE and lecturer who handles are of high quality.

### End Note

Based on the results of the analysis indicate that the BEITP performance rate seen from the success of graduates, are at the high level (81%) tend to be very high. The determinant of success of BEITP performance is RPLE; RPLE influence on the BEITP

performance is 27.30%. The success of the BEITP program determine by RPLE and lecture qualified; their influence is at 46.20%. While 8 other variables did not affect the performance, i.e.: student admission system, learning tools of the lectures, BEITP managers, curriculum, teaching and learning process, course materials, assessment and bachelor's degree.

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## STRATEGIES USED TO DEFEND THE EXISTENCE OF SMP STELLA MATUTINA SALATIGA

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### Abstract

The purpose of this study was to describe the strategies of management of public relation used for outdrawing attention of societies in order to enroll and to study in this school. It was a qualitative study which was analyzed descriptively. The study was conducted by 5 students of Magister of Education Management. The data sources were 3 people - the headmaster, a vice-headmaster of public relation and a vice-headmaster of student affairs. The data were collected through interviews with those sources. The data analysis used fishbone analysis to find the causal factors of the problem. The analysis showed that the programs used were successful in getting new entrants where every school year there were increasing numbers of new entrants in the new school year.

**Keywords:** *management of public relation, management of student, private school, new entrants*

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### Introduction

Education is an important factor in humans' life because it creates the next generation even the cost of education in Indonesia is getting higher now. In a paper entitled 'Impact of Cost of Education in Indonesia', Ibrahim MA wrote that quality of education is expensive. Increasingly, high cost of education cannot be separated from government policy to implement SBM (School Based Management), which is written on Government Regulation Number 66 of 2010 on amendments to the Government Regulation Number 17 of 2010 on the Management and Delivery of Education. However, SBM in Indonesia in reality is more understood as an attempt to mobilize funds. Actually, the fact indicates that the School Operational Assistance (BOS) given to public and private schools has not fulfilled the operational costs and the school's need yet. Related to this case, comes the government policy with regard to free schools that applied to public schools. Government Regulation Number 47 of 2008 states that the Government and the Local Government guarantee the implementation of compulsory education at least at the basic education without charge.

In practice, the policy of free school is not implemented optimally by the government, as

evidenced by the presence of levies by public schools. Most of societies who still regard the importance of education for their children but they have financial limitations, prefer schools which are stipulated as the free school by the government, which are public schools. These conditions threaten private schools including Junior High School or SMP Stella Matutina Salatiga. One of the reasons is because private schools are schools that all managements (including financial) are carried out independently by the schools. Without having financial support from parents, private schools would be difficult to defend and to live, much less thrive. The analogy is if the number of students will slightly decrease, the financial resources as well as school activities will also decrease.

Data from the Department of Education and Culture of Salatiga, Salatiga city is dominated by private schools from elementary, junior high and high schools with a total of 174 schools. In contrast, public schools from elementary, high school, and senior high have a total of 97 schools. The existence of private schools over public schools causes a lot of competition that not only occurs between public schools and private schools but also competition among private schools. To answer the school's

existence, the good management to manage the school is really needed.

Some cases above bring concerns to private schools including SMP Stella Matutina Salatiga. SMP Stella Matutina Salatiga that stands since July 1, 1953 and is managed by the Sisters of OSF is one of the private schools that still exists and excellent in Salatiga. Despite this school has ever experienced and had a difficult time when new policies of government above come, but this school still exists until now. School quality is also not doubted, this can be proven by many academic and non-academic achievements attained by students and teachers and employees of SMP Stella Matutina Salatiga, both at the municipal, provincial and national levels.

The problems for private schools are not big obstacles for SMP Stella Matutina Salatiga. The school management is the key of success for this school in getting students and answering the challenges of today education. Management systems and good management to manage the school in responding the existence of private schools in Salatiga is an advantage that can be emulated by other schools. The aim of this study is to describe the strategies used by SMP Stella Matutina Salatiga in answering the challenges of education today, especially in defending this school's existence.

## Discussion

### Problem - Solving Strategies

Based on the problems faced by SMP Stella Matutina Salatiga as an endangered private school, this school makes a strategy to maintain the existence of schools that is increasing performance and management synergies or management of school financial, student and public relations (PR).

This strategy is chosen because the school is aware of school managements consisting of several interconnected components. Each component of

1. Branch System (system) is the emergence of government policies on:

each school has a different role and it will be able to bring success if it has a strong synergy. All components are needed to be totally synergized in order to obtain good results.

## Results

The results achieved by the SMP Stella Matutina Salatiga using this strategy are:

- a. As a private school that financially handled by the school itself, SMP Stella Matutina can offer accessible school fee to wider community, both education funding and tuition fees (SPP).
- b. SMP Stella Matutina is still known by the public as a private school that is discipline/well regulated, and still ensures the quality of education.
- c. SMP Stella Matutina is still popular for many people.
- d. The number of entrants or new students who apply to SMP Stella Matutina from year to year fulfills the quota.
- e. SMP Stella Matutina still exists until now.

Based on fishbone steps, the first step the writers do is to agree on the problem statement. The main problem faced by the principal or this school is "the endangered existence of SMP Stella Matutina Salatiga as one of private schools in the midst of competition among schools according to the fact of declining interest of students to enroll in this school". The main problem is the head of a fish. The second step is to identify the categories of problem. In identifying this problem, the writers adopt 5S categories i.e Surroundings (environment), Supplies (supplier), System (system), Skills, and Safety. However, the writers only take 2 of 5S above such as Surroundings (environment) and System (system). The third step is to find reasons by using brainstorming. By this way, the writers can find some problems then they will be analyzed as explained below.

- a. School - Based Management (SBM), in which the school has an authority to regulate financial and school funding respectively. MBS gives impact on cost of high school or higher education.

b. Compulsory program. This policy raises issues of free schooling. Then the next problem that arises is that more people choose free public schools rather than private schools - including SMP Stella Matutina (students' interest for applying to SMP Stella Matutina Salatiga is descending).

c. Teacher's minimum credits/workloads for around 24 hours of lessons in a week. The problem

is that school has to add learning groups or class, so that the chance of private school is low to compete with other students in getting new entrants or students.

2. A large number of schools in Salatiga, especially private schools that causes competition among schools.

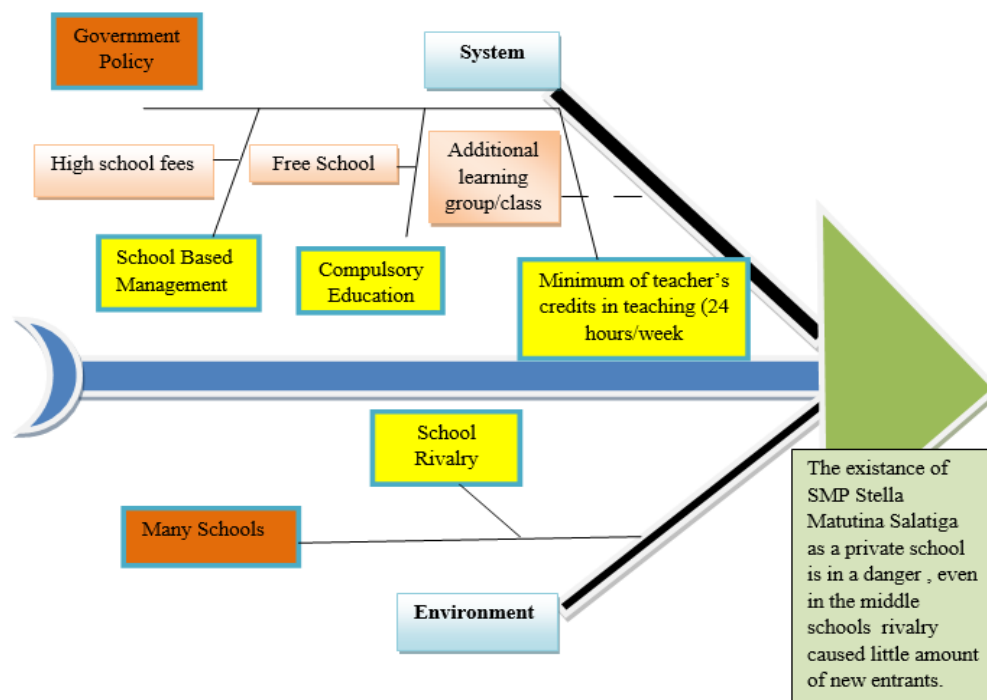


Figure 1. Concept by Using Fishbone Model

Based on problems that are existed and associated with the school management, then components of students, school funding, and public relations need to strive and to improve the synergy or cooperation in order to overcome the problems above.

#### A. Financial Management/School Financial Management

Because there are fundamental problems in finance, the management is very relevant. Based on challenges faced, the strategies undertaken in financial management are:

- At students' or new entrants' enrollment, the school "open an ACHIEVEMENT line/program

with the specific reason of financial policy", such as:

1. For admission students / learners of the school year of 2011/2012, 2012/2013, 2013/2014:

a. For students with the average scores in grades IV, V, VI Elementary School (SD) who get 85.00 above and have non-academic achievements in level of national or province will receive facilities, they are:

- Paying 50 % of education funding based on interview session (in the school year of 2011/2012, 2012/2013, 2013/2014).

- Paying the education funding of Rp. 500,000.00 (in the school year 2014/2015)
- Free tuition/school fees for the first of 3 months, then if in the middle of the semester the students still can maintain the scores, this facility will be continued until the next 3 months. If at the end of the 1st semester the student is still able to maintain the score, the facility will be continued on the next 3 months, and so on within a school year

b. For students with the average scores in grades IV, V, VI SD who get from 81.00 to 84.99 and have a non-academic achievement in the level of city or district will receive facilities, they are:

- Paying education funding with the same provisions with the provisions above.
- Discount of tuition/school fees off 50 % during the first 3 months, then if in the middle of the semester, the students still can maintain the scores, this facility will be continued until the next 3 months. If at the end of the 1st semester the student is still able to maintain the score, the facility will be continued on the next 3 months by getting 50 % of SPP on 3 next months, and so on within a school year.
- Giving "Education Vouchers" to SD students who win the competition on race/ tryouts held by SMP Stella Matutina in order to enroll at SMP Stella Matutina. If the students don't enroll sooner, the voucher will be invalid.
- Giving "reward or award" for the outstanding students in the form of tuition exemption for students of grades VII, VIII, and IX who get the first, second, and third ranks in class at the end of second semester and students who get or have non-academic achievements will be awarded by giving a tuition exemption. For the first rank and non-academic achievements nationally tuition exemption will be given for 3 months, and so on.

The financial policies above are undertaken to give awards for students, to help offset the cost of school but the school still keeps the school quality by obtaining qualified students and to encourage students to perform better.

School financial management is also done through the setting/ management of BOS (before the school year is ongoing). Besides, crossed-subsidy is also done between capable parents of students and the movement of foster parents.

#### B. Students and Curriculum Management

Management of students is done to maintain school quality through students and to achieve the school vision and mission which have launched by:

- Giving reward for outstanding students (in collaboration with the School Financial Management)
- Improving the school quality according to school vision and mission by offering many extracurricular options and alternatives and emphasizing on unseeded extracurricular which are Barongsai and dancing.
- Appreciating the ability of non-academic students through the art performing regularly, periodically and similar activities and competitions.
- Implementing personality enhancement through school cultures with different activities, such as:
  - a) Maintenance of cleanliness (picket yard and picket class), each student in the class with guardian teachers/picket teachers are scheduled to do picket yard (sweeping the school yard) in rotation with other classes. In addition, to accustom students to care about the environment, this activity is intended to make students familiar with the work and responsible.
  - b) Disposing waste on the right place or can.
  - c) Respecting the flag in the classroom before the first lesson begins

d) Providing an honest canteen (students serve themselves, pay the money and take the returns themselves frankly)

e) Praying The Angel of the Lord every 12 PM

f) Praying, giving greetings and small talk by using 3 languages: Monday, Tuesday, Wednesday, and Saturday by using Indonesian language, using English on Thursday, and on Friday using Javanese language.

a) Being friendly and courteous to others

b) Being on time. This school also has different activities with other schools, especially the cultivation activities in order to build the students' characters. Something which is different and memorable will bring some benefits to students that for sure they would be a "successful experience" for the students.

#### C. Public Relations Management (PR)

- Making performance and collaboration with the school committee effectively to answer school challenges and problems, such as:

1. Placing important figures of societies in school committee management so that they are also involved to do more for SMP Stella Matutina,

2. Creating good relations and recruiting students' parents who have economical capability and concerns for SMP Stella Matutina for being a fund raiser in school activities, being foster parents for students who are less able, and finding a sponsor for school activities.

- Having a cooperation with NFE

- Doing a school promotion through special techniques, such as:

1. School promotion to parents of elementary school students in the acceptance of students' report.

2. School promotion to elementary school students in beginning of the 2nd semester, through a "successful experience" from the senior who have ever been in SMP Stella Matutina.

3. School promotion to Catholic people through "worship tour" and "participation in environmental activities".

4. School promotion to the public and elementary school students through Open House by giving a gift of "education vouchers" for the winner of many competition held in this program.

All program activities from each component are synergized well so the implementation can run well. The evidences of the case above are:

1. The activities/ programs can be carried out from year to year well and smoothly.

2. There is a positive response from elementary school students and public to enroll in SMP Stella Matutina. This is showed by the percentage of registrants in SMP Stella Matutina which is getting higher and increasing.

Data of registrants who enroll in SMP Stella Matutina can be seen on the following table.

|                      | School Year   |               |          |               |               |               |               |                          |
|----------------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|--------------------------|
|                      | Before        |               | Problems | After         |               |               |               |                          |
|                      | 2007/<br>2008 | 2008/<br>2009 |          | 2010/<br>2011 | 2011/<br>2012 | 2012/<br>2013 | 2013/<br>2014 | 2014/2015                |
| Total of Registrants | 257           | 246           | 158      | 226           | 234           | 211           | 231           | 121 (on April 1st, 2014) |
| Quota/Targets        | 220           | 210           | 180      | 180           | 180           | 180           | 175           | 175                      |
| Accepted Registrants | 220           | 210           | 158      | 180           | 180           | 180           | 175           |                          |
| Denied Registrants   | 37            | 36            | 0        | 46            | 54            | 31            | 56            |                          |

3. Several private schools begin to take hold similar events and programs as an effort to get students at the beginning of each school year, for example SMP Pangudi Luhur Salatiga has organized in two years latest, SMP Kristen 2 Salatiga and SMA Virgo Fidelis Bawen.

### Conclusion

Based on the analysis and discussion above, the conclusion is that in the midst of the problems and challenges in education SMP Stella Matutina Salatiga still can be able to maintain its existence as a private school. The effort to defend is done by applying or using management strategies that impact both for the school. This is evidenced by (1) affordable education funding and tuition / fees for the general public, (2) SMP Stella Matutina is known as a discipline private school, and still ensure the quality of education, (3) there are many requesters, ie, students who are interested in school and enroll at this school, (4) the fulfillment of the quota number of students who enroll from year to year. In other words, SMP Stella Matutina still alive, victorious and exist.

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## ENVIRONMENTAL MANAGEMENT THROUGH GREEN SCHOOL PROGRAM IN SMA NEGERI 2 SALATIGA

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### Abstract

Green School is a school that is committed and systematically develops programs to instill environmental values into all school activities. In this case, the school needs to strengthen programs such as the green school environmental curriculum development, education development based on community, improving the quality of the school district and its environment, the development of friendly environmental support system as well as the development of management based on environment. This study used descriptive analysis as its research method in order to succeed the greening school environment, preventing the extinction of the environmental resources and global warming in SMA Negeri 2 Salatiga area. The analysis method used in this study was Forced Field Analytical (FFA). The data was collected through observation, interviews and literature. The results showed that the implementation of the green school program has created a school community, especially the students who care and have cultural environment as well as responsibility for the protection and environment management through good school governance to support a sustainable development.

**Keywords:** *environmental management school, green school, environment*

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### Introduction

Global environmental nowadays is becoming worse and worse. It is triggered by human activities that exploit natural resources and the environment indefinitely. Related to the human behavior toward the natural resources and environmental conditions in which they becoming far more aware of environmental issue, and then changing that behavior have to be the top priority. Arne Naess, also an ecologist, reveals that today's environmental crisis can only be overcome by changing the perspective of nature and human behavior are fundamental and radical (Sony Keraf, 2002). One way to change the environmental behavior is through education.

School has a very important role. From school, all the repair process begins. Students must understand the importance of loving and preserve the environment. Efforts to instill awareness of clean and healthy living behavior needs to start at school age. Therefore, the government sought to awaken people to behave in a friendly environment through the implementation of environmental education, Adiwiyata program.

Adiwiyata program is in the form of application of natural human behavior in order to protect and preserve the natural existence to occur sustainability of life. Adiwiyata is a good and ideal place to acquire all the knowledge and various norms and ethics which could be the basis for the creation of the welfare of human beings to achieve the goals of sustainable development. The program was succeed when the school community has Adiwiyata environmentally behavior wherever they go. Besides to build environmentally behavior, adiwiyata program was meant to a way to save the budget, because one of the Adiwiyata indicators is resource saving measures. Therefore, many schools are implementing Adiwiyata and hopefully, all schools will implement that Adiwiyata program. One of the schools that have implemented that program and being awarded as Adiwiyata School in Salatiga from 2010 to 2014 is SMA Negeri 2 Salatiga, located on Tegalrejo Road. No.79 - Salatiga.

### Research Methods

This study used a qualitative descriptive method to describe a phenomenon that occurs, especially the phenomenon of student's behavior in actual



fact. Therefore, the research conducted in the form of qualitative research by observing the social situation on the field.

According to (Sugiyono, 2009: 49) population in qualitative research called "*social situation*" that consists of three elements: the place, players, and activity that interact synergistically. The three elements then serve as the object of research to find out what events are happening inside it to achieve the research objectives.

The focus of the study is the behavior of SMAN 2 Salatiga citizens toward the implementation of Adiwiyata program. The techniques of collecting data are through observation, interviews, library research, and documentation. The analytical method used is a Force Field Analysis (FFA). The data analysis was carried out during and after data collection includes: reduction, presentation, and data verification.

## Result and Discussion

Adiwiyata School is a school that has implemented the learning process by applying the principles of environmental insight. Therefore, the behavior and attitudes of students and other school community (teacher and staff) should use that principles and proactively participate as a builder environment to improve the quality of life of citizens and schools the surrounding community.

The basic principles of Adiwiyata programs are, participatory, sustainable, and comprehensive. School component (students, teachers, employees) always participated in coaching school environment. The activities were carried out in a sustainable and comprehensive on various aspects.

The implementation, to be a Adiwiyata school which have environmental culture, has required several important elements, namely the School of Policy Development include:

- a. Environmental Policy
- b. Implementation of Curriculum-Based Environment
- c. Activity-Based Participatory Environment

## d. Management Infrastructure Supporting Sustainable

The behavior consists of three domains that include, domain behavioral knowledge (behavior knowledge), behavioral domains attitude (feeling behavior) and behavioral skills domain (doing behavior).

Behaviors are all activities that are performed by humans in response to environmental stimuli, which include motor activity, emotional, and cognitive. The behaviors of the students in the Adiwiyata program are reflected in four indicators, including:

### School of Environmental Policy Development

Care and environmental policy has been included in the vision, mission, and goals of SMAN 2 Salatiga. SMAN 2 Salatiga has a vision "create faithful and devoted graduates, superior in performance, character nationality, care for the environment and are able to compete in the globalization era graduates", with one of its mission "to create a loves school environment culture". Those vision and mission are intended to motivate all SMAN 2 Salatiga citizen to a good environment culture in the era of globalization, so it will create naturalization harmony, human and environment. As the result, it will create a health, clean and enjoyable learning process.

As Adiwiyata school, SMA Negeri 2 Salatiga applied 3R (reduce, reuse, recycle) as its superior culture including: (1) reduce as one way to reduce the consumption of junk. This is done to familiarize the canteen to use cups, plates, and leaves as foodstuff or dishes to reduce the plastic use. This is aimed to reduce the amount of garbage in SMA Negeri 2 Salatiga (2) reuse is the act of using things or stuff repeatedly. The program is conducted with the using of bottles beverages or food for lunch bring from home, so it will reduce the junk snack, including an appeal to use handkerchief instead of tissue. The school also impose disciplinary sanctions including littering (3) *Recycle* is the act of making a new item of old material (garbage) by changing the chemical content and physical goods. So, the recycle act doing by SMA Negeri 2 Salatiga is

through management of garbage, either organic or non-organic garbage. The results proudly from this recycle program is calligraphic making, bag, and other handicraft including crafting plastic wrap, natural batik color, and paper.

SMAN 2 Salatiga also has a policy of environmental materials listed in the syllabus, lesson plans, and assessment sheets designed at the beginning of the school year. At the beginning of the school year SMAN 2 Salatiga held an *In House Training (IHT)* to draw up a work program as well as learning devices. Another way to improve the quality of human resources in SMAN 2 Salatiga is by organizing and attending workshops and training sessions, especially with regard to the environment.

An institute cannot be separated from the issue of funding. Whether or not the funding is less dependent on financial management are made in the budget plan. From the RKAS, SMAN 2 Salatiga allocates approximately 15% for the purposes of environmental. In order to keep the fund, SMA Negeri 2 Salatiga made policies on the use of natural resources such as saving water, electricity, fuel, plastics, and paper. This is in addition to saving budget as well to maintain its availability to keep it smooth.

### **Curriculum Based Environment**

SMAN 2 Salatiga use unit-level education curriculum (KTSP). The curriculum integrates the environment in all subjects. So all of the subjects had a lesson plan (RPP) which is associated with the environment, from the methods, models, to learning media approach. Students will be more relax and enthusiasm while learning outside through the environment media. It can also increase the love and caring environment, because students immediately feel its benefits.

The implementations of Environmental integration are done through planting the characteristic of environment caring on student, either in the form of practice and theory. In terms of theory, students were equipped by material relating to the environment. Moreover, they were also been given such tasks which related to the environment. In term of practical, students were given such activities like environmental love and care, although

simply by cleaning the classroom and before the lesson started, the teacher will evaluate the cleanliness of the classroom. Moreover, in their learning process in class, they always being reminded and linked to care about the environment. Even if students break the law especially coming late, then the sanctions will be the form of cleaning for an hour lesson.

### **Development of Activity-Based based on participatory**

Students of SMAN 2 Salatiga always take an active participate in every activity including both activities inside and outside school. The activities in the school include such as doing picket classroom hygiene or cleaning duty, clean Friday activities, as well as picket routine every morning and afternoon. Besides that, the student also take participation on the environment contest such as hygiene class contest, parks contest, Adiwiyata classroom competition, poetry competition and environmentally themed drawing competition which could encourage them to always care about their surroundings more.

Other school activities are in the form extra-curricular activities. Those extra-curricular activities include extra KIR, PMR, Scout, BTA, Tambourine, *green house*, sports and the arts, *batik*, *Paskibra*, Dance and Theatre. Extracurricular activities are always associated with the environment which always linked or associated with the environment. This could be seen from the post-activity, where students are always clean up the event place, because if they don't then they may get a warning or sanction. That is a way to create a habit so wherever the student are, they already being familiar with clean place as it before. The activity of picking up trash is performed anytime and anywhere.

SMAN 2 Salatiga is also create a partnership with other external parties such as PLN, PDAM, SWCU, DPLH, GIZ (Germans speakers), *Cipta akaru*, hygiene department, education department, local government and private institutes. The cooperation with those external parties done in the form of clean-up activities, reforestation, bio-pore, absorbing wells, breeding, training, workshops, and

service both within and outside the school environment.

#### **Development and management of school instruments Environmental**

Environmental education in Adiwiyata schools, not only just a theory, but rather on a culturally practice. Therefore, it is necessarily to be facilitated with friendly environmental facilitation or infrastructure to create that environment culture. However, the needs of infrastructures required are not in a small amount, that why it takes some steps to accomplish it, especially related to the fund because not the entire school fund is allocated to the environment.

The environment funds are used to buy hygiene equipment, plant seeds, composter, build or create garden, WWTP reparation, bio Pori manufacture and green house. It is also spent on buying some books related to environment as well as other activities related to the environment such as workshops, training, competition and restructuring and improving of the environment.

Other facilitation that need to be consider is water, whether is from wells or PAM. The water in the restroom or at the faucet should not be blocked, because it will make things messy. SMAN 2 Salatiga also makes bio Pori as a form of their caring toward the water. All bio Pori in SMAN 2 Salatiga are being placed in every corner of open space both in front of the school yard and school park which aims to sodden the rainwater as well as avoiding puddles when the rainy season comes. To keep it clean and health, faucets are placed in front of the class to wash the hand every time after picking up the trash

SMAN 2 Salatiga also provide separated recycle bin into three types; that is, blue bins for organic trash, yellow for inorganic waste, and red for B3 (Hazardous Material) such as chemical substances used to practice, or room cleaners which contain harmful chemicals, while bins in classrooms all beige color with each types of the waste (organic, inorganic and B3 trash) written on it. Organic garbage usually used for compost and SMA Negeri 2 already has a set composter to make their own

compost and trash thrasher. After that, then plastic waste being recycled to produce handicraft.

SMAN 2 Salatiga also have stalls at the rear of the living as youth academic activities (KIR) which makes herbal medicine as well as drinks and food from pharmacies material life. In addition another land is used to create the park. Almost every building in SMAN 2 Salatiga has a garden although on a small scale. Parks include the park in front of the school yard, park in front of the class, the park in front of the lab, the park in front of the teacher's room, greenhouse and nursery. Each of the gardens are well maintained so that it can be used for a place of learning, meeting, working groups, as well as refreshing for students. In addition to the shady trees in the park there are many small birds that flew to and fro with a cheerful voice. The park is also equipped with fountains and fish ponds, and chicken are released.

The existing facilities at SMAN 2 Salatiga not always in good condition, that one day they will also being damaged and depleted. To anticipate that, SMAN 2 Salatiga make some cost effective such as energy savings, use the electricity necessarily. Electricity is used in the dark situation, turn off the TV when nobody watched, turn on the computer when it is need as well as turn off the water when the basin has already full. Other strategy of saving effective such as using water necessarily especially for wudhu or washing and keep the tub so it would not be spilled. Besides water and electricity savings, other savings effective are done through paper savings by using water papers for the latter envelops and avoiding the excessive invitation use. Written call-saving was patched on every strategy so they could be seen and read easily by all the school community.

#### **Conclusion**

The school achievement in Adiwiyata because of the cooperation among all the school community. Thus, it form the sustainable environmentally character and culture for all school citizens wherever they are. If the character is already embedded, both programs and policies no longer become a burden. Application of reduce, reuse and recycle then make the schools and its environment

clean, cool, comfortable for the learning process. In addition, students also have the additional creativity in the form of garbage utilization for high-value items.

### **Recommendation**

Socialization needs to be done continuously, so that all people can understand the meaning of Adiwiyata school actual program, which is done to create a conducive school environment, ecological and sustainable both in reality and continuously, sympathetic manner, creative, innovative as well as profess values and cultural wisdom.

### **ACKNOWLEDGMENT**

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## HIGH SCHOOL MAJORS SELECTION USING NEURAL NETWORK

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### Abstract

Majors in high school is a process for separating classes so that students can learn the appropriate areas according to their competencies. The research aimed to develop artificial neural network that can be used to separate high school majors. Majors is done by developing neural network model to students who have a good achievement. Three layer neural network was trained with the back-propagation algorithm, input layer consist of 5 neurons, hidden layer consist of 20 neurons and output layer consist of 1 neurons, initial learning rate 0.5 and momentum 0.6. After simulation neural network was done, it was found that neural network could separated the students with an accuracy level of 97.5%.

**Keywords:** high school major selection, neural network

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### Introduction

Indonesia government regulation No. 17/2010 on school management and operation states that Senior High School has to facilitate the students to select subjects major to support the learning and competency that the students need in order to continue their education to the higher level [1]. In School-Based Curriculum, students can choose their major when they are at the end of semester 2 of Grade X (first year). In 2013 Curriculum, however, students has defined their major since they are in the first semester of Grade X.

In spite of the same objectives, the two curriculums have two basic differences in term of their subject major policy. In 2013 Curriculum, students select their major from the very beginning. They are, therefore, only take the subjects offered by their major. Their major selection is defined based on their achievement in Junior High School, the interview with the guidance and counseling teacher and the result of the aptitude test they take before admission [2]. In the School-Based Curriculum, however, students take all subjects in the first semester for they choose the major in the end of the second semester. Based on their achievement in their first year, then, they choose their major.

The absence of strong standardized scoring system in Junior High School makes the role of guidance and counseling teacher and aptitude test

result vital in supporting the decision making process of school major selection by the students in 2013 Curriculum. This research is an effort to develop artificial neural network support system to improve aptitude test accuracy in supporting major selection process by the students. The use of this system is hoped to make the decision more accurate.

### Related Literature

Artificial neural network is a computation model inspired by human neural network system. This network solves the problem by using learning algorithms. It learns so that all data inputted to it will give expected output [3].

A number of researches on the application of artificial neural network in education showed that this network was a dependable problem solver. Oladokun, Adebajo, Charles-Owaba research in 2008 proved this network system's ability in predicting students' academic achievement [4]. Multilayer artificial neural network in this research, called Perceptron, could forecast student academic achievement with more than 70 % accuracy. In Engineering education, back-propagation algorithm artificial neural network could even predict education quality with 90 % fidelity [5]. In additions, Budhi, Liliana, dan Harryanto found that neural network with self organizing map algorithm successfully estimated basket ball players' talent. NBA players' data were used in training while Indonesian

players' ones were employed in testing. This network gave 95 % accurate prediction [6].

The present research uses backpropagation algorithm artificial neural network which is trained with supervised method. To the network, a pair of input and expected output patterns are presented. When a pattern is presented, the weight of the network is modified to minimize output pattern with the expected output pattern. This is done repeatedly to get network output pattern which is similar to that of the expected one.

In this research, input patterns consist of five variables, the result of students aptitude test; General Ability (GA), Mechanical Reasoning (MR), Numerical Ability (NA), Verbal Reasoning (VR), and Language Usage (LU). Meanwhile, one variable is employed as output pattern; the majors of the students (MS).

Back propagation neural network training algorithm operates in two steps; forward propagation and backward propagation [3]. Forward and backward propagation are operated repeatedly to every given pattern up to the point when the error margin is relevant to the expected value. Forward propagation is used to calculate the network output (equation 1 & 2), while backward propagation is employed to change the network weight (equation 3).

$$S_j = \sum_{i=0}^n a_i w_{ji} \quad (1)$$

$$y = \frac{1}{1 + e^{-S_j}} \quad (2)$$

Where

$a_i$  = input unit i

$w_{ji}$  = weight from unit i to j

y = output neuron

$$\delta_j = (t_j - y_j) f'(S_j) \quad (3)$$

Where

$\delta_j$  = error correction

$t_j$  = target value

$y_j$  = output value

## Research Methodology

To achieve the objective of the study, the following steps were needed:

- Preparing the aptitude test data. The data are taken from one of high schools in Yogyakarta. These data will be integrated with the data from the major the students are already in. There are 140 data altogether; 100 are used for training and the rest are used for testing.
- Developing software to simulate back propagation neural network with momentum and adaptive learning rate. Simulation was done by using Neural Network toolbox Matlab R 14. Figure 1 shows the topology of the neural network and table 1 list the parameter of neural network. The architecture of neural network used for this study consists of three layer; the input layer will receive the score of the test, the hidden layer will calculate them, and the output layer will represent the majors of the student. One (1) represent IPA and Zero (0) represent IPS.
- After the data and the software are ready, the neural network is trained and tested with different kinds of learning rate. The training is done for 100 student, consist of 50 IPA and 50 IPS. The testing is done for 40 students, consist of 20 IPA and 20 IPS. In each training, the speed of convergency of neural network was recorded. In each testing, the accuracy of neural network in recognizing the majors was recorded.

Table 1. Neural Network Parameter

|                       |               |
|-----------------------|---------------|
| Input neurons         | 9 cells       |
| Hidden neurons        | 20 cells      |
| Output neurons        | 5 cells       |
| Initial learning rate | 0.4, 0.5, 0.6 |
| Momentum              | 0,6           |
| SSE/error             | 0.1           |

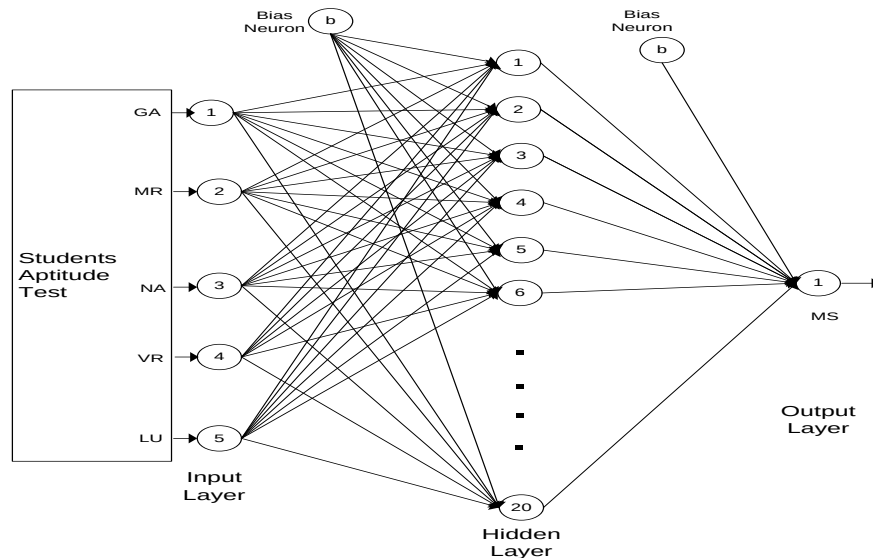


Figure 1. Neural Network Topology

### Research Findings and Discussion

Figure 2 show the training process of backpropagation neural network. Table 2 list the result of training and testing of neural network. From table 2, it is seen that convergence of the backpropagation neural network found by using the initial learning rate value 0.5. From this configuration we can also find that the recognizing at the phase of training is 100% and the recognizing at the phase of testing is 97,5%. This may imply that the neural network has a fairly small error of 2.5%. From these findings it can be concluded that the variables used in

the aptitude test (General Ability (GA), Mechanical Reasoning (MR), Numerical Ability (NA), Verbal Reasoning (VR), and Language Usage (LU)) can be used as a potential determinant of the majors of students in high school.

Table 2. The Result of Training and Testing

|                      | Learning rate |        |     |
|----------------------|---------------|--------|-----|
|                      | 0.4           | 0.5    | 0.6 |
| Iteration            | *             | 28,356 | *   |
| Accuracy of training | NA            | 100%   | NA  |
| Accuracy of testing  | NA            | 97.5%  | NA  |

\*not convergent up to the iteration of 100,000

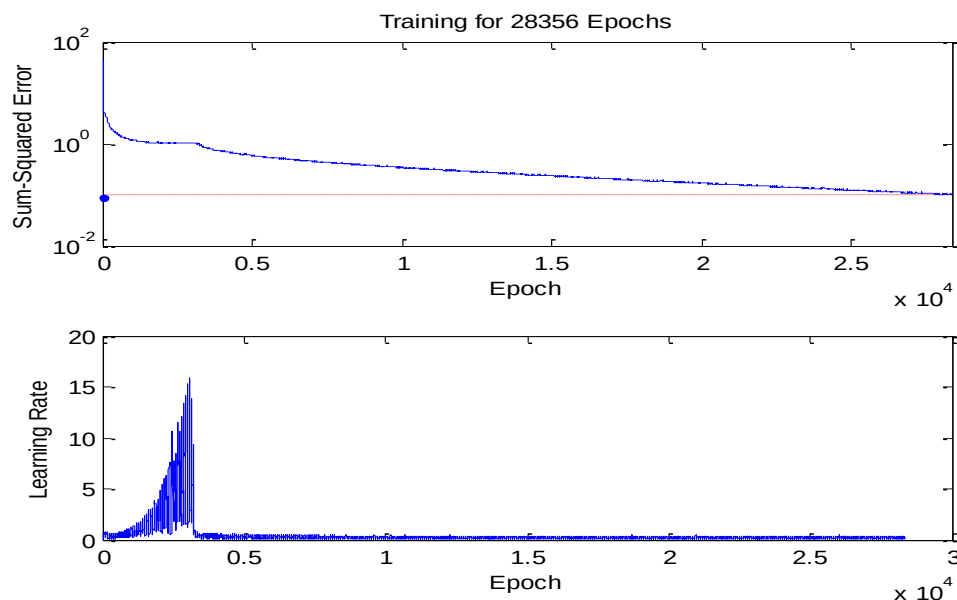


Figure 1. Figure 2. The Training Process of Backpropagation Neural Network

### **Conclusion and Future Works**

The backpropagation neural network with momentum and adaptive learning rate can support majors selection in high school. The convergence of the neural network is found by using 20 neurons in hidden layer, the momentum value is 0.6 and initial learning rate value is 0.5. The accuracy of the system is 97.5%.

The future works of the research can be done by exploring more deeply the variable used in this research. From 5 variable used in the aptitude test which variables have the dominant role in determining the high school majors selection. The purpose of this future works is to eliminate the disturbing variables, so the accuracy can be improved

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## THE EFFECT OF INFORMATION SYSTEM QUALITY, PERCEIVED USEFULNESS AND INFORMATION QUALITY TO END USERS' SATISFACTION OF ACCOUNTING DRYLAB PROGRAM AT OPEN UNIVERSITY OF INDONESIA

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### Abstract

The purpose of this study was to evaluate the implementation of ADLP by looking at users' perception of the system quality and information quality, associated with the perceived usefulness and the satisfaction of user through Structural Equation Modeling (SEM). Respondents in this study were active college students of the Accounting Department at the registration period of 2014. The results of this study show that information system quality statistically significant affected the perceived usefulness and end-user accounting software satisfaction. Information quality statistically significant affected the perceived usefulness and end-user accounting software satisfaction. Perceived usefulness affected the end-user accounting software satisfaction.

**Keywords:** *accounting dry lab program, end user satisfaction, information system quality, information quality, perceived of usefulness.*

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### Introduction

In 2010 UT's Accounting department launches a practicum program that seeks to cover the weaknesses experienced by students in the Online Tutorial (Tuton). Tuton has not been able to satisfy and meet the needs and objectives of practicum. Students should continue to monitor the initiation of material every week, and should be active in the discussion forum. Besides interaction with tutors or lecturers every week should exist. If students miss the learning process within a week, it will not be able to repeat in the next week. In general, Tuton can achieve cognitive objectives of the course Introduction to Accounting Laboratory, but it can't be used to improve student skills in working on accounting cases as in real business practices.

Though the end goal of accounting practicum is improving students skills to resolve the case of accounting transactions to the preparation of financial statements in various cases and industry. This skills will appear on the student's ability to resolve the case of accounting on the final exams. When students are not skilled, though diligent in following Tuton, surely will not be able to resolve the case of accounting in the final exam because they're not accustomed to practicing accountancy.

That's why UT's Accounting Department makes a practicum program called Dry Lab for accounting introduction course.

Dry lab is an abbreviation of Dry Laboratorium which is a lab with simulated via computer and equipped with animation, images, audio, and video that developed to allow students to carry out practical work with easy, fun and effective and efficient. To assist students in conducting lab, UT's Accounting Department provide a theoretical basis or introductory on accounting concepts before students do the lab working. These concepts being contained in the Dry Lab Introduction to Accounting module which is expected students will not have difficulty in understanding the subject.

Dry Lab can be accessed easily via UT's website, without the constraints of time and place. In addition through the UT website, under certain circumstances dry lab program can also be obtained by the student in the form of a compact disc and the practicum results can be sent to either UT Accounting Department through the Internet (softcopy) or via mail (hardcopy). The two main requirements to be able to follow the drylab program is: 1) You have to be registered as a student lab course Introduction to Accounting and 2) having

basic computer skills such as excel programs, word, and simple navigation computer operation.

Dry Lab program has been launched, but until now the evaluation of the quality of information and quality of information systems that affect the perception of usefulness and user satisfaction levels itself has not been much done at the Open University. Meanwhile, according to Janson and Subramanian (1996) and Lucas et al. (1998), stated that the problem that usually occurs in the use of accounting drylab package is system incompatibility with the information required by the end user. The discrepancy between the needs of the students drylab applications as users could pose a significant problem for them. Technical difficulties which interfere in drylab, interfacing problems in the system, and difficulty in hardware can make a lower levels of satisfaction.

If students are not satisfied with the drylab program, they will no longer use it. EUCS (End User Computer Satisfaction) can be used as a signal for the Open University in general and specially for Accounting Department to overcome these difficulties and mismatches. Seddon (1997) stated that by overcoming the weaknesses of the better measurement, end-user satisfaction can be used to measure the gain or success of Dry Lab.

Departed from the reasoning and the empirical facts, this study try to evaluate the application of drylab program. The evaluation is done by looking at students' perceptions of the quality of information and quality of existing information systems in the Dry Lab, associated with the perceived usefulness and the level of student satisfaction over the Dry Lab through structural equation modeling. The use of this model is important because it is a powerful way to overcome the problems that arise in information systems research and understanding of emergence.

If the student does not accept or use the system effectively, the benefit of the Dry Lab as a learning system based on e-learning can not be realized. It is therefore important to investigate the factors and critical success drivers of Dry Lab to provide feedback to designers and teachers to build systems

that are useful and accepted by the end user, in this case the student of UT's accounting department. Departed from this facts and the background research, the formulation of the problem in this study are: 1). how the influence of the quality of the information system and the quality of information on user satisfaction Dry Lab, 2) how the variables influence perceived usefulness as an intervening variable in the relationship between the quality of information and quality of information system on end-user satisfaction of Dry Lab, 3) how the structure and dimensionality, reliability and validity of the instrument used to measure end-user computing satisfaction (EUCS) made by Doll and Torkzadeh (1988). This study is also the response of Klenke's research (1992) which stated the need for cross-validation MIS instruments and to re-examine the instrument EUCS with new data.

Meanwhile the objective to be achieved in this study are: 1) To investigate the influence of the quality of the information system and the quality of information on end-user satisfaction drylab program, 2) To examine the effect of perceived usefulness as an intervening variable in the relationship between the quality of information systems and information quality and end user satisfaction drylab introductory accounting, 3) To examine the structure and dimensionality, reliability and validity of the instrument used to measure end-user computing satisfaction (EUCS).

Hopefully this study can achieve the benefits to: 1) Those researchers and practitioners of information systems based learning (e-learning) in assessing the quality of cleaning lab to improve student satisfaction, 2) UT to develop innovations that fit the students need in the future and improvement of the dry lab quality, 3) UT's students in order to create an ideal network-based lab.

### **Information Systems**

According to O'Brien (2006), information system is a combination of people, hardware, software, communication networks and data resources that collect, transform, and provide information in an organization. According Mutyarini and Sembiring (2006), the characteristics of information systems in higher education are as follows:

1. As a supporter of higher education institutions to achieve its objectives.
2. Having a purpose to:
  - a. Provide the necessary services to the satisfaction of the academic community, reliable and affordable.
  - b. Improving the quality of service in accordance with the mission of higher education.
  - c. Providing accurate information into and out of institutions.
3. Consists of units of information systems that stand alone but in line with the vision and mission of the institution.
4. Accessed by various academics communities with the needs, roles and different knowledge.

The role of computer-based information systems has expanded significantly over the past few years. The widespread development of information systems also brings a change in the role of the information system itself. Any changes have an impact on end users and managers in an organization. As an example of an information system among others:

1. Academic Information System (AIS)-based Web. The purpose of making the Academic Information System (AIS) is to support education, so that the college can provide better information and effective to the community, both within and outside the university through the Internet. Major features of Academic Information Systems (AIS) web based, among others: the curriculum of the course, the semester KRS registration, registration KRS short term, study sheets, profiles of faculty, staff profiles, job descriptions faculty, student profiles, profiles of alumni, student enrollment new, structurally faculty, databases thesis / final project, E-learning, academic calendars, announcements, event organizer, online quizzes, news, articles, and online photo gallery.

2. Library Information System (SIP) Web-based. SIP Web-based can be used by various groups, both libraries at educational institutions and public libraries public or private. These applications and services facilitate access to information and library data, such as makes it easy to book / catalog, system membership, journal information, course material, borrow and return books and periodic reporting. Thus, the efficiency will be obtained in the work of the library staff library book management, presentation of information more easily and interactive, providing better services to the users of library services. The main features of the library information system (SIP)-based web include:

- a. Catalog / book category, the program can divide the book / paper or other products to be displayed at the library information system in separate categories, making it easier for users to find what they need.
- b. Detailed information books, complete information on the book / product, will be displayed screenshots (pictures) of the book (if any), equipped with a library ID, title of book, name of author, publisher, ISBN, number of pages of the book, the size, the type of language, source books, stock books available as well as a brief resume of the book / product.
- c. Forms of borrowing, visitors can make a request to borrow this book, where after selecting the desired book they will be asked to fill out a request form of borrowing.

#### **Previous Research and Hypothesis Development**

##### **A. Information System Quality and End-User Satisfaction of information system**

Information System Quality and End-User Satisfaction of information system is an inherent characteristic of the system itself (DeLone and McLean (1992). Defined quality system also Davis et al., (1989) and Chin and Todd (1995) as perceived ease of use that is how big the perceived computer technology is relatively easy to understand and use. Perceived usefulness is defined as the degree to which a person believes that using a particular system can improve the performance (Davis, 1989).

Research Adams et al. (1992), showed a positive relationship between the usefulness and ease of use. Iqbaria, Guimaraes, and Davis (1995) in their study using the technology acceptance model (TAM) showed the influence of perceived ease of use on perceived usefulness. Test results Mao and Palvia (2006), as well as Simon and Paper (2007), shows the influence of perceived ease of use on perceived usefulness.

Seddon (1997) conducted a study to see the relationship between the perceived usefulness of information quality. The results of the study Seddon (1997) on the relationship between these two variables, the results of research supported by Li (1997) and Rai et al., (2002). If the user is confident with the quality of drylab accounting system it uses, and feel that the system is not difficult, then they will believe that the use of such a system would provide greater benefits and will improve their performance. If the information generated from the accounting drylab used increasingly accurate, timely, and has good reliability, the more it will increase the confidence of users of the system. Increased user confidence in information systems, is expected to further improve their performance.

Based on the above description of this study hypothesized that based on the perception of the user, the higher the quality of accounting drylab, will further increase the perceived usefulness. A second hypothesis is built higher quality accounting information produced Software used, will further enhance user perceived usefulness, in terms of its perception.

H1: The quality of information systems a positive effect on Perceived Usefulness.

H2: Information quality positive effect on Perceived Usefulness.

B. The quality of information systems, information quality and user satisfaction of information system.

Size of user satisfaction in a computer system is reflected by the quality system owned (Guimaraes et al, 1992; Yoon et al, 1995). User satisfaction of an information system is how users view information

in a real system, not on the quality of the engineering system (Guimaraes et al, 2003). In the research literature and in practice, user satisfaction is often used as a surrogate measure of the effectiveness of information system (Melone, 1990). The results obtained DeLone and McLean (1992), McKinney et al., (2002), Rai et al., (2002), and Livari (2005) indicates that the quality of the information system has positive influence on the wearer satisfaction.

The higher the quality of information produced by an information system, will further enhance user satisfaction (DeLone and McLean, 1992). This opinion is supported by the results of McKinney et al., (2002), Rai et al., (2002), and Livari (2005). If users believe that the quality of information systems and quality system information generated from the system used is good, they will be satisfied using the system.

This study hypothesized the third hypothesis that higher quality accounting introduction drylab used, will increase user satisfaction according to their perception. For the fourth hypothesis in this study is the higher quality of information produced by the introduction of accounting used drylab will increase user satisfaction based on their perceptions.

H3: The quality of information systems a positive effect on user satisfaction of information system.

H4: The quality of information has a positive effect on user satisfaction of information system.

#### C. Perceived Usefulness and User Satisfaction

DeLone and McLean Information System (1992), states that the impact of the use of information systems on the performance of the individual to the level of user satisfaction (user satisfaction) have a reciprocal relationship. While Seddon (1997) in his model hypothesizes that the impact of the use of information systems in the form of increasing the performance of the individual, will affect the level of user satisfaction.

Rai et al., (2002) examined the relationship between perceived usefulness to the user

satisfaction using three models of information systems success. All three models are models of information systems success DeLone and McLean (1992), the model Seddon (1997), and Model Seddon (1997) modified by adding the relationship between perceived usefulness with system use. Research results indicate overall perceived usefulness affect user satisfaction. Livari (2005), conduct research on the success of the new information system is applied to the users of information systems in an organization which is mandatory. Research results for perceived usefulness variable relationship with user satisfaction shows the influence of both variables. If users feel the benefits of the information system of systems that are used, then they will be satisfied using the system.

Based on the above description of this study hypothesized that the higher the perceived usefulness, user satisfaction will increase drylab accounting, according to their perception.

H5: Perceived Usefulness has a positive effect on user satisfaction of information system.

Thought and the hypothesis can be stated in the Figure 1.

### Methods and Techniques of Data Collection

This study uses primary data that is obtained directly from the original sources (Sekaran, 2003). The unit of analysis of this study is all respondents who use drylab introductory accounting at UT's Accounting Department. The data was collected through a questionnaire and sent to the students of UT's Accounting Department. Before being sent to the respondents, we conducted a pretest on the questionnaire in advance, to ensure that the sentences in the questionnaire can be correctly understood by the respondents. After the pretest, the questionnaire is sent directly to the student via e-mail and online tutorial. Questionnaires were sent, along with a cover letter containing instructions and explanations charging research purposes. This sample selection method is purposive sampling and based on certain criteria (Sekaran, 2003). Criteria for the selection of the sample respondents are students who register and use drylab program at least since 2011 to 2014.

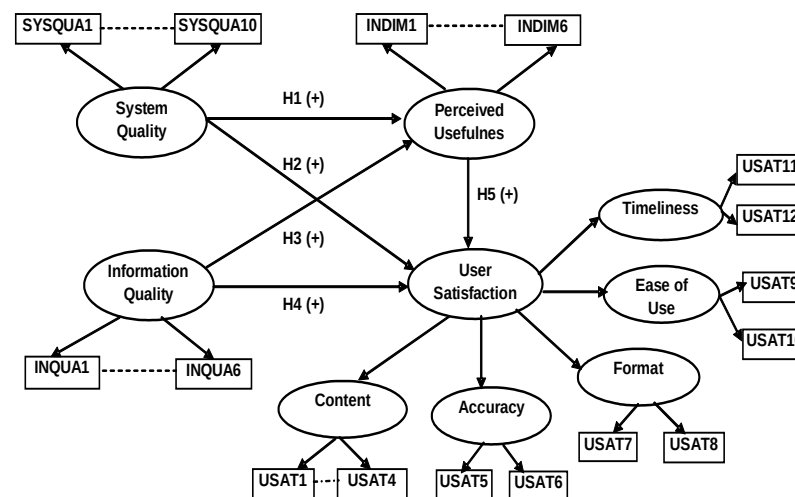


Figure 1. Modified Model of DeLone and McLean (1992) and Seddon (1992, 1997)

The size of the sample is determined by the number of respondents who return the questionnaire. The study period is the period of deployment to the collection of questionnaires from respondents that

during the four months from February 2014 until April 2014.

## Research Model

This research uses a model form of Structural Equation Model and uses a modified model of information system success model of DeLone and McLean (1992) and Seddon (1997), by adding a confirmatory factor analysis (CFA) for latent variables user satisfaction. The addition of this model is expected to give a better explanation on the validity and reliability of each instrument in EUCS. The addition of this model is also based on research results Somers, Nelson, and Karimi (2000).

### Latent Variable

Operationalization of the latent variables are the key variables that are the focus of attention in this study. This variable is an abstract concept that can only be observed indirectly and imperfectly through its effect on the observed variables (Wijanto, 2006). There are 6 Latent variables in this study which consists of:

### Information System Quality

The quality of information systems referred to in this study is the quality of accounting drylab used,

seen from the user perception. The items to measure these variables adopted from the questionnaire used by McGill et al. (2003). The items are an adaptation of the questionnaire Davis et al, (1988). The quality of information systems in the path diagram abbreviated as KS. This variable was measured by 10 questions with 5 Likert scale from very disagree to very agree. The higher the score of this variable, meaning the higher the accounting drylab quality as perceived by the user. The lower the score of this variable, indicating that lower the accounting drylab quality as perceived by the user.

### Information Quality

Information Quality referred to user's perception of the quality produced by the accounting drylab used. Some karakteristik used to assess the quality of accounting drylab of these include the accuracy, timeliness, relevance, informativeness, and Competitiveness (Weber, 1999). The questionnaire used to measure the quality of this information in the adoption of the

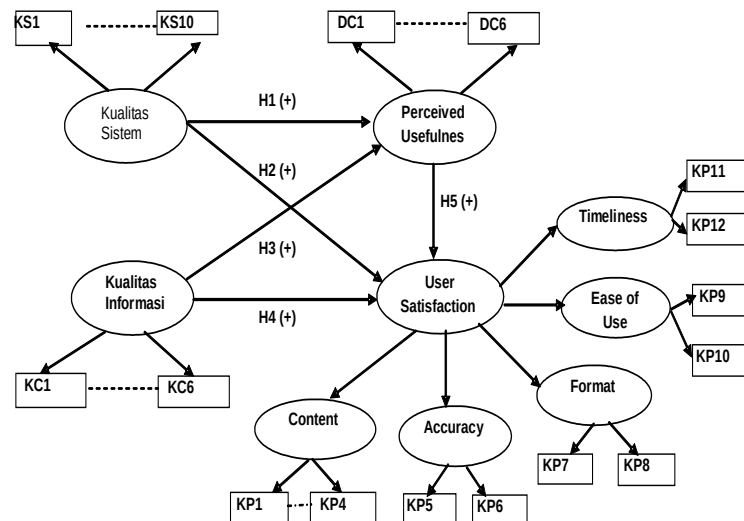


Figure 2. Research Model

questionnaires used in the study of McGill et al., (2003). In the path diagrams, quality of the information is abbreviated as KS. This variable was

measured with 5 Likert scale from very disagree to very agree. The higher the score this variable, meaning the quality of accounting information

generated drylab higher perceived by the user. The lower the score of this variable, indicating that the quality of accounting information produced drylab lower perceived by the user.

### **Perceived of Usefulness**

In this study, perceived of usefulness variable is the user's perception of the extent to which the impact of the use of accounting drylab which may be influential in the increase their performance later. The instrument used to measure these variables are taken from Davis et al, (1988), with modifications of accounting drylab using. This questionnaire has also been used in research Sandee (1984) and Goodhue (1995). In the path diagram of this study, the perceived of usefulness variable abbreviated as DS. This variable was measured by 6 questions in 5 Likert scale from very disagree to very agree. The higher the score this variable, meaning the impact of the use of accounting drylab in improving user performance as perceived by the user is getting higher. The lower the score of this variable, indicating that the impact of the use of accounting drylab user performance as perceived by the user is getting lower.

### **User satisfaction**

User Satisfaction in the study is the level of user satisfaction of using drylab accounting and outputs produced by the drylab. Weber (1999) states that there are five characteristics to assess user satisfaction is the content, accuracy, format, easy of use, and timeliness. Questionnaire to measure user satisfaction of information system in this study was adopted from a questionnaire compiled by Doll and Torkzadeh (1988), which has also been used in studies of Kim and McHaney (2000).

In this study, variable user satisfaction is abbreviated as KP. Indicators for user satisfaction consists of 12 question items with a five Likert scale ranging from very disagree to very agree. The higher the score of this variable, mean user satisfaction over the using of accounting drylab the higher perceived by the user and vice versa.

### **Observed variables**

Observed variables also called manifest variables or observed variables (Ghazali, 2005). Unobserved variables are variables that can be observed or measured empirically which is also often referred to as an indicator (Wijanto, 2006). The observed variable is the effect or the size of the latent variables. Variable is observed in this study consisted of 34 baseline variables that constitute the existing question items in the questionnaire.

KS.

For latent variable quality of information systems (KS) consists of ten observed variables. Observed variables in the path diagram is abbreviated as KS, from KS1 to KS10.

KC

KC was observed variables as indicators of a latent variable quality of information. This variable consists of six indicators in the path diagram of this study, written as KC1 up with KC6.

DS

latent variables perceived usefulness had 6 observed variables, and in the path diagram is written as DS1 up with DS6.

### **Latent Variable Scores**

Special for latent variables user satisfaction of is a confirmatory factor analysis (CFA) of five components: content, accuracy, format, ease of use and timeliness. Each of these components in the initial model is a latent variable in the path diagram is written as Content, Accuracy, Format, Ease and Time. Content have been observed by 4 variable, and written in the path diagram KP 1 until KP4. Accuracy in this study has been observed by 2 variables and written in the path diagram as KP 5 to KP6. Format in this study has 2 observed variables, in the path diagram is written as KP7 to KP8. Ease of use in this study has 2 observed variables, in the path diagram is written as KP9 until KP10. Time variables has 2 observable variables, in the path diagram is written as KP11 until KP12. After calculating the scores for the five latent variable

content, accuracy, format, Ease and Time, then the five latent variables and the observed variables into the research model will be simpler.

## TEST ANALYSIS AND RESULTS

250 questionnaires was sent to respondents, but only 165 questionnaires returned. So the response rate of the questionnaires was 66% of the total questionnaires sent. Of that amount back, there are 20 questionnaires could not be included in the sample because it does not meet the criteria for the selection of samples or incomplete filling. The number of samples that can be obtained final test is included in the 145 questionnaires. The data collection period is for four months from February 2014 until April 2014.

The number of respondents who are qualified to analyze as many as 145 people. The total number of manifest variables (indicators) are 34 questions that represent the five constructs which are system quality, information quality, perceived usefulness,

and user satisfaction. Testing is done by following the steps that apply in the SEM using the method of maximum likelihood estimation (MLE). There is a two-step testing should be performed (Hair et al., 1995) that is testing the suitability of the measurement model and structural model fit.

### 1. Overall Model Suitability

Structural model in SEM analysis begins with testing the overall model fit is seen by the indicator Goodness-of-fit index (GFI) statistics of the output of LISREL (Hair et al., 1995). Overall summary of the critical value of the test the suitability of the overall model can be seen from the summary in Table 1.

By looking at the overall results of the estimation based on existing criteria, the overall values obtained are good. So from the results of an analysis of the reliability of the output for testing the overall model, it can be concluded that the model is a good fit or good.

Table 1. Overall Model Suitability

| Models Criteria for Suitability | Compatibility Level Indicator                                        | Model Estimation Results                         | Level of Suitability Model |
|---------------------------------|----------------------------------------------------------------------|--------------------------------------------------|----------------------------|
| RMSEA<br>P (close fit)          | RMSEA < 0,08<br>P < 0.05                                             | 0.22<br>0.00                                     | Not Good<br>Good           |
| ECVI                            | Smaller values of Independence and closer to the Saturated Model     | M* = 17.13<br>S** = 5.25<br>I*** = 97.07         | Good fit                   |
| AIC                             | Smaller values of Independence and closer to the Saturated Model     | M* = 967.60<br>S** = 756.00<br>I*** = 13978.41   | Good fit                   |
| CAIC                            | Smaller values of Independence and closer to the Saturated Model     | M* = 2806.20<br>S** = 2259.21<br>I*** = 14085.78 | Good fit                   |
| NFI                             | NFI > 0,90                                                           | 0.95                                             | Good fit                   |
| NNFI                            | NNFI > 90                                                            | 0,96                                             | Good fit                   |
| CFI                             | CFI > 0,90                                                           | 0,97                                             | Good fit                   |
| IFI                             | IFI > 0,90                                                           | 0,97                                             | Good fit                   |
| RFI                             | RFI > 0,90                                                           | 0,94                                             | Good fit                   |
| RMR                             | Standardized RMR < 0.05                                              | 0.01                                             | Good                       |
| GFI                             | GFI > 0,90, <i>good fit</i> ; 0.90 < GFI > 0.80, <i>marginal fit</i> | 0,84                                             | Marginal fit               |

M\* = Model S\*\* = Saturated I\*\*\* = Independence

Validity Test



Tests on the validity of a grain of questions indicated by the value of  $t$  and the standardized loading factor. For values of  $t$  must be above a critical value is 1.96 and the standardized factor loading greater than 0.5 (Iqbaria et al., 1997). Question items that do not meet the criteria for a valid test can not be included in the next. The load factor for each indicator on its latent variable is presented in the form of the relationships depicted in the path diagram obtained by running the LISREL program.

Variable User Satisfaction is a confirmatory analysis measured by two stages. First, the latent variables measured using observable variables that second order of five dimensions into the indicator. The second step is to calculate the scores for the five latent variables into dimensions of user satisfaction variables. This score is used as an indicator of user satisfaction through a fifth dimension that has become the observed variables. This variable has five dimensions, namely the content, accuracy, format, ease of use, and timeliness.

Content is measured by 4 (four) of the observed variables KP1 to KP4. Accuracy is measured with 2 (two) variables observed that KP5 and KP6. Format, is measured by two observed variables from KP7 to KP8. Ease of use was measured by two observed variables, namely KP9 and KP10. Timeliness was measured by two observed variables namely KP11 and KP12. From the results of running the program Lisrel for KP twelve variables, all indicators have the  $t$ -value above the critical value of 1.96 and the value of the standardized factor loading are above 0.5. This means that all indicators are valid, so there is no indicator that should be discarded. These results are then used to calculate the latent variable scores of user satisfaction which has five dimensions, namely Content, Accuracy, Format, Ease of use, and timeliness. The results showed that the entire processing this indicator variable has a value of standardized loading factor above

0.5. This means that the variable content, accuracy, format, ease of use, and timeliness meet valid criteria to represent the construct being measured which is user satisfaction.

For system quality variable, the results indicate that all standardized loading factor values for KS1 to KS10 are more than 0.5. So, these variables can be used in the next test because it does represent the construct of system quality. For the indicator variables of the latent variable information quality, the results showed that no variable has a value of standardized loading factor below 0.5. This means that all the observed variables of information quality which is KC1 to KC6 can be used in subsequent testing. Meanwhile for perceived usefulness variable, the overall value of the standardized loading factor is significant, because from DS1 to DS6 has  $t$ -value above 0.5. So from the six variables was observed for the latent variables, can be used for further testing because it represents the construct being measured. Of the total 34 observed variables as indicators for each latent variable in this study, all variables can be included in subsequent testing. LISREL output processing results for each latent variable can be seen in the appendix.

#### Reliability test

Reliability test aims to test the consistency of the grains have a question or statement in the questionnaire. To test the reliability of the variables, we have to calculate the construct reliability (CR) and variance extracted (VE) from each of the observed variables (Hair et al. (1995). If the calculation results of the construct reliability greater than 0.70, and the variance extracted is greater than 0.50, it can be said that the construct had good reliability (Wijanto, 2008). The figures are used to calculate Reliability Construct and Variance Extracted taken from the output Completely Standardized Solution of the data processing. The summary of CR and VE calculations for each latent variable, are presented in Table 2.

Table 2. Construct Reliability and Variance-Extracted Value of Each Latent Variable

| Latent Variabel           | CR value<br>>=0.70 | VE Value<br>>= 0.50 | Summary |
|---------------------------|--------------------|---------------------|---------|
| System Quality (KS)       | 0.956              | 0.741               | Good    |
| Information Quality (KC)  | 0.962              | 0.809               | Good    |
| Perceived Usefulness (DS) | 0.932              | 0.700               | Good    |
| User Satisfaction (KP)    | 0.934              | 0.740               | Good    |

#### Structural Model Suitability

The analysis is performed on the structural equation coefficients by specifying a certain level of significance. Analysis of the structural model to test the hypotheses proposed in this study. For a significance level of 0.05, the value t of structural equation must be greater or equal to 1.96 or greater for practical equal to 2 (Wijanto, 2008). Of the overall hypothesis, generate 3 equations which means there are three structural models proposed.

#### Structural Equation Model 1:

H1: System Quality has positive effect on Perceived of Usefulness

H2: Information Quality has positive effect on Perceived of Usefulness

$DS = 0.47*KS + 0.23*KC$ , Errorvar.= 0.65,  $R^2 = 0.35$

(0.097) (0.082) (0.17)

4.80 2.82 3.79

From the first structural equation in the model above can be seen in the figure below, all coefficients have significant t values. This equation is an equation for the first and second hypothesis. It can be concluded that the hypothesis H1 and H2 in this study is significantly proved.

#### Structural Model 2:

H3: System Quality has a positive effect on the User Satisfaction.

H4: Information Quality has a positive effect on User Satisfaction.

H5: Perceived Usefulness has a positive effect on User Satisfaction.

$KP = 0.46*DS + 0.47*KS + 0.13*KC$ , Errorvar.= 0.22,  $R^2 = 0.78$

(0.077) (0.061) (0.050) (0.033)

5.97 7.71 2.57 6.79

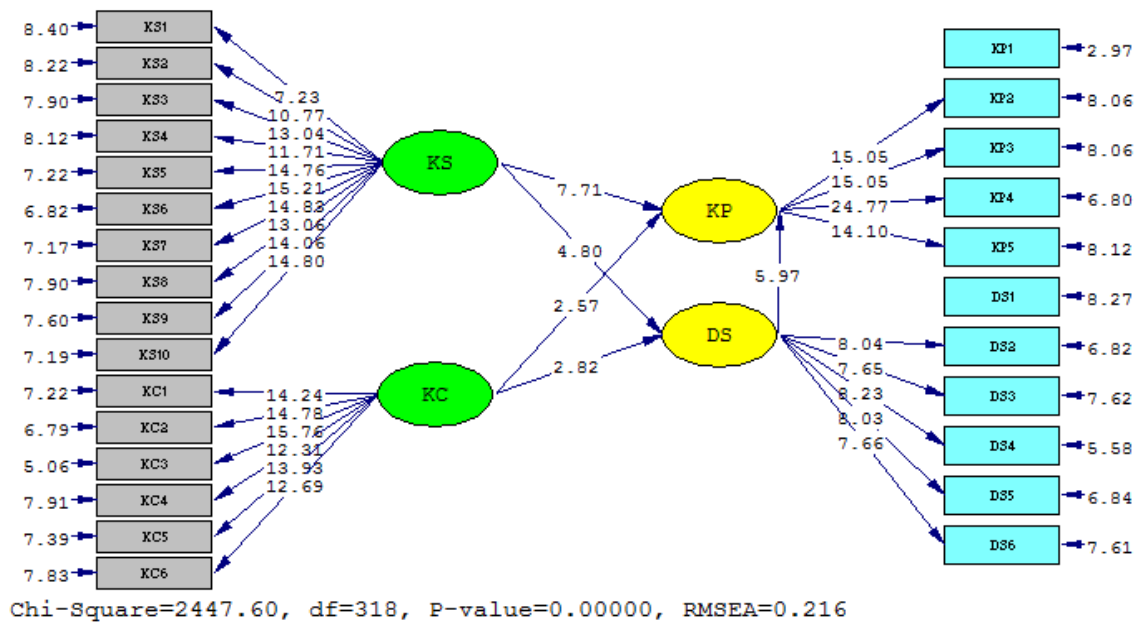
For the equation in this second model, also shown that all coefficients have significant t values above 1.96. So the conclusion that can be drawn is that the H3, H4, and H5 are also proven. From the second equation shows that the models have to offer a good level of significance for the t value is above the critical value of 1.96. This shows that all the coefficients for the first and second equation is significant. The Summary of t-value of each latent variable, are presented in Table 3.

Table 3. t-value for each hypothesis

| Hypothesis | Path  | Estimation | t-value | Summary     |
|------------|-------|------------|---------|-------------|
| H1         | KS→DS | 0.46       | 5.97    | Significant |
| H2         | KC→DS | 0.47       | 7.71    | Significant |
| H3         | KS→KP | 0.47       | 4.80    | Significant |
| H4         | KC→KP | 0.13       | 2.57    | Significant |
| H5         | DS→KP | 0.23       | 2.82    | Significant |

The results of the path diagram in Figure 3 below, shows the structural model generated from Lisrel output.

Figure 3. Path Diagram



### Test Results Analysis

Based on structural equation models testing were produced and confirmed that the system quality is significantly affect perceived usefulness. These results reinforce previous studies of Adams et al (1992), Mao and Palvia (2006), as well as Simon and Paper (2007). The influence of the system quality by Davis et al., (1989) and Chin and Todd (1995) which is defined as the ease of use is the perceived usefulness also supports the findings of Rai et al., (2002) and Gumaraes et al., (2007).

The second hypothesis examines the effect of information quality on the perceived usefulness of positive results also proved significant. These results also support the findings of Seddon (1997), Li (1997) and Rai et al., (2002). This indicates that the higher the quality of information produced by the accounting software used, will increase the perceived usefulness views of user perception.

The third hypothesis regarding the effect of system quality on user satisfaction, the results proved to be significantly positive. These results are consistent with the results obtained by DeLone and McLean (1992), McKinney et al., (2002), Rai et al., (2002), and Livari (2005). It can be concluded that based on the perception of the user, the higher the

quality of accounting software, will further enhance the software user satisfaction.

The fourth hypothesis testing on the effect of information quality on user satisfaction results proved significant positive. These results support the results of previous studies that DeLone and McLean (1992), and Livari (2005). With these results we can conclude that the higher the quality of information produced by the accounting software used, will further improve user satisfaction, according to their perception.

Test results on the effect of perceived usefulness H5 against user satisfaction also proved significant, in line with the results of the research DeLone and McLean (1992). These results also support the model of Seddon (1997), Rai et al., (2002) and also Livari (2005). This gives the conclusion that the higher the level of perceived usefulness, user satisfaction will increase accounting software, based on their perception.

This research is motivated by numerous previous studies conducted related to the model of information system success. The purpose of this study is to see the extent of accounting software in terms of the perception of the user by implementing information systems success model

of DeLone and McLean (1992) and Seddon (1997) modified by adding a variable confirmatory factor analysis to the user satisfaction. This model is used to test the primary data obtained via questionnaires 239 respondents.

This study contributes to the information systems success model of DeLone and McLean (1992) and Seddon (1997) by adding a variable confirmatory factor analysis to the user satisfaction. The addition of CFA will help identify the validity and reliability of each indicator variable into user satisfaction instrument built by Doll and Torkzadeh (1988).

### Conclusion

There are five hypotheses developed in this study which is a model of the relationships that exist in the success of information systems of DeLone and McLean (1992) and Seddon models (1997), and summarized by Rai et al., (2002). After testing the hypotheses proposed in this study, it produced some conclusions which are System Quality proved to be significantly positive effect on perceived usefulness. Information Quality proved to be significantly positive effect on perceived usefulness. System Quality proved to be significantly positive effect on user satisfaction.

Information Quality proved to be significantly positive influence on User Satisfaction. Perceived usefulness proved to be significantly positive effect on User Satisfaction. The results also lead to the conclusion that all the instruments of research into user satisfaction indicators has a good validity and reliability.

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## COMMITMENT IN ENHANCING THE PRINCIPAL DISCIPLINE

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### Abstract

Government Regulation Number 53 of 2010, states that discipline is a Civil Service. Civil Service is the ability to comply with the obligations and avoiding the prohibitions specified in legislation and/or regulations are not adhered to when the official is sentenced or violated discipline and that disciplinary sanctions are imposed on civil penalties for violating disciplinary rules a Civil Service Civil Service. Before the initiative in terms of the condition of school discipline working hours are not adhered to due to lack of socialization and understanding of the rules. In addition, sanctions may not be awarded due to acts of physical evidence that can be used as a basis for sanctions/penalties. Impact motivates others to commit violations without being subject to sanctions. Adherence to the rule lies in the enforcement of all rules and sanctions by the principal as a committed leader. Any infringement action immediately through a predetermined procedure. The purpose of the act is to prevent ongoing violations and sanctions imposed accompanied by strong evidence, so it is acceptable. Principles used to implement the enforcement of all rules and commitment is exemplary sanctions and persuasive approach. Modeling will be an impact on someone willing to open your heart to accept any instructions. With persuasive approach is expected to touch feelings, to educate the soul, and uplifting. It is expected to create a conducive working environment. To achieve the goal, made a personal conversation with the teacher to identify the background of disciplinary offenses. Furthermore, a meeting / conference as a medium of socialization applicable regulations. Record all violations and to give appropriate sanction procedures. The results of the principal action give positive influence on the discipline of working hours / time, attendance teachers, teaching, break, and return in accordance with the terms of working hours, the orderly implementation of administrative activities, and smooth communication. Commitment leader, exemplary, and persuasive approach to raising awareness of teachers to their professional, comfortable feeling, and motivation to compete. This can also be done for other schools hoping to create discipline.

**Keywords:** *commitment, disciplin*

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## INTRODUCTION

### Background

Government Regulation No. 53 of 2010, stating that the Civil Service Discipline is the ability of civil servants to comply with the obligations and avoiding the prohibitions specified in legislation and / or regulations are not adhered to when the official is sentenced discipline or violated. In fact on the ground implementation of these regulations has not gone as expected. Many teachers who break the rules, but not sanctioned so as not to cause effects that motivate teachers to have a better performance increase competence optimally again.

Related to this condition, the principal plays an important role in the development of the organization at the school. The organization at the

school must be made in accordance with the instruction, guidelines, and educational signs that the tasks can be accomplished properly and smoothly. Therefore, the principal must have the leadership skills to organize teachers and other school staff to achieve the goals of the school. School goals achieved or not depends entirely on the discretion of the principal applied to all school personnel.

Principal supervision as the supervisor in charge of organizing the attendance of teachers and other staff. Supervision is one of the main tasks in educational administration are also the principal job duties of the employees of the school. He should be researching, finding and determining which requirements are necessary for the organization's progress in school. Principals should be able to

examine the conditions which have existed and fulfilled, and where there is no or less to the fullest.

Supervision of the teacher serves as a control so that teachers are able to carry out a task or function, respectively. Implementation of supervision with monitoring functions performed by the principal to the teachers to the steps set the standard implementation, measuring actual performance, measure and compare the real execution with established standards, as well as taking the necessary corrective action when execution deviates from the standard. The school principal is more emphasis on direct and motivate personnel in order to carry out the duties and functions well.

The factors that influence the success or failure of supervision or the supervision results faster than other state between teachers the skills or expertise available and the principal itself. How to implement principals Government Regulation No. 53 Year 2010 for achieving the goals of the school?

## **DISCUSSION**

### **Conditions before Initiative**

The teacher is a very important element in the advancement of students. Since that teachers are required to have high commitment and skills of learners, making the quality of good students is the main task of a teacher, always learning to improve the quality of good pedagogy. Teachers must understand their role and function. He should serve as a model or example for children. Each child has the expectation that their teachers can be an example or a model for him. The role of the teacher is as faithful in other educational institutions. A teacher is expected to help his friends who need help in developing their potential. Help can be directed through the official meetings as well as meetings incidental. Teachers as community development communicators. In addition, the role of teachers as well as administrators. A teacher, not only as an educator and teacher, but also as an administrator in the field of education and teaching. Therefore, teachers are required to work a regular administration. Everything in relation to the implementation of the learning process needs to be administered properly. Because the administration is

done as to make teaching plans, noting the results of learning and so is a valuable document that he has carried out his duties properly.

Before the initiative, the conditions of Elementary School Rejowinangun Utara 6, Central District of Magelang, Magelang in terms of working hours does not adhere to the discipline. Some of the teachers present in the school on during school hours and will begin immediately to class to teach some even came to the school after completion of the first recess. Hour lesson starts at 07.15, break for 15 minutes the first two are at 09:00 and 11:00, and ends at 12:25. After students return immediately went home teachers are teachers who return even precede the student without the principal's permission first.

In accordance with Government Regulation No. 53 Year 2010 compliance work hours in a week is 37.5 hours, starting at 07.00 until 14.00 for Monday through Thursday, 11:00 am to Friday, and at 12:30 for Saturday. Teachers present 15 minutes before the start of working hours and the remaining time after the completion of learning to use for other administrative work related tasks teachers.

Violations of either discipline working hours of arrival, rest, and home become more common and convenient to do because it has become a habit. This is caused by the absence of sanctions that can be given to the offender. Penalties cannot be given because of the lack of documents or records of violations. The principal did not have a record that can serve as a strong basis for awarding sanctions and reporting materials for violations occurred despite giving a verbal warning was limited to only. The visit and the findings of the monitoring was not able to be used as material evidence to condemn or sanction.

Supervisor receiving the report could not act without proof, although the majority of his fellow teachers and supervisors, knows the offense, just let it go. The attitude of seeking safe an option as long as it does not interfere with another person in performing the task.

The impact is to motivate other teachers to violate sanctions can be imposed without him.



Giving a warning sanction will only give a sense of injustice for teachers who commit minor violations. Indifferent attitude and pessimistic about the uncomfortable conditions greater. Implementation of administrative tasks cannot be run properly and smoothly. Reasons to be a tool for self-justification for the violations committed.

In addition to the above, another effect which was central to the organization of the school is the learning process becomes unable to function properly and smoothly. Students, too undisciplined. Coming late to school does not make him anxious and worried about reporting teacher gets sanctioned picket. Not doing homework assignments and stay calm because it is not done reprimand. Exit the school without permission during recess has become a habit. Go to class was not implemented immediately and humorous fights without teacher supervision.

There is no caring attitude, look chaotic does not feel burdened. Destroying school, littering, and pray instead of things that are considered sacred.

Surrounding environment becomes indifferent and do not care. Not good communication and only limited if there is a need, not delivered information to the school environment and support stakeholder very less. Such circumstances make public concern about school be very less so.

#### **Implementation Initiative**

In connection with the problems associated with compliance violations actual individual teacher. Compliance has a meaning like obedient, obedient, and disciplined against the rules or orders. Obedient and submissive can be defined as a disciplined, orderly, and organized. People who are obedient and subservient to their religion, meaning people who are disciplined, orderly, and orderly running of worship and piety. Piety towards religion means obedient to His rules and do not do His prohibition. Obedience to His will that created us. The god who built this world, which creates life, which makes man certainly has a purpose. He wants to be the man most noble creature. So if we do not want to obey the call to be noble? Way is proud to have the freedom and lifestyle that is up to us if it did not

make us noble. The freedom that we choose it actually degrades our lives be like being an animal, plant, or robots. In our freedom, we choose to be true to the call of life. Choosing to live a noble. Choose to follow his will. That is the real meaning of obedience.

Adherence to the rule lies in the enforcement of all rules and sanctions by the principal as a committed leader. Each violation has immediately taken action in accordance with the prescribed procedure. The purpose of the act is to prevent ongoing violations so as not to continue with the sanctions with strong evidence that can be accepted. Principles used to implement the enforcement of all rules and commitment is exemplary sanctions and persuasive approach. Modeling will have an impact on someone willing to open up to accept any instructions. Modeling as a model of personality- humanistic. The model emphasizes the personal development of each individual 's self-concept. This includes the development of individual processes and build and organize themselves. The model focuses on a strong self-concept and realistic to help build productive relationships with others and the environment. This model starts from the Humanistic theory, which is oriented to the development of the individual. The primary concern of the emotions in developing a productive relationship with the environment. This model makes the personal capable of forming a harmonious relationship and be able to process information effectively.

While the persuasive approach is expected to touch feelings, to educate the soul, and uplifting. Persuasive approach aims to alter or influence the beliefs, attitudes, and behavior so as to act in accordance with what is expected. Belief/knowledge about something someone believed to affect their attitudes and behavior and ultimately influence their action against something. Changing one's knowledge of something believed to change their behavior.

#### **Destination**

In the development of advanced and versatile technology that cannot be denied developments allow increasing problem, especially for dealing

with the properties of an increasingly diverse teachers. As a result, principals are required to know many of them and master the various concepts of leadership, and professional spirit.

With the model/example and persuasion conducted principals such as attention or suggestions to overcome the trauma that causes resentment of teachers, the lack of impact even believe, irritable, defensive, and deceitful, is expected to create a conducive working environment through the discipline of time or hours work, so that smooth communication is established good cooperation, and orderly administration.

### **Implementation Phase**

In order to achieve these goals through the following steps: First, by calling personally do not discipline teachers. Asked to explain why arbitrarily apply themselves and do not realize that such behavior makes the other fellow to be uncomfortable, apathetic and pessimistic. In addition, another fellow teacher, called and asked to give an assessment of the situation and the condition of the existing and brainstorming so that the condition can provide a sense of comfort in achieving better school performance. The problems found are less teachers understand the rules that exist because of less/no socialization and no sanctions are given. Second, hold a meeting or conference. During the meeting delivered socialization recent regulations that must be adhered to by the teacher and as a consequence sanction in case of infringement. Teachers consulted, issued an opinion together, and look for solutions of all the problems that exist. Third, find the opinion of the teacher wants students, residents' views of the surrounding communities, and advice from superiors. Fourth, exercise authority as head of the school with a commitment to enforce discipline through the signing of integrity pacts. All violations noted in the document violations and the provision of appropriate sanctions.

Provide the principal reasons of integrity pacts such as the application of the law solely to make teachers become more controlled and adhere to the rules.

### **Results Achieved**

After the example and persuasion applied by the principal's commitment to enforce the rules and sanctions-sanctions through integrity pacts:

#### **Discipline time or working hours**

The results from the action provide a positive influence on the discipline of time by the teacher. Starting from the time attendance, lesson start, ten hours of lessons, break, and return in accordance with the terms of working hours. After students return home teacher no longer participate. The time available is used for administrative work and discussion of the various activities and problems that occur. Be comfortable and soothing atmosphere impact. The impact on students is also a co-discipline.

#### **Cooperation and Concern**

Teachers become more communicative and easy to cooperate in completing official duties. Classes fill vacancies due to shortage of teachers through sharing, teaching duties with appropriate choice of subjects each teacher competence No more envy or jealousy towards other fellow teachers. Help each other so that the work becomes lighter and there is no suspicion of the execution of official duties.

#### **Order Administration**

Began working with the orderly administration. Teachers are more proactive in administrative tasks with many questions and discussion with colleagues. Stretching healthy competition within the administration has appeared to resolve perception.

#### **The lesson to be drawn**

Adherence teachers on the implementation of their duties and obligations lies in the commitment of the principal in enforcing regulations.

1. Mental principal leadership in enforcing applicable protein through principle or exemplary models and persuasive approach.

2. Discussions find the problem and will lead the way out with a personal awareness of the duties and obligations to perform properly.

#### Possible Sustainability

1. Dissemination of all existing regulations, has always done so that the latest information can be conveyed.
2. The commitment of principals and teachers on the integrity pact has been made.

#### Possible Deployment

1. The Discipline of the time able to control, discipline in other areas. Teachers who have been disciplined in terms of time certainly will not let them pass you by. He will fill the time with a variety of things that make him energetic, passionate, and has a chance to do much else. For principals perceive that teachers themselves do not adhere to behave arbitrarily

disciplined or hours of work time making people restless for another school. School climate to be uncomfortable, not smooth communication, cooperation becomes constrained, and the achievement of school goals to be obstructed. Therefore, other principals can implement this kind of commitment to make a pact of integrity.

2. Principals with integrity pact will be easier to implement the commitment that makes the teacher becomes more controllable and adhere to the rules. The school principal will also be easier to drop sanctions because of the integrity pact to base decision-making in case of infringement.

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## IMPROVING THE QUALITY OF CARE AND QUALITY ASSURANCE ASSESSMENT IN LEARNING SCIENCE THROUGH LABORATORY-BASED INTEGRATED DEVELOPMENT OF CMI (COMPUTER MANAGED INSTRUCTIONAL)

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### Abstract

The purposes of this study were (1) to develop CMI (Computer Managed Instructional) for the management of an integrated science-based practicum laboratory with a focus on service and value systems, (2) to overcome the problems that occurred in practice management through collaboration between faculty and students, so that all parties could mutually benefit (reciprocity of benefits), and (3). To develop the design and implementation of strategies in an integrated lab-based science laboratory database as input to the development of CMI. The results of the study are (1) The carrying capacity of a computer-based information systems was still very low to be used in conducting laboratory management in the Science Education Program, Faculty of Mathematics and Science, (2) Utilization of CMI could improve service quality and quality assurance in the laboratory science, (3) in the laboratory organizational structure was also empowered as a function of laboratory manager laboratory management system so it needed no intensive special training, and (3) There are ten aspects assessed in the lab activities in Science Education Program, namely (a) observing skills, (b) the skills to analyze the data, (c) skills to communicate the results of the experiment, (d) practical reports, (e) skills using tool, (f) measurement accuracy, (g) discipline, (h) honesty, (i) persistence, and (j) teamwork.

**Keywords:** *Computer Managed Instructional, lab-based learning, quality assurance*

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### Introduction

An integrated lab-based science laboratory at Faculty of Mathematics and Science, Yogyakarta State University (YSU) followed by almost all students of science education from a variety of forces, which is attended by about 250 students. This of course resulted in quite the complexity of managing lab activities, ranging from scheduling, monitoring, provisioning, implementation of pretest, practical implementation, guidance or assistance activities until at last assessment. This condition is sometimes caused primarily length assessment management for nearly 2000 file reports each semester (250 x 8 topics practicum students). For this reason it is considered very necessary to improve the management system in the management of this lab. To given the advances in the computer field has enabled it to be tested in this study was developed CMI (Computer Managed Instructional). CMI is used as a teaching aide increasing administrative function, such as the recapitulation of student achievement data, database worksheets, laboratory administrative

activities such as student data records, lab reports and assessments.

Studies in Science Education, Faculty of Mathematics and Science, YSU, has provided quite a lot of computers connected to the Internet network that is easily accessible to students. This kind of facility is very supportive to develop CMI can be accessed by faculty and students through the existing internet network. Students are provided information about the practicum. In addition, it can also be arranged structured tasks and some questions related to lab materials as deepening understanding of the concept. It is important that the process of practical implementation can run well.

Another problem that arises based on the results of preliminary observations and guiding experience in an integrated lab -based science laboratory during the past few years it is still a lack of independence of students who may be an obstacle in the development of CMI 's other

problem is still not revealed dioptimalkannya existing computers in developing management lab activities. If this problem is left it is feared lab management is not optimal, or the same as previous years[3]. Based on the revealed problems it is necessary a realistic activity in the form of learning for CMI development of integrated lab-based science laboratory. The general objective of this study was to increasing the quality of processes and products in an integrated lab -based science laboratories through the development and implementation of CMI that is used primarily for administration and scoring. While the specific objectives are [4]: (1) CMI to develop an integrated management practicum laboratory-based science with a focus on service and value systems, (2) address the problems that occurred in the management practice through collaboration between faculty and students, so that everyone can reap the reciprocity of benefits, (3) develop the design and implementation of strategies in an integrated lab-based science laboratory on the basis of the data as input for the development of CMI, (4) an inventory of the constraints that exist as a material consideration for reflection and implementation of subsequent research.

Research for the development of CMI for improvement quality and administrative processes in an integrated lab-based science lab provides a positive contribution both from the aspect of matter (content) that can be seen from the material and tutorial system through the Internet, methods and approaches using communication technology that is easily accessible, the evaluation system more quickly and efficiently, and come out in the form of student independence, which is directly related to quality improvement in an integrated lab -based science laboratories in both the practical and theoretical level [5].

## **Method**

Research for the development of CMI for quality improvement and administrative processes in an integrated lab-based science lab provides a positive contribution both from the aspect of matter (content) that can be seen from the material and tutorial system through the Internet, methods and

approaches using communication technology that is easily accessible, the evaluation system more quickly and efficiently, and come out in the form of student independence, which is directly related to quality improvement in an integrated lab-based science laboratories in both the practical and theoretical level.

In accordance with the objectives of this research, to improve the quality of integrated lab-based science laboratory to develop CMI, the developed approach to research and development (R&D). In the process of developing learning materials development model oriented contextual approach used Four-D model developed by [1] which consists of four stages: definition, design, development and deployment.

Borg and Gall [2] propose a series of steps that must be taken in its approach to R&D, namely "Research and information collecting, develop a preliminary form of the product, preliminary field testing, the main product revision, playing field testing, operational product revision, operational field testing, the final product revision, and dissemination and implementation ". If these steps are followed correctly, it is assumed that education will produce a product ready to be used at the class level of learning. According to [2], the stages of research and development put forward Borg and Gall can be simplified into four main steps are simpler to be a model 4-D cycle (Define, Design, Develop, Desemination). Based on the opinion of the steps being taken in this study are:

### **1. Defining Stage (Define)**

The purpose of the definition phase is to establish and define the needs of teaching based on preliminary studies. In establishing the teaching needs to be considered include the circumstances sins learning in the classroom learning, developmental levels of students, and the syllabus used. At this stage of defining the characteristics examined in an integrated lab-based science laboratories, ketapatan learning outcomes and evaluation tools need to be integrated lab-based science laboratory. Through this phase is obtained, among others, the problems that arise in learning.

## 2. Stage Design (Design)

The purpose of this stage is to design or plan a form of learning devices. Included in this phase is to describe the indicators of achievement of learning outcomes based on the basic competencies to be achieved. Of these indicators will be grating evaluation capabilities using measuring devices. In this stage also carried out planning, including; defining skills, set goals, determine the order of presentation of the material, and small-scale evaluation that can be applied.

## 3. Phase Development (Develop)

At this stage of the learning examples that will be used was developed. The steps being taken are:

- Develop the initial product forms, including by preparing teaching materials, reference books, and evaluation tools.
- Initial field tests (on a limited basis). Carrying out interviews, observations, questionnaires, to collect data and analyze it.
- Major product revision, revised in accordance with the recommended products in step b.
- Revised semi-finished products, performed by a step d.
- Revision of the finished product, implemented based on suggestions from the field test of semi-finished products (step f)

## 4. Phase Pendesiminasian (Deseminate)

The purpose of this stage is mendeseminasikan results and distribution of finished product in the form of a script so learning devices are used in classes pemebelajaran. Deseminasi and distribution of finished products in the form of a script so the set of professional meetings and in journals. Finally, for the implementation of quality assurance of the finished product quality control needs to be done on the basis of predetermined quality standards.

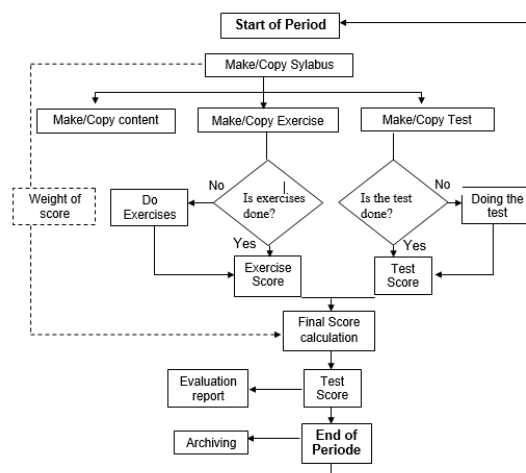


Figure 1. Flow chart computer-based assessment program within the framework of the CMI

## Results And Discussion

Planning stage in product development according to the needs expressed in the results of observations in the form of computer-based assessment program within the framework of CMI laboratory [6]. The development is carried out in this study is fully started and is based on the planning process at this stage. Delineation process or made a rough sketch used as an ingredient in the manufacturing process flow maps or flow charts are a core part of the initial process of product development.

This plan includes the preparation of the program framework in the form of a flowchart (flowchart) that describes the basic components and functions of the program are developed in Figure 1.

The assessment program is basically operated via a computer network comprising a server computer and some computer users (clients) [7]. The computer serves as a central computing server also functions as a data storage medium (database). while the user computers used to access the program in the learning process. In this case there are two types of users are administrators (teachers/lecturers) and user/user (student/student). Therefore, this program is basically organized into two types of pages (pages)

that the page administrator that serves to supply the data required various purposes in learning as well as manage all of the components on the program, and user page/user page is intended as learners to access a variety of learning needs through this program [8].

The developed program content is divided into several menus that are tailored to their respective functions on each type of page, both the page and the page administrator user. Some menu on page administrators are [9]:

- 1) Directive, provides general information about how to use and some things that need to be prepared before starting the learning through this program.
- 2) The teaching period, a menu to adjust the teaching period data as well as initial point of commencement of learning through the assessment program.
- 3) Syllabus, is a data set menu syllabus. Weight rating calculation is used as a reference in the assessment of this program is set in this menu.
- 4) Learning Materials, a menu to adjust the presentation of learning materials. The material can not be made if the teaching period or syllabus is not yet available.
- 5) Exercise, a menu to adjust the making exercises. There are three types of questions in the multiple choice questions, true - false, and multiple answers.
- 6) Test, a set menu item construction and testing are also available in a matter of three types namely the type of multiple choice, true - false, and multiple answers.
- 7) Student Account, a menu that displays account data of students enrolled in the program this assessment.
- 8) Academic Information, a menu that presents the values of the student when the student has been doing exercises or tests are presented. The values are presented consists of numeric values and letter grades, either for training or value of test scores. Additionally it also served as a general statistical information relating to the values presented.

- 9) Records, a menu that functioned as storage files in the previous period so that learning can be accessed again if necessary.

10) The setting of CMI, is a set menu some administrative purposes in the program which consists :

- a) Setting class, which is used to add and change grade class. Classes that have been added can not be removed, because it relates to some of the data in the database and associated with the data - the data in the archive.
- b) Registration Service, which is used to open or close the registration services to mahasiswa. Layanan this registration should be closed when all students have registered so as to minimize the existence of the accounts are not valid.
- c) Setting the Student Account, which consists of setting to reset (reset) the password if required and students to change the settings on the student class.
- d) Change Admin Password, functioned to change the administrator's password.

- 11) Account, a menu that presents information administrator account data such as user ID, Name, NIP, Status, Date and Date Last Access list.
- 12) Logout, in the form of a link to exit the program. About CMI, which contains general information about CMI (Computer Managed Instruction).
- 13) Profile, containing information about the program developers.

While some of the menus on the page regular users (students) are:

- 1) Directive, a menu that provides general information about how to use and some things that need to be prepared before starting the learning through this program.
- 2) The period of the Doctrine & Syllabus, a period that presents a menu that goes along with the teaching syllabus that is used as a reference in the study.

- 3) List of exercises, a menu that lists latihan yang provided. In this menu the students can access and work on the exercises.
- 4) List of tests, a menu that lists yang disediakan test if the test is more than one. In this menu the students can access and work on such tests in realtime.
- 5) Academic Information, a menu that contains the information value of the exercise and the student test scores. Values presented consists of numeric values and letter grades.
- 6) Change Password, namely the menu to change the account password the students concerned.
- 7) Account, a menu that presents information on the student account data such as user ID, Name, NIM, Class, Status, Active Period, Date and Date Last Access list.
- 8) Logout, in the form of a link to exit the program.
- 9) About CMI, which contains general information about CMI (Computer Managed Instruction).
- 10) Profile, containing information about the program developers.

Operationally, the two types are separated based on the status page the user (administrator or user) so that when the user accesses the program in question need to enter the User ID and Password on the main page (login). The registration process is done once pada saat administrator of this program was first installed at the time of login which is accessible for the first time the registration link provided administrators. While the registration process the user (student) is set during the period of the teaching and syllabus are available[10].

This assessment program was developed through writing courses in web programming language that is based on the results of the above planning. As for some of the main software used to create and develop this program are:

- 1) Apache, is software that is used as a server to accommodate the file - file program.

- 2) MySQL database, which is software that serves as a database for storing data - program data such as account data, the period of the teaching, syllabus, materials, exercises, tests, the data value and some other related data.
- 3) PHP, a programming language that is at the same software that is used to translate the program steps of human language into computer/machines.

While some support software used are :

- 1) Notepad + +, a text editor software for writing programs.
- 2) Adobe Dreamweaver, the software for the design of the page as well as writing the program in the text editor.
- 3) Corel Draw and Adobe Photoshop, a software used to design the required images in page creation program.

The whole process of making and development planning program based on the results compiled and adapted to the requirements formulated in the basic objectives of this study. The results of the development of the program in the form of a web - based application program whose main function is to accommodate, modify and save content that is required in the learning process and calculate the corresponding value of existing procedures and workflows that have been prepared.

Computer-based assessment program within the CMI framework aimed at laboratory -based learning is essentially created and developed by the foundation as elearning with combined based on the basic principle of CMI (Computer Managed Instruction) the ability to collect a variety of information related to the learning process (gather information), store (store), update (update), take (retrieve), analyze (analyze) and report the information (reports the information).



The development of the overall program is based on the reference algorithm depicted in the flow chart has been prepared as presented in the flowchart assessment program within the framework of a computer-based CMI). Basic principle operational assessment programs are to be per each teaching period means that there is learning content on the program is fully bound in one period so that the assessment process is done entirely in the data period ongoing teachings. Besides the teaching period can be regarded as the gateway over other learning components such as syllabi, learning materials, exercises and tests.

The assessment process is done based on the availability of the data needed is when the practice or testing done by the users (students). Automatically each exercise or test is completed, the program calculates the value directly obtained and presented in a numeric value or the value of the letter. The reference to the conversion of a numeric value into a letter grade that is used in the assessment process based on the Standard Assessment in Academic Regulations Yogyakarta State University in 2006, CHAPTER VIII Article 29, paragraph 4 of that final value is converted into an A, A -, B +, B, B -, C +, C and D are the standard and number/weight set.

As for some of the main points are used as references in the development of the assessment program are as follows :

- a. The learning system is programmed in one period teachings.
- b. Syllabus as a reference signs in the learning process can only be issued if the teaching period has been opened. The syllabus is also a reference in the assessment process in which the final score ratings are based on the amount of weight training and test weights.
- c. Learning materials as a source of learning material or can be made or arranged with content updated information where it relates to the ease to change/update Opera necessary. In the process of making/publishing of learning materials can not be done if the syllabus has not been formed/no.

- d. Exercises and tests as the basis for examining understanding of the concept presented in a matter of three types namely the type of multiple choice, true - false and multiple answers. In the assessment process serving/weight training and assessment for the test based on the weight of assessment in the syllabus.
- e. Academic information as the presentation of the values achieved are presented in the form of an informative and provided in the format of numbers and letters.
- f. Archiving is done when the teaching period has closed. The data in the archive can be accessed at any time if necessary.

As described in the earlier stages of planning at the top where the program has two types of users are administrators (teachers) and user (student). Program is basically organized into two types of pages (pages) that the page administrator that serves a variety of purposes to supply the required data in the study and manage all of the components on the program, and user page/user page is intended as a student to access a variety of learning needs through this program.

## 2. Distribution Aspects of the Validation Program

Product/program developed a kind of electronic products/digital operation which requires a computer device. Therefore in this product validation process required several aspects related to the basic functionality of programs/products developed. As for the aspects required in the validation process of the program are as follows :

- a. Aspects of the interface and navigation, an aspect that needed to reveal product quality in terms of general use and functions of the navigation program page.
- b. Aspects of access rights, intended to assess the degree of consistency in the diversion program and the presentation of the appropriate type of user pages. This is because there are two types of customized user is an administrator (educators) and user/users (students).

- c. Aspects of the input-output process, intended to assess the suitability of the input data to output data in the program.
- d. Aspects of assessment calculation functions, an aspect that is needed to assess the suitability and correctness assessment process in the learning process through a program/product.

### 3. Distribution Aspects of the Program Assessment

As in the validation process of the product/program, also required the formulation of aspects in the assessment process by the user program with the aim to find out some information related to the use of aspects.

As for the necessary aspects of the assessment process by the user program is as follows :

- a. Convenience aspects, namely whether or not related to the operation of the program is easy to activate functions.
- b. Benefit aspect, an aspect that is needed to assess the usability and usefulness of the basic functions of the program, namely in terms of assessment of learning.

### 4. Results Validation Program.

Based on the data analysis program validation can be seen that the achievement assessment scores in the aspects of access rights, aspects of the input - output functions and aspects of assessment calculations have been uniform amount that is equal to 5.00. As for the aspects of the interface and navigation got a mean score of 4.66. It can be explained that the presence of less value in the aspects of the interface and navigation caused by the level of clarity of navigation points on the session type operation, where it relates to not include a button to return to the previous page. It is also at the same time as the points are used as the point of repair/revision program developed. As for other aspects ie aspects of access rights, aspects of the input - output functions and aspects of assessment calculations have been insufficient for general use.

It has been mentioned that the feasibility of the product/program being developed will be

categorized worth taking if the value of the final validation ber kriteria ' good ' by substituting the value obtained to the reference criteria of an ideal assessment scale of five categories (1-5), which was adopted from the [11]. Through calculating the value akhir validasi products/programs for every aspect of the obtained values of 4.28 akhir validasi. It can be concluded that the product/assessment program that has been developed is a product unfit for use by the criteria gets ' very good ' in the assessment of the five ideal scale (1-5).

### 5. Results Assessment Program

As in the analysis of the data regarding the assessment of the program by the user it appears that both aspects for user convenience administrator/faculty and student users scored higher than the expediency aspect. It can be based on several related materials referenced Things repair/revision of the product such that the absence of further clarification on the feedback on the exercises or tests and not supporting the optimal placement of images on the page program. Through obtained values on the results of this assessment it is Thus Obtained an overall score of good in the aspect of convenience and expediency are aspects of the criteria very well with the value assessment score of 3.98. Thus the product/assessment program that has been developed is a product category 'good' for use with a decent level of convenience and expediency adequate.

### CONCLUSION

With the backup and restore method via the network using a computer program laboratory managed in science Education Program Faculty of Mathematics and Science, YSU we can: (1) make standardization of operating systems and application software for laboratory science education, especially in terms of laboratory management activities, (2) create a backup system and application which has been installed in the form of images that can be easily accessed and facilitate services for the improvement of quality assurance, and (3) repairing the damaged system quickly by restoring over the network.

Related to the purpose of this study is to greater quality of processes and products in an integrated lab-based science laboratories through the development and implementation of the CMI in used mainly for administration and assessment of achievement can be seen through the following indicators: (1) CMI has been developed for the management of science in Practice integrated laboratory-based with a focus on service and value systems, (2) there has been a collaboration between faculty and students, so that all parties can mutually benefit (reciprocity of benefits) associated with the use of CMI in laboratory activities, (3) has been developed design and strategy implementation in an integrated lab-based science laboratory database as input to the development of CMI, and (4) have been inventoried to the constraints that exist as a material consideration for reflection and implementation of subsequent research. Methods This study is a Research and Development (R&D) carried out in an integrated laboratory-based science labs Faculty of Mathematics and Science, YSU start of observation, the manufacture of CMI, until the testing activities.

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## THE LECTURER EMPOWERMENT FOR INCREASING WORK PRODUCTIVITY OF MANAGEMENT LECTURER THROUGH DEVELOPMENT OF LEARNING MATERIAL IN MEDAN CITY

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### Abstract

The main purpose of this research was to increase the work productivity of lecturers by empowering them. This research was conducted by fifteen Management lecturers who worked in public and private universities in Medan City as the sample for this research. They teach Introduction Management, Marketing Management, and Human Resources Management I. Several activities have been done to empower the lecturers as the empowerment effort itself. This research have begun with the discussion among the lecturers who are divided into three groups and each group consisted of five lecturers teaching the same subject. They designed the planning of implementation for lecturing based on entrepreneurship characteristics which is a character forming values and behavior of a person who is always creative, confident, highly motivated to take risks in catching up the goal and it will assist students in facing the challenges of life. The stakeholder also contributed to this research to give suggestions and validation for the planning of implementation for lecturing. Based on the planning of implementation for lecturing, the lecturers composed three modules as learning materials consisting of those three subjects. The lecturers have used these modules in their class. All of these activities have increased work productivity of Management lecturers.

**Keywords:** lecturer empowerment, work productivity, learning material

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### Introduction

The quality of university graduates from Indonesia now is still low compares with another countries. To produce university graduates with high quality, we need education with high quality too. So that, in according to the demand of facing global challenges, we need to improve the quality of education. Lecturer is one of the important factors to create competent university graduates. Therefore, the quality of university graduates is strongly influenced by qualified lecturers as well. The increase of work productivity of lecturer in teaching is one way to increase the quality of the lecturers. Work productivity of lecturer is closely related to the ability of lecturer for preparing of teaching materials.

Lecturer empowerment is one of the way to increase work productivity of lecturer. Employee empowerment leads to enhancing productivity, performance and job satisfaction (Nick et al., 1994).

Furthermore, Duostdar, Rostami (2013) stated that employee's empowerment is a new approach for the development of human resources that can lead to an increasing of productivity employee's performance. Khoshpanjeh, Rahnama, Kalan, Hoseinpour (2012) stated that empowerment employees directly have an impact on organizational productivity.

Nursyamsi (2012) conducted a study about lecturer empowerment. The result showed that lecturer empowerment had a positive influence on the improvement of lecturer performance. It has also been investigated by several previous researchers (Riniwati, 2008; Ariawan, 2007;

Rahman, et al, 2007; Praptadi, 2009) who stated that lecturer empowerment have direct effect to lecturer performance. Research on teacher empowerment was also studied by several other researchers who study how the behavior of teachers in educational organizations that

contribute to the performance of educational organization (Howell & Dorfman, 1986; Diefendorff, *et al*, 2002).

Empowerment is the degree of responsibility, and authority given to an employee. By empowerment, the employees are supported and encouraged to utilize their skills, abilities, and creativity by accepting accountability for their work (Singh and Dixit, 2011). Therefore, in this research there are several activities for utilizing lecturer skills, abilities, and creativities for increasing their work productivities.

Higher education must become more flexible, responsive, efficient, and focused on students' needs to better serve their students in the same way that businesses are finding to better serve their customer needs (Alexander, 2000; Cullen, Joyce, Hassal, & Broadbent, 2003). Entrepreneurship is essentially the nature, characteristics and character of a person who has desire in realizing innovative ideas into real world creatively (Suryana, 2006). Therefore in this research the lecturer developed teaching materials based on Entrepreneurship Characteristics for four subjects Introduction Management, Marketing Management, Human Resource Management (I and II).

## **Literature Review**

### **Lecturer Empowerment**

Empowerment is the degree of responsibility, and authority given to an employee. By empowerment, the employees are supported and encouraged to utilize their skills, abilities, and creativity by accepting accountability for their work (Singh and Dixit, 2011).

Conger and Kanungo (1988) defined empowerment as a process whereby an individual's belief in his or her efficacy is enhanced.

Byham (1992) stated that empowerment is a feeling of job ownership and commitment brought about through the ability to make decisions, be responsible, be measured by results, and be recognized as a thoughtful, contributing human being rather than a pair of hands doing what others say.

According to Bennis, 1989; Block, 1987; Kanter, 1977; Kanter, 1979; Kanter, 1983; McClelland, 1975) empowerment is defined as an approach to leadership that empowers subordinate as a main constituent of managerial and organizational effectiveness (Honold, 1997). Rappaport (1987) defined empowerment process as mastering on problems of organizations by people, organizations, and societies (Amin, *et.al*, 2010)

The organization have gained many benefits if they have empowered employee. One of the gains of empowerment is improved employee attitude, such as a highly motivated staff (Lashley, 1995b; Tyson, 1994). Empowering makes employees feel that they are appreciated and for making it possible continuous and positive feedback on their performance is essential (Smith, 1997). Sanderson (2003) believed that empowerment creates motivation, and energy in workforce to do their work efficiently and effectively (Amin, *et.al*, 2010).

In education, in terms of lecturer empowerment related on their capability for teaching. According to Barizi (2000), empowerment of lecturers is an activity or process that is intended to maintain and improve the skills, attitudes, understanding and lecturers's performance in its role of faculty academic personnel on the present and future.

Dee, *et al* (2003) stated that empowerment in education refers to teachers who demonstrate high commitment to their work and the organization and the level of commitment can be seen from their confidence and the result of their confidence. The results showed that empower a positive effect on teachers's commitment in schools.

Empowerment of teachers can also improve satisfaction for the students. A research conducted by Yunus, Ishak, Razak (2010) showed that there is a significant relationship between the dimensions of motivation, empowerment and service quality with satisfaction level of students at the Polytechnic of Malaysia.

Research on the empowerment of teachers and lecturers has started since 1980 (Edwards, Green, & Lyson, 2002). Furthermore, Short, Greer & Melvin (1994) defines empowerment of teachers and

lecturers as a process in which the participation of teachers and lecturers may be able to develop its competence, and they are able to develop themselves and be able to solve their own problems.

Related on the empowerment of teachers and lecturers so that Short (1994a) explains in detail that there are several dimensions that can affect the successful performance of a teacher and lecturer is viewed from the aspect: decision making, professional growth, self-efficacy, autonomy.

Another study by Sweetland & Hoy (2000) recommends that there are 4 supporting assumptions will develop a teacher and lecturer, namely professionalism, organizational and classroom, technology of teaching and learning, authentic.

#### Work Productivity

Productivity is not just that "doing something right" to the maximum performance achieved, but the "right things" to reach maximum effectiveness (Garvaie, 2001).

Rolloos (1997) defined the productivity as that which people can produce with the least effort. Productivity is also defined by Sutermeister (1976) as, "output per employee hour, quality considered". Dorgan (1994) defines productivity as, "the increased functional and organizational performance, including quality".

Work productivity according to Tri Dharma of Higher Education is closely related to the number of opportunities in the implementation of Tri Dharma's activities that is related to education and teaching, research and dedication to public.

#### Learning Material

Sudjana (2006) stated that learning materials is an approach used by a teacher or educator for implementing the learning process through certain stages so that the student can follow the teaching and learning process.

According to Mulyasa (2006) learning materials consists of knowledge, skills, and attitudes which students need to learn in order to achieve the standard of competence. Gafur (2004) stated that

instructional material is the knowledge, skill and attitude to be taught by teachers and learned by the student. The learning material contains subject matter that must be mastered by the teacher and communicated to students

Mulyasa (2006) mentions that the forms of learning materials are:

Printed materials such as; modules, books, worksheets, brochures, handouts, leaflets, wallchart

Audio Visual, such as; video/ film, VCD

Audio such as; radio, kaset, CD audio

Visual such as; photo, picture, model

Multi Media such as; interactive CD, *computer based*, Internet

#### Research Method

This research was a qualitative research. There were two kinds of data used in this research are primary and secondary data. Primary data source was observation while secondary data were literatures from books, internet and journals.

#### Result and Discussion

##### Result

Lecturers are the most central in the development of higher education so it needs to be empowered them in order to enhance their work productivity. Research on lecturer's empowerment can not be separated with empowerment efforts itself. The activity aims to improve work productivity of lecturer. According to Anhar (2007) work productivity of lecturers is very influenced by several factors: knowledge, skill, ability attitude and behavior. Therefore, this research have done some efforts for empower the lecturer. These activities are:

The workshop of entrepreneurship characteristics in learning

This workshop was aimed at improving lecturer's knowledge about entrepreneurship characteristics in learning. This activity has involved stakeholders as speakers, namely Mr. Buchari as

Chairman of the Student Entrepreneurship Centre (SEC) of University of North Sumatera and Mr. Indra Siregar is a Human Resources Manager PT. Sosro Medan. The number of participants of the workshop is 40 lecturers from various state and private universities.

The speakers have presented on the importance of entrepreneurship characteristics in learning and this will be very useful for students in developing themselves in their work.

Entrepreneurship characteristics take from opinion of Scarborough, N. & Zimmerer, T (2000). He suggests the characteristics of entrepreneurship are have a responsibility (desire for responsibility), prefer to choose moderate risk, it means he always avoids a high risk (preference for moderate risk), confident in himself/herself to succeed (confidence in their ability to succeed), requires a feedback (desire for immediate feedback), have a high energy (high level of energy), oriented to the future (future orientation), have skills in organizing resources (skill at organizing), achievement as the primary motivation (value of achievement over money), high commitment to work (high degree of commitment), tolerance against an uncertainty (tolerance for ambiguity), ability to adjust themselves with a change (flexibility), ductile (tenacity).

Activity for compose draft of activity in learning

The second activity is an activity for compose draft of activity in learning based on entrepreneurship characteristics for the three subjects, Introduction to Management, Human Resource Management and Marketing Management.

This event was attended by 15 lecturers from state and private universities. Group discussion divided into three teams that are adjusted to the three courses. The number of participants for each group consist of five lecturers of the same subject.

As for draft of activity in learning is Planning of Implementation for Lecture based on entrepreneurship characteristics for the three subjects, Introduction of Management, Human Resource Management and Marketing Management.

Before starting the discussion, the lecturer given knowledge about the various models of learning that can be used to load the entrepreneurship characteristics in each subject. The final result of this activity is Planning of Implementation for Lecture based on entrepreneurship characteristics for the three subjects, Introduction of Management, Human Resource Management and Marketing Management.

Discussion among lecturer with stakeholder

This discussion is very important to evaluate the Planning of Implementation for Lecture based on entrepreneurship characteristics for Human Resource Management and Marketing Management. The participants were the lecturer who teach Human Resources subject and Marketing Management subject. The stakeholder gave input and evaluation for that Planning of Implementation for Lecture.

The workshop of design learning module

The one of kind for learning material is the learning module. The purpose of that workshop for increasing knowledge of lecturer so that they knew how to make learning module clearly.

Discussion among team of lecturer

Discussion among team of lecturer is very important for empowering lecturer. The lecturer discussed for developing learning material. Group discussion divided into three groups that are adjusted to four courses and for each group consist of five lecturers for the same subject. They have made learning modules for four subjects Introduction Management, Marketing Management, Human Resources (I and II).

## **Discussion**

Lecturer empowerment has positive impact for increasing work productivity of lecturer. Lecturer empowerment in learning means giving some authorities for lecturer for making a decision in their learning. Holpp (1994) said that empowerment leads to self actualization and creates a happier, more energetic workplace.

There are some activities increase work productivity of lecturer. According to Japan Productivity Center stated that increase in staff productivity factors such as staff development and training, including their empowerment, participatory management, equity and fair distribution of funds (Alan, 1997). In this research the lecturer attended in the workshop for building their capacity as a educator, they achieved more knowledge and skill for learning.

Team of lecturer have discussed to make their modules of learning and they used their own ideas to make it. The lecturer also have power and authority to make decision for developing their learning material. Herrenkohl et al. (1999) found the following current uses for the term of empowerment: a redistribution of power and authority, maximizing employee contribution to the success of the firm, full participation of workers in decision making, shared vision between employees and management and self-motivation. Empowered teams have higher levels of customer service and job satisfaction (Kirkman & Rosen, 1999; Spreitzer, Kizilos, & Nason, 1997).

### **Conclusion**

The concept of empowerment is not only means of empowering employees and delegating authority. But also is a process by which employees acquire knowledge, skills and motivation can improve performance. Therefore employee empowerment is an effective technique for increasing employee productivity and use of their individual and group capacities and capabilities in line with organizational objectives. This research have made some efforts for empowering the lecturer in order to increase the work productivity of lecturer.

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## IMPROVING TEACHERS' COMPETENCE IN DESIGNING LESSON PLANS THROUGH KKG IN ELEMENTARY SCHOOLS

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### ABSTRACT

This study was intended to describe the increase in the ability of elementary school teachers in Magelang in designing lesson plans. The procedures performed in this study included planning, action, observation and reflection that were recycled or cycled. This research was conducted in two cycles. Training in the lesson planning using the pattern in the KKG may actually enhance the ability of elementary school teachers in preparing lesson plans in Magelang.

**Keywords:** *lesson plan, KKG, action*

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### Introduction

One of the aspects that influence the national education success is curriculum aspect. The curriculum is a system of learning programs to achieve institutional goals in educational institutions. Therefore, the curriculum plays an important role in achieving the schools' qualities.

The curriculum is a set of plans and the setting of the objectives/competencies, content, and teaching materials, as well as the means used to guide the organization of learning activities to achieve specific educational goals.

The top of curriculum successful will be determined by the actual implementation of the curriculum. The implementation of KTSP (curriculum based on educational unit), embodied in the form of learning activities and based on the lesson plan that have been designed before. On the practice, the implementation of curriculum which is not suitable with the learning design often exists. As the result, the objectives that have been set before cannot be achieved optimally.

In order to keep the curriculum fit with the design, it needs some preparation especially the preparation of implementation. Whatever it looks good both on design or curriculum design but the success depends on the teachers. Even in the simple curriculum design, if the teachers have the abilities, passions, and dedication then the output will also

be better than the teachers who have low dedication. Key for the successful of education not only lies on the resources, but also on the teachers as the main key.

The Curriculum implementation actually occurs during the learning process. The learning process is a process that contains a set of actions of teachers and students based on the reciprocal relationship which takes place on educational situation in order to achieve particular goals, on that process include the teachers' multi-role such as planning, implementing, and evaluating curriculum.

The teacher's role related to the curriculum planning is teacher's lesson plan (RPP). it is intended to create a preparation of lesson plan which based on the assumption that lesson plan should be done in order to keep the lesson run smoothly, especially to avoid unfocused opportunity as well as improvise with unclear reference.

Related with the above matter, the teacher is expected to do learning preparation or learning material related to both physical and psychological conditions conductively toward the learning process. Basically planning activities may include, expected objectives determination/competencies/indicators, specify materials/learning resources, determine the learning media, methods, learning tools as well as the assessment planning.

Planning is a systematic means in order to achieve the goal. Through the good lesson plan hopefully, will make the learning activity easily.

Having teachers who are able to plan, implement, and evaluate the curriculum is an expectancy of all education unit's leader. However, in the reality, still there are teachers who incapable of doing such things. One of them is constructing lesson plan and one of the education unit teachers who still are incapable to create lesson plan is in Magelang elementary school where most of them still not be able to create lesson plan.

### **Lesson Plan (RPP)**

In general, a principal have at least five tasks and roles as set out in the Regulation of the Minister of National education No.13 2007 about the Standards for School/Madrasah namely: personal competence, managerial, entrepreneurial, supervision, and social competence.

A school principal should understand what he/her duties and roles in school exactly. If the principal is able to understand the task and its role as the principal it will be easy for them to carry out their duties with regard to their plan related to the development of the management.

There are some competencies that have to be done by the principal in carrying out his/her duties in their school. Among them are evaluating the teachers' behavior toward their performance in perform their duties in school based on the competency standard from SISDIKNAS, those behavior including teachers are expected to be able to make their own lesson plan up to make assessment both on the process and output assessment correctly.

Lesson plan also known as instructional design is an activity which needs to be done before the teacher perform the learning process. There are many terms to name the lesson plan such as, lesson plan, learning programs, learning scenarios, and also learning design. But, whatever the terms is; the

From those limitations, could be concluded that the lesson plan or teaching program is a

concepts remain the same, which refers to a planning process in learning activities.

Design is a plan, pattern or model (Rusman, 2008: 24). Learning designing means arranging or preparing the learning design with the syllabus, competency standard and basic competencies required accordingly.

Teachers are expected to also be able to outline the objectives stated in the curriculum into the more specific objectives. Further, those specific objectives are translated into learning activities. An activity prior to the implementation of this learning is called as a planning activity. Planning made by the teacher known as lesson plan.

Planning, also known as election from a number of alternative procedures about reaching the determination, and the estimated sources which could be provided to achieve these particular goals (advised, 2004: 134). Moreover, planning is a set of operations that is consistent and coordinated in order to obtain the desired results (Oemar Hamalik, 2008:135). While teaching or teaching unit is a form of preparation for each detailed theme which compiled systematically based on the guidelines of Teaching Program that has existed for a particular subject (advised, 2004: 156).

While, Wahjosumidjo in his book "Leadership Principal theoretical Overview and Issues" argued that the teaching program is referred as the arrangement of subjects, time allotment, and spread in every class and education units (2007: 209).

Other limitations about RPP are written in the RPP (Lesson Plan) explanation book which is said that RPP is the translation of the syllabus that describes the procedures and organization of learning activity to achieve basic specified competence in the Content Standards. RPP is used as the teachers' guide on implementing the learning activities in the classroom, laboratory and/or field.

determination procedure or estimates made by the teacher in preparing learning activities for a specific

competence on particular subject to achieved the expected objective.

Lesson plan at least contains of five aspects, such as:

1. Purpose of learning
2. Learning materials
3. Learning method
4. Sources of learning
5. Assessment of learning outcomes

While the lesson plan format that could be developed are as follows:

#### LESSON PLAN

|                          |        |
|--------------------------|--------|
| Subjects                 | :..... |
| Class/Semester           | :..... |
| Meeting                  | :..... |
| Time allocation          | :..... |
| Competency Standards     | :..... |
| Basic Competence         | :..... |
| Indicators               | :..... |
| A. Learning Objectives   |        |
| B. Learning Materials    |        |
| C. Method of Learning    |        |
| D. Lesson                |        |
| 1. Introduction activity |        |
| 2. Core activity         |        |
| 3. End /cover activity   |        |
| E. Learning sources      |        |
| F. Assessment            |        |

#### Teachers Working Group (KKG)

Each of the leaders has their own responsibility to develop his/her subordinates or employees, no matter the level of the leadership. That responsibilities start from that employee officially being accepted to join the school. The meaning of by developing the employee is every leader effort to add more skill or working efficiency from his/her workers in performs their duties and places them within their position correctly.

The Effort to fulfill this purpose is done through varieties action such as training, promoting and movement. One of the leaders' duties is to train their employee. The training is not only as a new

employee, but also when a person is promoted to a higher position or when the new technologies are being implemented in that company. The employees should be given training in order to help them in doing their duties. Those training could be done through teachers' group working (KKG). KKG could be used as a program in which should be implemented because of there is an assumption that it could improve the teachers abilities in performs their duties efficiently.

KKG could be interpreted as a process of transformation of expertise, knowledge as well as ability into action. This activity could be implemented toward the old employees, especially the new teachers. KKG is the process of helping resources contained within an organization to gain effectiveness in their current job or future through the development of skills, knowledge, and attitude.

Besides it can help to improve the competency, this activity is also intended to be a site for skill development and employees discipline or employee based on their own field or working areas.

Through this group work, the participants can withdraw or share their work experience or reflect to the activities that they have been done before and then trying to evaluate as well as correct their mistake that they still does. While things that considered as good, can be maintained or even be enhanced.

Another benefit from KKG activity is employee development to achieve efficiency and day –to-day work as well as to anticipate the future tasks. KKG could also be an effort for career development and self-developments' employee.

#### Research Methods

The method used in this study is explanation approach of the sites in the city area and population in Magelang. The objects of this study were teachers of grade three and grade four.

## Discussion of Results

### 1. PHASE ACTION RESEARCH SCHOOLS

|                                                                                                                                      |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cycle I                                                                                                                              | Planning<br>(Identify the problem and determining the alternative solutions) | Problems identified with regard to competencies that must be mastered by the teacher: the teachers' do not have ability in composing the lesson plan.<br>Alternative solutions offered is education through KKG for the teachers who need assistance in improving their skill<br>this activity is called teachers' group working program<br>Scenario that can be done through this activity:<br>1) The coach gives the description of the material that must be mastered by the participants.<br>2) Coach provides an opportunity to conduct a discussion with the participants.<br>3) Coach provides training worksheets for participants.<br>4) Participants discuss for completing the worksheets given coach.<br>5) Participants submit their work to the coach.<br>6) Coach provides feedback on the work of participants.<br>7) Participants and coaches reflection. |
|                                                                                                                                      | Action                                                                       | Applying the action refers to the scenarios that have been established.<br>Perform evaluation, namely the examination results as indicators that have been set.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                                                                                      | Observation and Evaluation                                                   | Perform observations using the format provided.<br>Documenting in the form of images for every moment of action that are important to note.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                      | Reflection                                                                   | Doing conversation (discussion) with the participants to discuss the implementation of the activities that have taken place.<br>Improving the implementation of appropriate measures to be used in the evaluation of the results of the second cycle.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                      | Reflection<br>Indicators of Success Cycle I                                  | Participants considered successful when they were able to prepare lesson plans suitable with guidelines issued by the National Education Standards.<br>Participants obtained a score of at least 2 (scale 0-4) (Rusman, 2008: 292).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Cycle II                                                                                                                             | Planning                                                                     | <ul style="list-style-type: none"> <li>Identify problems based on the findings and reflections on the 1st cycle</li> <li>Training program development based on the 1st cycle reflection.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                      | Actions                                                                      | Implementation of the second cycle                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Actions scenario that can be done related to the activity of "on the job training" are as follows:                                   |                                                                              | <ul style="list-style-type: none"> <li>Participants discuss in order to complete the worksheets given by the coach.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>Coaches provide exposure to the material that must be mastered by the participants</li> </ul> |                                                                              | <ul style="list-style-type: none"> <li>Participants submit their work to the coach.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <ul style="list-style-type: none"> <li>Trainer provides an opportunity to conduct a discussion with the participants.</li> </ul>     |                                                                              | <ul style="list-style-type: none"> <li>Coaches give feedback toward the participants works</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <ul style="list-style-type: none"> <li>Coaches provide training worksheets for the participants.</li> </ul>                          |                                                                              | <ul style="list-style-type: none"> <li>Participants and coaches doing the reflection</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

The 1st cycle of PTS participants' lesson plan results

| NO          | NAME OF RESPONDENT | LESSON PLAN EVALUATION ASPECTS |           |         |       |            | FINAL SCORE |
|-------------|--------------------|--------------------------------|-----------|---------|-------|------------|-------------|
|             |                    | OBJECTIVES                     | MATERIALS | METHODS | MEDIA | EVALUATION |             |
| 1           | A                  | 4                              | 2         | 2       | 2     | 1          | 2,2         |
| 2           | B                  | 4                              | 2         | 2       | 1     | 1          | 2           |
| 3           | C                  | 3                              | 2         | 2       | 2     | 1          | 2           |
| 4           | D                  | 4                              | 2         | 2       | 1     | 2          | 2,2         |
| 5           | E                  | 3                              | 2         | 2       | 2     | 1          | 2           |
| 6           | F                  | 4                              | 2         | 2       | 1     | 2          | 2,2         |
| 7           | G                  | 4                              | 2         | 2       | 1     | 2          | 2,2         |
| 8           | H                  | 3                              | 2         | 1       | 2     | 2          | 2           |
| 9           | I                  | 4                              | 2         | 2       | 2     | 1          | 2,2         |
| TOTAL SCORE |                    |                                |           |         |       |            | 19          |
| MEAN (M)    |                    |                                |           |         |       |            | 2,11        |

The 2nd cycle of PTS participants' lesson plan results

| NO          | NAME OF RESPONDENT | LESSON PLAN EVALUATION ASPECTS |           |         |       |            | FINAL SCORE |
|-------------|--------------------|--------------------------------|-----------|---------|-------|------------|-------------|
|             |                    | OBJECTIVES                     | MATERIALS | METHODS | MEDIA | EVALUATION |             |
| 1           | A                  | 4                              | 3         | 3       | 3     | 2          | 3           |
| 2           | B                  | 4                              | 2         | 2       | 3     | 2          | 2,6         |
| 3           | C                  | 4                              | 3         | 3       | 3     | 1          | 2,8         |
| 4           | D                  | 4                              | 3         | 3       | 2     | 3          | 3           |
| 5           | E                  | 4                              | 2         | 3       | 2     | 2          | 2,6         |
| 6           | F                  | 4                              | 3         | 2       | 2     | 3          | 2,8         |
| 7           | G                  | 4                              | 2         | 2       | 3     | 2          | 2,6         |
| 8           | H                  | 3                              | 2         | 3       | 3     | 2          | 2,6         |
| 9           | I                  | 4                              | 3         | 3       | 2     | 2          | 2,8         |
| TOTAL SCORE |                    |                                |           |         |       |            | 24,8        |
| MEAN (M)    |                    |                                |           |         |       |            | 2,76        |

The differences between 1st and 2nd result of PTS participants' lesson plan

| NO            | NAME OF RESPONDENT | 1ST CYCLE RESULT | 2ND CYCLE RESULT | NOTE (DIFFERENCE) |
|---------------|--------------------|------------------|------------------|-------------------|
| 1             | A                  | 2,2              | 3                | Up 0,8 poin       |
| 2             | B                  | 2                | 2,6              | Up 0,6 poin       |
| 3             | C                  | 2                | 2,8              | Up 0,8 poin       |
| 4             | D                  | 2,2              | 3                | Up 0,8 poin       |
| 5             | E                  | 2                | 2,6              | Up 0,6 poin       |
| 6             | F                  | 2,2              | 2,8              | Up 0,6 poin       |
| 7             | G                  | 2,2              | 2,6              | Up 0,4 poin       |
| 8             | H                  | 2                | 2,6              | Up 0,6 poin       |
| 9             | I                  | 2,2              | 2,8              | Up 0,6 poin       |
| TOTAL SCORE   |                    | 19               | 24,8             | Up 5,8 poin       |
| VALUE RPP (R) |                    | 2,11             | 2,76             | Up 0,65 poin      |

From the table above, can be concluded generally that in fact KKG could improve the teachers ability in compose lesson plan. This is proved by the significant results both in the first and the second cycle. The results showed that there is an improvement especially in 1st and the 2nd cycle score results.

In the second cycle, there are 3 people or about 33.33 % of teachers has increased their score at least 0.8 points, 5 teachers, or approximately 55.55 % for 0.6 points, and 1 teacher, or approximately 11.11 % had increase in value by 0.1 points.

### **Conclusion**

KKG can improve the ability of preparing lesson plans for elementary school teachers Magelang. This is indicated by the results of the assessment carried out by comparison of the acquisition score on the first cycle and the second cycle with an average value of 2.11 in the first cycle to 2.76 in the second cycle. In other words, there is an increase of 0.65 points.

KKG also was able to provide motivation and fun atmosphere for participants as long as they follow the activities and training.

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## TEACHERS' CREATIVITY AND LOYALTY IN OVERCOMING THE IMPACTS OF THE IMPLEMENTATION OF CURRICULUM 2013 IN GRADE 1 OF ELEMENTARY SCHOOLS

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### **Abstract**

In reality there are still a lot of obstacles encountered in the implementation of Curriculum 2013, primarily in the first grade of elementary school students who cannot read and write. One case is like what happened in SD Negeri 3 Kedungsari Magelang. The 1st grade teachers have difficulties in delivering the materials for the majority of students because of their incapability to read and write while the material is very dense with limited time. To overcome these problems the 1st grade teachers of SD Negeri 3 Kedungsari Magelang need to be more creative to train students to read and write outside the school hours. Although, there are many parents who object to this because their children should return in the exceeded time limit of learning in general. With the creativity, loyalty and patience of the teacher, it can be seen that the students in the 1st grade of SD Negeri 3 Kedungsari who initially have difficulties in reading and writing can keep learning in line with the expectations. The creativity and loyalty of teachers can overcome the problems that arise in the implementation of Curriculum 2013, especially in the elementary school classroom 1. The activities which are undertaken by the first grade teacher of SD Negeri 3 Kedungsari Magelang need to be developed in a sustainable manner and should also be followed up for years to come.

**Keywords :** Curriculum, 2013, students of grade 1 of elementary school, loyalty, creativity

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### **INTRODUCTION**

In the National Medium Term Development Plan 2010-2014, explained that the curriculum is based on the evaluation conducted by the Center for Curriculum and the book shows the need for a realignment of the applied current curriculum (CBC). On that basis, the Government of Indonesia in July 2013 would impose a curriculum launched in 2013 on a limited basis and will begin the school year 2013/2014. Curriculum 2013 will be implemented nation wide by 2015. Various attempts have been made, among others, the socialization curriculum in 2013 through a mini piloting in several provinces. This is confirmed by the Minister of Education and Culture through its policies, that Curriculum 2013 is expected to generate productive Indonesian people, creative, innovative, and through strengthening affective attitudes, knowledge, and skills are integrated. Thus, Curriculum 2013 is expected to overcome the weaknesses that exist in the previous curriculum.

Reality on the ground is still a lot of obstacles encountered in the implementation of learning primarily grade 1 elementary school students who can not read and write, among other things in SD Negeri 3 Magelang Kedungsari. Grade 1 teachers have difficulty in delivery of material for the majority of students have not been able to read and write while the material is very dense with limited time.

Based on the above facts, the writer is interested in conducting research to help students, teachers, and parents yang mengalami anxiety in addressing problems faced by students who have difficulty reading and writing beginning in grade 1.

The object of the study is the first graders in elementary Kedungsari 3, Magelang. Then the researchers took the title in context CREATIVITY AND TEACHER LOYALTY COPING WITH THE IMPLEMENTATION OF CURRICULUM 2013 PRIMARY CLASS 1 CITY STATE Kedungsari 3 Magelang.

Based on the studies mentioned above, the research. This is be focus is: How can businesses overcome the difficulties teachers first grade students in reading and writing starters.

Furthermore, from the focus broken down in to three sub-focus, namely:

1. Helping students who have difficulty in reading and writing the beginning so that they are able to read and write fluently so that they can follow the lessons well,
2. Assisting teachers in Teaching and Learning Activities for learning to run smoothly so as to achieve the expected goals,
3. Helps parents of students who have difficulty in reading and writing in order to reduce anxiety because set heir child can not attend the class because they can not read and write,
4. Reduce the impact of the implementation of the implementation of Curriculum 2013 in Grade 1 elementary school students in order to improve the quality of education in schools.

## **METHODS**

In this study, using a qualitative approach and case study design. This, because of the nature of qualitative data collected patterned, not a series of numbers. Thus produces descriptive data in the form of written or spoken word from the people and observed behavior (Bogdan and Taylor. 1975). Furthermore, in accordance with peculiarities that will be done in this study, researchers used a design or case study research. In this study, the researcher was present in the field since the preparation, implementation and refinement of the data for analysis. The existence in the field of research tailored to the needs of the implementation itself, from beginning to end. The presence of the researcher is indispensable in conducting in-depth interviews, observation and documentation studies. The data source was the Principal, Officers, Teachers, and parents. Sources of data taken purposively, and not random. Thus,

this study uses the technique of "snowball sampling". Collecting data in this study using the basic techniques depth interviews, observation (participant and non-participant observation) and documentation. Equipped with a variety of field notes and resources another, both from the words and actions, written sources, photographs, and statistical data.

To obtain findings and interpretation of the data is valid and acceptable to all parties, then checking the validity of the data. This is done through triangulation. Researchers in this regard will do checking and authenticity of data through triangulation of data, namely the principal, teachers, and parents. The principle used in this activity is the Teacher Creativity and Loyalty in the implementation of learning in schools by providing additional specialized subjects (reading and writing beginning) for students of classes 1 Elementary School Kedungsari 3. Creativity and Teacher Loyalty here more emphasis on methods and techniques teachers in teaching which is based on sincerity spirit services to students because these activities are done outside of school hours, thereby reducing the break time teacher. In this case it takes the cooperation of teachers and parents home school because students will be more daylight so requires patience parents who pick up sons and daughters, and gives additional allowance.

## **RESULTS AND DISCUSSION**

At the beginning of the school year the student trying to read. For students who can read is certainly not a problem, but for students who can not read and do not make them afraid to go to school. Finally, the 1st grade teacher SD Negeri Kedungsari 3 Magelang expressed to the principal to ask permission to give extra lessons outside of school hours. Principal welcomed the idea and discussed it with the Board of Teachers and School Committee. Principal with the School Committee to collect 1 class parents to discuss the issue and set the schedule. For students who are already fluent reading extra tutorials are free but there is still always given homework as a form of continuous exercise.

Activities undertaken to determine the ability of teachers provide students with early reading instrument as below:

Pair the names below corresponding with the first letter

|       |   |
|-------|---|
| Udin  | s |
| Lani  | b |
| Santi | u |
| Amir  | l |
| Budi  | a |

Read the words below:

write  
threes  
shoe  
interest  
jasmine

Based on the test results of the initial capability, the next teacher coaching as a core action research outside of school hours with beginning reading and writing materials. Students who do not pass the test early must follow guidance. Tutoring is done for 6 weeks every 4 weeks of regular meetings. Initially students who have not been able to read in a class there are 60% after additional studies conducted over 2 weeks was reduced to 30% within 6 weeks and all students have been able to read fluently. After the program improved reading skills and writing for students of classes 1 Kedungsari 3 Elementary School implemented, the results that have been achieved are:

1. Grade 1 students can read and write fluently.
2. Teaching and Learning Activities run as expected
3. Results of assessment in learning activities has increased
4. Students are more enthusiastic about learning, both at home and at school.
5. Parents feel relieved and comfortable as the son of his daughter eager to learn.

## CONCLUSION

After the program improved reading skills and writing for students of classes 1 Kedungsari 3 Elementary School implemented, the results that have been achieved are:

- Creativity, loyalty, and patience of teachers to train students to read and write outside of school hours to address the problems that arise in the implementation of Curriculum 2013 Grade 1 students, especially elementary school.
- During the cooperation between parents and schools are good in assisting and guiding their children, implementation of curriculum 2013 will run in conformity with expectations.
- If the teacher has the creativity and loyalty towards their main duty, patiently assisting learners, the grade 1 elementary school students will be able to follow the lessons according to the curriculum in 2013 in an optimal
- If the teacher's role and creativity is developed and applied to other elementary schools, the problem difficulty grade 1 at the beginning of the school year in accordance with the 2013 curriculum will be resolved.

## RECOMMENDATIONS

Lessons to be learned from the program to improve reading and writing skills for students of classes 1 public elementary school Kedungsari 3 out of hours learning, is:

- personal communication schools and parents need to encourage students to address problems arising in school-related student.
- Cooperation schools and parents need to be improved in order to success in school education can be achieved.
- Do not despair if you are having trouble because every difficulty there must be a way.

- Creativity and Teacher Loyalty determine the success of the school in improving the quality of education.
- Additional learning to read and write at the beginning of class 1 elementary school students need to be given at the beginning of the school year so that students know how to read so soon learning implementation can run smoothly.
- Given the academic year 2014/2015 school in Magelang will execute simultaneously Curriculum 2013, quite possibly the schools primarily grade 1 elementary school, will have

the same problems. To the above solution really needs to be disseminated as a reference that can be used for schools that will implement the curriculum in 2013. Dissemination of the above can be through a forum of KKG KKG cluster level to city level.

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## CONTINUING PROFESSIONAL DEVELOPMENT POLICY OF THREE IN ONE MODEL FOR TEACHERS AFTER CERTIFICATION

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### Abstract

For the quality assurance of teacher professionalism, post certification must be improved continuously. It is very important to increase the teachers' professionalism in optimizing the professional career development today and the future. We need to know that professional teacher will arouse students' motivation in science and technology. This article aims to describe the concept of modeling a Continuing Professional Development of teachers with Three In One (lesson study approach, ICT-based learning and classroom action research) to improve the performance of teachers in Surakarta. This development model seeks to improve the quality of education in Indonesia with the main objective of promoting the professional competence of teachers in pedagogical and professional competences post-certification.

**Key words:** *Continuing Professional Development, Model of Three In One, Teacher Performance.*

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### Introduction

The teacher certification program has been going on for 4 years. Enhancement of teachers quality through the certification program as an effort to improve the quality of education. However, the result of The United Nations Development Program (UNDP) study in 2010 [1] about the Human Development Index shows that Indonesia is ranked 108 of 169 countries studied. The low of Indonesia rank in the quality of human resources shows that education quality in Indonesia still low. It was caused by a teacher quality component. there are many various efforts to improve the quality of teachers has been done. However, the certification program, which in essence to increase the competence of teachers was not as expected. Teachers who have passed the certification program did not show competence significantly [2]. Furthermore, in 2007 until now, the certification process is found several problems, such as: low of teacher interest to research, learning still go on teacher-centered, and not based on ICT.

In order to achieve the vision of education to create the Indonesian people who have intelligence and competitive, so it is needed special attention for teacher as a professional who has the function, role, and position important.

Profession of teacher is necessary to be developed as a dignified profession as mandated in the Law of Teachers and Lecturers number 14 in 2005. Consequently, the position of teachers as a profession which need a continuing training and development.

Training and development is a effort to increase a teacher professionalism which can do through a seminary, training, and education continuesly. It is very important that a teacher has to do a Continuing Professional Development (CPD) [3].

Continuing professional development with three-in-one model is professional development integrated of lesson study activities, ICT-based learning and improvement of the ability to research about Classroom Action Research) should be able to solve the problems on motivation and performance after teacher certification.

### 2. Continuing Professional Development

Continuing Professional Development is a term that the first discovered by Richard Gardner on building professional studies at York University in 1970 [4]. Every one has the right and purpose to improve in professional skills and knowledge continuously. According [5] Continuing Professional Development is the development of knowledge and

technical, professional, personal business, and management skills and competencies for work. In order to improve the professionalism of a teacher needs to do a continuing professional development process).

Based on [6] about continuing professional development is a teacher competence development that carried out in accordance with the requirements, graded, and continuing to improve professionalism.

There are three main terms on continuing professional development: That is continuing, professional, and development. Called continuing because learning never stops regardless of age or seniority. Called professionals (professional) because CPD is focused on the professional competencies in a professional role. Called development (developing) because its purpose is to improve one's performance and to strengthen one's career advancement more than education and training [3]

Professional teachers can be determined from the education, training, self-development and a variety of other activities related to the profession. However, the certification does not necessarily guarantee the improvement of teacher quality. Therefore, teacher professional development activities need to be done in a sustainable and continuously.

### 3. Continuing Professional Development of Three In one Model

Definition of three-in-one is an activity consisting of three kinds of activities carried out in an integrated manner at a time. Continuing Professional Development of Three In One model is a model of professional development activities are conducted in an integrated manner of Lesson study, implementation of ICT-based Learning and Classroom Action Research (CAR). To clarify from the activities carried out in an integrated manner, will be described each of these activities, namely Lesson study, implementation of ICT-based learning and Classroom Action Research (CAR).

#### a. Lesson Study

The term of lesson study is created by Makoto Yoshida where this activity can help improve learning (teaching) and learning / learning process students in the class, and also in curriculum development.

Lesson Study is a model of guidance of educator professional through collaborative learning and sustainable based on the principles of collegiality and mutual learning to build a learning community [7]. According to Baba in 2007 in Ref [8], Lesson Study is a process that teacher do progressively to improve their learning method and collaboration with other teachers. While [9] define the Lesson Study as a process that involves teachers working together to plan, observe, analyze, and improve learning. From the definitions above, Lesson Study can be define as a collaborative activity by a group of teachers to develop themselves towards professionalism, the process is start from planning until evaluation by applying the principle of mutual learning in a high atmosphere of collegiality.

The main goal of Lesson Study is to: (1) obtain a better understanding of how students learn and how teachers teach; (2) obtain a certain results are beneficial to other teachers when they implementing the learning; (3) improve the learning systematically through collaborative inquiry. (4) establish a pedagogical knowledge, which a teacher can get more knowledge from other teachers [10]. The benefits that can be taken from Lesson Study are: (1) the teacher can document the progress of work, (2) the teacher can get feedback from other members, and (3) the teacher can publish and disseminate the final results of the Lesson Study [10].

In the implementation of lesson study that conducted by IMSTEP-JICA in Indonesia [11] introduced the lesson study that has practice oriented. The lesson study that has been implemented consisted of three principal stages:

- 1) Planning the academic learning with excavation academic on the topic and learning tools are used, this activity is called plan stage.

- 2) Implementing the learning refers to learning plans and tools are available, and invite colleagues to observe. This activity is called the Do stage.
- 3) Implementing reflection through the various opinions / responses and discussions with observers / observer. This activity is called phase See.

Based on the implementation of lesson study, give priority to implementation of two types of Lesson Study are Lesson Study based on school and Lesson Study based on MGMP [12]. Lesson study based on school is conducted by teachers from any subjects with their principal, and has a purpose to improve the process quality and the result from any subjects. While Lesson Study based on MGMP is the assessment of the learning process that held by a group of teachers on a certain subject which can be implemented at the regions level, regency levels, or perhaps could be expanded again.

Lesson Study Research Group of Columbia University suggests 3-6 people is enough for group membership, which comprises with teachers and principals, and other interested parties. Principals need to be involved mainly due to its role as a decision maker in the school. With his involvement in Lesson Study, principals are expected to take important and appropriate decisions to improving the quality of learning in the school, especially on subjects that were examined through Lesson Study. Besides that, it can also invite other parties that has competent and have concern for student learning, such as school inspectors or experts from universities.

a. Learning Based on Information and Communication Technology (ICT)

Utilizing information and communications technology in the schools is one of way to improve the quality of education in Indonesia. There are many researches, not only in the domestic but also abroad shows that the use of instructional materials which packaged with media-based Information and Communication Technology (ICT) can improve the quality of education. At the same time, at the generation of e-learning, public awareness of the

learning process by using ICT media will be even greater. Based on that situation, today is the perfect time to encourage people to start using the technology to development of human resources. Associated with professionalism, teachers in the future should not be clueless (stuttering technology) so it is necessary to learn the application of technology (handpone, television, mass media, computer, internet, etc.).

Teachers as educators are required to know well about the technology information. The Teacher quality is also important thing to supporting the human resource developement, therefore, there is no other way, the teachers must know well about technology. According to Daniel Muijs and David Reynolds in [13], that ICT can help students learn:

First, presenting information. ICT has an extraordinary ability to give an information. Encyclopedia which has several volumes can be stored on the hard disk. Even now been born google earth which can show us the whole region of our earth from the aerial photographs impressively. With open [www.google.com](http://www.google.com), data and information will be obtained easily. Want to create graphs and tables? It's so easy. Computers will be happy to assist learners to make graphs and tables automatically, by including the data in accordance with what we want.

Second, a quick and automatic completion of routine tasks. Our routine assignment can be solved with the computers quickly and automatically. Want to make a chart, making exposure animated, and so on, can easily be done with the help of computers.

Third, assessing and handling information. With a computer connected to the internet, we can easily obtain and transmit information easily and quickly. Through the internet, we can have a website that can reaching the end of the world yet. Do not be surprised our children can easily do the chatting with friends who are either in parts of the world.

Information and communication technology (ICT) development has an impact on education, especially in the learning process. To be able utilize ICT to improve the quality of learning,

there are three things that must be realized that (1) students and teachers should have access to digital technology and the Internet in the classroom, school, and teacher education institutions, (2) the material must be available and have a good quality, meaningful, and cultural support for students and teachers, and (3) the teacher should have knowledge and skills in using the tools and digital resources to help students to reach the academic standards [14].

**b. Classroom Action Research**

One of Continued Professional Development activity for teachers is scientific publications [15]. Writing a scientific paper is kind of professional teachers' competence. According to Education National Standard (ENS), there are four competencies that teachers should have. The four competencies that teachers should have are personality, professional, educational and social. Amongst that teachers' competency, which is directly related to teachers necessary for preferment and position promotion from Administrator above is professional competency. Professional competency is the ability to do a simple research, especially for Classroom Action Research to improve quality of teachers professional, especially for a quality of learning.

Writing skills for writing a scientific paper is very important for teachers. The teachers who aren't able to write well will have some obstacle in communication. Because, when they do daily duties, teachers must able write a job application letter, write a service letter, write a report for an activity and write a scientific paper for preferment [16]. Based on "Ref [17]" opinion, writing can make a person to recognize their own potential, expand their horizons, encourage someone to learn actively, and make someone to think and speak in an orderly manner. Through writing, someone can record, give information to someone else, persuade another person, and influence others.

One of method to improve the pedagogical competency and professional competency is increase the teachers' activity in Classroom Action Research (CAR). To increase the teachers' activity

when they should solve a problem use CAR, they need some of movement to examine something that related to pedagogical competency and professional competency. Pedagogical competency includes the teachers' comprehension to their students, design and implementation of learning, evaluation of learning output, and develops the students to actualize the potential, while in the professional competence, includes the ability to mastery learning materials the research activity, teachers must read a lot of literature; in this case the teachers must read a literature or article that related to the competency.

**Conclusion**

The designing model of continuous professional development use three in one models, expected could:

**a. Improving the quality of education**

Teachers' certification as one of government program has a purpose to improving teachers' competency when the teachers do their duty to realize national education purpose, improving the process and the quality of education, enhancing the dignity of teachers and increasing the teachers professionalism. In addition, to that teachers' certification as an effort to improve the quality of the teachers has a purpose to improve the quality of learning and education in Indonesia for a continued period. Therefore, improving the quality of education can't be separated from improving the quality of educator and education personnel. The method to improve the quality of education wouldn't success without starting with improving the quality of the educator and education personnel. Therefore, to realize improving of better quality of education is need continued professionalism development for the teachers after received certification.

Continued professional development has a purpose to develop and expands the knowledge, skills and the quality of the personality as the requirement to improving the quality of the profession. It also means renewal the basic knowledge of the continued profession and increased the competency through the duty



implementation. The duty is part of commitment as the professional, always improving the ability as commitment to improve the profession quality in optimizing the opportunity of career development, in the present and in the future.

#### Motivating The Teachers Performance After Certification

The survey that has conducted by Republic Indonesian Teachers Association about the impact of the certification toward to teachers' performance, explaining that performance of the teachers who have qualified the certification hasn't been satisfactory. Teachers at all educational levels who haven't been qualified the certification, has a high work motivation.

They hope, they will qualify the certification soon and get the profession salary allowance [18]. In the fact, certification isn't enough to realize and improve the teachers' competency. Although they have qualified certification and they have received profession salary allowance, it doesn't mean that teachers has a competency which required by the law.

Professional teacher is a teacher who has competency, includes pedagogical competency, professional, social, and personality, also skills, adeptness or an ability that according with standard quality or certain norms, to support the primary duty of educating, teaching, guiding, directing, training, assessing and evaluating students. Therefore, teacher need the knowledge and skills and should be improved, because technology and information always changing. In order, to maintain the quality of the teachers who have qualified for certification, is need a continuously and integrated guidance.

Teacher performance after received the certification is already contained in [19] about Technical Guidelines for Implementation of the Functional Position of Teachers and the credit number. One important part in determining the functional position of teachers and the determination of credit number is teachers' performance appraisal. Teachers performance appraisal has a function to maintain the

professionalism of teachers when performing their duties, in addition to the teachers performance appraisal also have an impact on career coaching, competency enhancement, and profession salary allowance. In the assessment of teacher performance, one of the main components is considered continued professional development, to develop teachers competency based on necessity, step by step and continuously to improve their professionalism.

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## DEVELOPMENT OF COLLABORATIVE EDUCATION SUPERVISION MODEL IN MIDDLE SCHOOL

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### Abstract

The aims of this research were to know the model of educational supervision in middle school currently, to know the development potential of collaborative educational supervision model between principal and supervisor, and to know the collaborative educational supervision model between principal and supervisor that is expected in middle school. The kind of this research was Research and Development by Gall and Borg (1983) with some modifications as necessary. In this research, the development steps were only conducted on preliminary research and literature study. The methods of data collecting were questionnaire and interview. The method of data analysis was descriptive qualitative. The results of this research showed that the model of educational supervision in middle school currently was conducted separately by the principal and supervisor which included planning, implementation, evaluation, and follow-up. The model of collaborative educational supervision model between principal and supervisor in middle school has potential to be developed. It has been known the model of collaborative educational supervision between principal and supervisor that was expected in middle school.

**Keywords :** education, supervision, and collaborative

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### Introduction

According to Law No. 20 in education, especially in learning activities, supervision holds a very important role, because it determines the improvement of teacher performance. Increasing ability of teachers to manage learning activities in school, especially as the responsibility of the principals and supervisors as supervisors [1]. In the Minister of National Education of the Republic of Indonesia [2] and [3] stated that a education supervision is not only done by supervisors, but also by principals. This is consistent with the statement of Made Pidarta [4] that one of principals position was as a supervisors. This provision would imply good supervision activities carried out jointly or in collaboration between principals and supervisors, because the teacher will receive coaching from two sides by the principals and supervisors, through a combination of the results obtained by the principal and the supervisors. Collaborative education supervision [5] is an approach based on cognitive psychology. Cognitive psychology assumes that learning is the result of a blend between individual

activities with the environment which in turn affects the individual activity. This is consistent with the statement of Olivia [5] that most of the work in this world is done through group interaction. However, in reality, the two supervisors are never done together. The results and follow-up of supervision are very rarely integrated or synchronized. In this case the author thinks, if the education supervision conducted collaborative, certainly will obtain a clearer conclusion about the ability of the teacher. Unfortunately, these hopes never happened.

Starting from this incident, the author would like to develop a model of supervision that never happened which the authors call as collaborative education supervision that is supervision of a teacher who conducted jointly the principals and supervisors. Observation was carried out simultaneously with coaching by supervisors and principals, is expected to have better impact than if the supervision is done individually.

The aim of this study are to know the model of education supervision in middle school recently, the

potential development of collaborative education supervision model principals and supervisors in middle school, and a model of education supervision principals with supervisors expected .

Practical benefits of this research for education broadly are obtained the integrated data that are produced by the supervisors and principals, improving the current supervision practices by supervisors and principals together at one time. Teacher will also get clear and better guidance because it combine the results obtained by the supervisors and the principals, and have been thought together about the matter, stages and model for coaching.

Theoretical benefits of this research are the quality and competence of teachers can be clearly described because it as a result of a collaborative education supervision by supervisors with principals. As the follow up of this study can be formulated a policy of a coaching model that also be conducted jointly by supervisors with principals. Description related to teacher competence can be mapped, which part of competence still need coaching seriously and which are already in accordance with the provisions for the profession of educator.

The social benefit of this research is there will be a close collegial relationship between supervisors and principals. Between teacher, supervisors, and principals will also occur closer relationship because supervisors always come to school with the principals.

Education benefit of this research are the result of supervision is expected can be more comprehensive and more precise in accordance with empirical facts that is done and occurs in supervised teacher. Thus, the description of the teacher will be more transparent and can be used by anyone with an interest in teachers in order to improve the quality of teachers.

#### The supervision concept

Supervision by principals at school can make a positive contribution to the quality of education in general in this country, and able to improve the

performance of teacher, especially in teaching and learning process. According to Suharsimi Arikunto [6] who observed supervision in the United States in 1976 and 1986, supervision in the United States, supervision was divided into three, namely (1) academic supervision, (2) administrative supervision, and (3) school supervision.

#### Academic supervision

Various authors have defined the academic supervision in different ways. Suharsimi Arikunto looked at the academic supervision as possible measures to improve the quality of teacher in teaching and learning and to improve the relationship two personal and organizational needs[7]. The definition of academic supervision in this research is supervision that is aimed directly at learning activities or learning that takes place in the classroom. When supervisors or principals entered the classroom while the learning process, the supervisors or the principals' view is not only focused on the teacher was teaching, but especially the gaze should be fixed on the students who are learning. There are six objects that need to be observed by a supervisors and principals, namely (1) the student, (2) the teacher, (3) teaching materials, (4) a means of learning, (5) classroom management, and (6) the environment.

#### Administrative Supervision

What is meant by administrative supervision is supervision which focused on things which affect implementation of learning and teaching because it is services or jobs that occur before or after the learning process takes place. Examples of services that affect the learning process goes well is the readiness of students to receive lessons. Before teacher begins to teach, the students are ready to sit in place, ready to open a textbook to be studied.

Administrative activities undertaken by the teacher after the learning process is completed is collect all the tests that are worked by students in the form of question bank. The tasks that are worked by students brought home by the teacher to be examined and returned to students with sign of right and wrong or with some comments.

### School Supervision

The definition of school supervision is supervision which the target is not included in the academic supervision and administrative supervision.

### Method

In this study, the authors only limit on academic supervision, supervision emphasis on learning.

For the purpose of this collaborative education supervision researcher also prepared a new instrument, using the stages of preparation of a more analytical instrument through the identification of indicators. In the initial exploratory meeting in the collaborative supervision, understanding and mutual agreement on the instruments that will be used also performed. If there is disagreement, the necessary repairs will be done directly.

The development research used the method proposed by Borg and Gall [8] which focused on the stages of field survey and literature study. Analysis of the data in this research used qualitative description.

### Results

On Saturday, September 7, 2013 conducted Focus Group Discussion (FGD) in SMP Muhammadiyah II Godean. The meeting was attended by 5 principals, namely: Mrs. Tri Rukmini as the principals of SMP N 1 Godean, Mr. Sumadi as the principals of SMP N Moyudan, Mr. Nur Wahid Sudarjo as the principal of SMP N 3 Godean and Mr. Tri Winarno as the principals of SMP Muhammadiyah 2 Godean. Supervisors who attended 3 persons, namely: Mr. Sardiyono, Mr. Sukardi, and Mr. Sutarto. Teachers who attend are 4 persons, namely: Mr. Hari Sukanto from SMP Muhammadiyah II Godean, Mrs. Endah Darwati from SMP Muhammadiyah II Godean, Mr. Sugeng Budiyan from SMP Muhammadiyah II Godean, and Mrs. Sri Lestari from SMP Muhammadiyah II Godean. FGD were divided into 3 groups.

Group1 consist of Mr. Sidhartha Nur Wahid, S. Pd, Mr. Sardiyana, Mr. Sugeng Budiyan, Mrs. Sri

Lestari. They expressed their opinion that in this supervision it is good if there is a teacher who assess other teachers. Previous supervision experience conducted by principals and supervisors on their own. Teacher preparation is too pretended. According to the group, the collaborative education supervision weakness are (1) less appropriate, (2) difficult to reconcile the time between principals and supervisors because they are busy persons, (3) The principals difficulty in making the schedule because there must be an agreement with the supervisors. Likewise supervisors difficulty in making the schedule because there must be an agreement with the principals, and (4) uncertain every teacher ready supervised collaborative. According to the group, the advantages of collaborative supervision are (1) times more efficient, it is good for both teacher and supervisors, (2) more effective, (3) the problems that were found can be resolved or addressed. According to the group the steps that must be performed in a collaborative education supervision is (1) determine the time, (2) determine which teacher will be supervised, (3) preparation the class and material, (4) must be in accordance with the implementation schedule in school, collaborative education supervision should be done but remember the time. Group 2 consisted of Ms, Sumadi, Mr. Sutarto, Mr. Thomas Heru Santosa, argue that collaborative education supervision can be implemented, but just for academic supervision, conducted routine once each semester, especially for teachers have a low competence, based on the value of the previous supervision, supervision target is all teachers with supervisors instrument, only one meeting, formulate evaluation and follow-up. During the principals conduct supervision once per year, the principals may delegate it to a senior teacher with relay duty. Due to the limitation of the principals so that the supervision cannot be conduct overall, at least once a year, once per semester, supervision is important, there is an assessment for teacher and supervisors, equate the instrument, in the collaborative education supervision beside involve supervisors and a principals it is good if involve one senior teacher too. Collect all good teachers then joined to conduct supervision help principals, and supervisors. Supervision includes planning,

implementation, evaluation, and follow up. Group 3 consisted of Mr. Sukanto Day, M.r Sukardi, Mrs. Tri Rukmini, and Mr. Tri Winarno. According to this group, collaborative education supervision is important because it determines the professionalism of teacher, but do not conduct to all teachers. This group proposes the following steps: (1) the mapping is done first to repair, development, or coaching, (2) there is coordination between teacher, principals, and supervisors about time, criteria, supervision format, refer to existing supervision guideline which includes the introduction, the core and the closing, and prepared teacher. (3) need to be made the schedule of implementation, just one meeting, not to all teachers. (4) at the end of the supervision need to be conducted follow-up to discuss the results of the supervision for repair, improvement, or development. Teachers are invited and notified of the results and was given an opportunity to respond. Supervision must be continuous, not just one semester.

#### **Discussion**

From the preliminary study can be known the implementation of education supervision in middle school recently with its problem and potential for the development of collaborative education supervision model in middle school.

- a. The model of education supervision in middle school.

The number of supervisors is not proportional to the number of school. One supervisor in Sleman is responsible for fostering 7 schools. Of course, this condition causes the execution of supervision is not going well. Previous experience of supervision carried out by supervisors and principals separately.

- b. The potential for the development of collaborative supervision

There is a willingness of teachers, supervisors, and principals to conduct the collaborative education supervision. Implementation of collaborative education supervision that is expected by teachers, supervisors, and principals is as follow. The supervision is conducted just for academic

supervision, regular time, each semester once, and for one session. Supervision should be ongoing and should be implemented in accordance with the schedule in school, preferably for teachers who have low competence, based on the value of the previous supervision, and for all teachers. Supervision that is expected by teacher, supervisors, and principals.

The implementation of supervision should be according to the schedule in school, collaborative education supervision needs to be done but remember time, integrated findings (teacher, principals, supervisors), and due to the limitations of the principals so the supervision cannot be conducted thoroughly.

- c. The model of supervision that is expected by teachers, supervisors, and principals.

#### **1) Preparation:**

a) There is a time coordination between teacher, principals, and supervisors. There are criteria and form of supervision. Supervision refers to the existing guidelines includes introduction, the main activities, closing, and prepared the teacher.

b) mapping do first to repair, development, or coaching,

c) Collect all good teachers, then joined to conduct supervision help principals, and supervisors. Supervision includes planning, implementation, evaluation, and follow up

d) Determine the time or schedule

e) Determine teachers who will be supervised,

f) Preparation of class and material,

#### **2) Implementation**

a) The principals may delegates it to a senior teacher with the task relay,

b) equate the instrument,

c) supervisors in the collaborative education supervision plus one senior teacher.

2) Closing

- a) Formulate the evaluation and follow-up,
- b) There is a teacher and supervisors assessment, teachers who participated assess other teachers.
- c) The principals and supervisors observation is conducted by sampling.
- d) Conduct a follow-up to discuss the results for the repair, improvement or development.
- e) Teachers are invited and notified of the result and the teachers were given an opportunity to respond.

**Conclusions**

- a. Model of education supervision in middle school currently have been known. Supervision was done separately by the principals and supervisors of planning, implementation, evaluation, and follow-up.
- b. There is potential to develop the model of collaborative supervision by supervisors with principals.
- c. Model of collaborative supervision that is expected by teachers, supervisors, and principals is academic supervision of the planning, implementation, evaluation, and follow-up.

**Suggestions**

- a. Because one supervisors in Sleman responsible for fostering 7 schools, it is need to add the number of supervisors in order to supervision is going well.
- b. Due to possible constraints difficulty of adjusting the time between the supervisors and the principals activities so that supervision should be designed as early as possible.

c. The implementation of supervision should be adjusted to teaching schedule.

d. Senior teachers should be involved in this collaborative supervision.

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## **BASELINE DATA IN THE DECISION SUPPORT SYSTEM *KARTU JAKARTA SEHAT***

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### **Abstract**

Healthcare reform legislation has been demanding regarding the quality, cost and efficiency of hospitals and health systems. One way to manage this expectation is a program of Jakarta Health Card (KJS) by the Jakarta administration is the provision of free health services. KJS as a strategic health plan programs that provide free health services are badly needed by the city residents, especially those living in poverty. KJS services are conducted in some steps. The people must go to the health center first. If the health center cannot handle, then the patients will be sent to hospitals. KJS needs support in the implementation of computerized information systems to facilitate the decision making related to the condition of facilities and health centers or hospitals. Decision Support Systems (DSS) is an interactive computerized information system that can help decision makers compile useful information from the problem that the raw data, documents, personal knowledge, and / or models to identify and make accurate decisions. DSS - KJS is a model -based system that is simple, easy to be controlled, adaptable, complete, easy to communicate and able to support organizational problem solving. DSS - KJS is needed in order to integrate baseline health data in support of any decision, to make troubleshooting KJS as strategic health programs become more focused, more comprehensive, more efficient, both in terms of human resources and funding sources.

**Keywords:** *Baseline data, Decision Support Systems, Kartu Jakarta Sehat*

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### **Introduction**

Jakarta Health Card (Kartu Jakarta Sehat-KJS) was launched on November 10, 2013 and legalized based on *Peraturan Gubernur DKI Jakarta Nomor 97 Tahun 2013* about *Pembebasan Biaya Pelayanan Kesehatan*. KJS is a kind of health insurance program from Jakarta government through Unit Pelaksana Jamkesda Dinas Kesehatan Provinsi DKI Jakarta to the community. KJS is the renewal health insurance program from the previous one called Jaminan Kesehatan Daerah (Jamkesda) for those who live in DKI to get free of charge health services with different system. DKI Jakarta provide has 340 *puskesmas* (community health service) and 88 referred hospital in cooperation with Dinkes DKI Jakarta. This KJS system can serve 4.7 million people in the capital city to get free health care; being treated in the hospital – 3<sup>rd</sup> classes free of charge. When it was first launched, it was skyrocketed to 1400 KJS patients per day. Recently it decreases to 1200 to 1300 per day. Several hospitals in Jakarta need to add more facility, human resource to handle this KJS patients especially 3<sup>rd</sup> class. This health care

insurance is in coordination between Pemda DKI and PT Askes. KJS is known as an example of health care system in Indonesia which will be held in 2014. In the national health care system which is managed by Badan Pengelola Jaminan Sosial (BPJS), 96 millions of uninsured Indonesian citizens will be taken care of. World Health Organization (WHO) supports this program. “They have seen when it was first launched, they support us,” stated Ahok, the Deputy Governor in Balai Kota DKI Jakarta [1]. KJS opens the opportunity for Jakarta people to get free-of-charged health care. Consequently, inadequacy of the hospital capacity takes places, lacks of human resource as well. In 2013, legislative agreed the budget of Rp. 1.2 trillions or Rp. 23,000 / KJS member. The budget has increased to 200 millions in 2014. Ahok-the deputy governor of DKI- stated that this program still flaws [2]. Evidence based policy making contributes in decision making in health sector.

### **Discussion**



### Jakarta Health Card (KJS)

Access to health care remains a problem for some people. It is caused by problems in distribution and affordability of health care facilities where both primary health care facilities and advanced services [3]. Health development carried out in order to achieve the ability of people to live healthy, so they can achieve optimal health status. Health development basically involves a lot of things in various aspects of human life, both physically and non physically. One of the problems in current state health development needs attention. It is a matter of the quality of hospital services (RS). Quality of hospital care is a unique phenomenon, because the dimensions and indicators may differ among people involved in health care. Quality of service refers to the level of health care excellence in meeting the needs and demands of each patient. Thus, the definition of health care quality is at a level of perfection that shows the cause of health care satisfaction to every patient. Real application of quality health services to provide the Government of Jakarta offers a program that is administered in the form of KJS Jakarta residents. The purpose of providing health care benefits is for the residents of Jakarta Provincial especially for the poor and underprivileged with tiered referral system. As the target of the Program, all Jakarta residents who have ID / Card Family Jakarta who do not have health insurance, outside the Askes program, or other health insurance. KJS benefits, health care facilities for residents to outpatient health centers throughout the District / Sub-District in the province of Jakarta; outpatient advanced on Health Care in hospitals, hospital vertical and Private Hospitals in collaboration with Jamkesda, based on a referral from the health center ; inpatient care in health centers and hospitals in cooperation with Jamkesda. KJS supposed to start the first phase of health care, which is advising people to live healthy and prevent disease. It is the duty of health centers. Because the function is not running, so when KJS launched amounts and referral system to register a lot of trouble at the hospital.

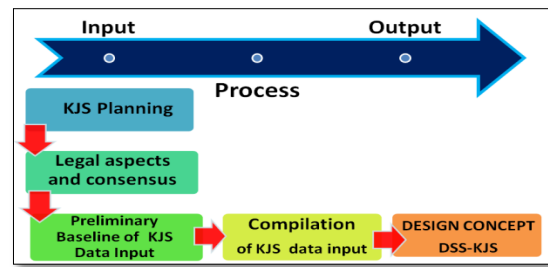


Figure 1: The urgency of the DSS-KJS is for each sub-system. Design by Hebat Author 2014

### Baseline Health Data DKI Jakarta

Baseline data, initial information on a program or program components collected prior to receipt of services or participation activities. Baseline data are often gathered through intake interviews and observations and are used later for comparing measures that determine changes in a program [4]. The Baseline Data are used to determine the quantitative level for the indicators of success and indicates how much change will occur if the desired outcome is achieved [5]. Strategic Plan Baseline Data, baseline data, extant or new data and information collected to verify that a suggested issue is of such magnitude that it requires action by the program. There are two types of baseline data, fixed baseline data, is closely related to the proposed program and clearly indicated by the goals and objectives of the program; baseline data is not fixed, do not be clearly linked to the goals and objectives program but provides useful background understanding about sociolinguistic and cultural context of the program. Process Evaluation strategies, a method is presented for evaluating the amount of information a medical provides about health society. Emphasis is placed on the role of a health in the evaluation of patients with a service. In this context, the yield of a test is best interpreted by analyzing the prognostic information it furnishes. Information from the history, physical examination, and routine procedures should be used in assessing the yield. The success of health development requires good planning based on the data and information that is precise and accurate health and quality, so as to describe the state of the real (evidence based). Based on the population data in 2012, the biggest population in DKI Jakarta is in East Jakarta (18,04%) and the smallest number of

population is in Kepulauan seribu (0,22%)[6].The highest population density lies is West Jakarta Barat (18.837 people per sq m) while the lowest is in Kepulauan Seribu (2.127 people per sq m). The ratio per 100.000 population in DKI Jakarta for community health center is 2,91. The ratio of general doctor is 17,4 – 124,7. The ratio of dentist is 6,4 – 21,0. The ratio of nurses is 86,5 – 586,4. The ratio of midwives is 13,9 – 41,6. Based on the target indicator of Indonesia Sehat, DKI Jakarta province doesn't reach the target [7]. Health budget from the central to the province, *Jamkesmas Pelayanan Kesehatan Dasar* Rp. 6.413.915.000; *Jamkesmas Pelayanan Kesehatan Rujukan* 61.798.789.000; *Jaminan Persalinan* 41.265.642.000 [8].

### **Evidence Based Design (EBD),**

a process for the conscientious, explicit, and judicious use of current best evidence from research and practice in making critical decisions, together with an informed client, about the Design of each individual and unique project [9]. EBD is a process used by healthcare professionals in the planning, design, and construction of healthcare facilities. An evidence-based designer, along with an informed client, makes decisions based on the best information available from research, from project evaluations, and from evidence gathered from the operations of the client. EBD should result in demonstrated improvements in the organization's utilization of resources. At The Center for Health Design, an organization that supports healthcare and design professionals to improve the quality of healthcare through evidence-based building design, researchers have proposed the definition of EBD as "the process of basing decisions about the built environment on credible research to achieve the best possible outcomes" [10]. In many countries, principles of EBD making policy processes in the health sector conducted by the study sought appropriate Evidence Based Policy (EBP) making. Meanwhile in other countries, the decision made by contrast, is more of a decision based on political pressure or sheer instinct. Policy-making in Indonesia showed symptoms yet provide a place for evidence based policy making. The most striking example was the policy regarding health insurance for poor families. Until now, security systems

askeskin still unclear and has not been much research on which to base decisions. Evidence Based Policy, Cookson gives a similar definition, but focuses on public decisions about the group or society, is not a decision about an individual patient [11]. Evidence Based Medicine, Sackett et.al defines EBM as: "The conscientious, explicit, and judicious use of current best evidence in making decisions about the case of individual patient" [12]. In the past quarter century, the healthcare industry has begun to embrace a growing body of work that examined the relationship between the physical environment, human responses, and consequent healthcare outcomes. EBD or the process of basing decisions about the built environment on credible research to achieve the best possible outcomes [13]. EBD is being used by a growing field of healthcare architects, practitioners, researchers, and administrators to better understand the impacts of the healthcare environment on healthcare outcomes, including patient safety outcomes [14]. Maximizing infrastructure investments like the building, technology, equipment, and furniture to achieve strategic outcomes requires an internal synergy of effort between leaders who can transform organizational culture and a staff that can reengineer clinical and administrative processes, as depicted in Figure 2. Using a multidisciplinary team to execute and institutionalize the work, all of which is based on evidence-based research, pre and post occupancy measures are used to track desired outcomes, the results of which ultimately further EBD science. Additional information about the Evidence-Based Design Model can be found in The Center for Health Design's Evidence-Based Design Study Guide 1, page 76 (Goetz, et al, 2010) at <http://edac.healthdesign.org/EDACStudyGuide1.pdf>. Objects, such as health facilities, also require careful EBD research to fully understand the role those facilities in realizing desired patient and staff outcomes. Health facilities will be bought and replaced multiple times during of most healthcare facilities. The high-risk healthcare industry demands much from medical equipment objects, ranging from embodying an organization's brand, providing patient comfort and support during stressful times, enabling staff to work efficiently and safely as a team,

and perhaps most importantly, not contributing to patient and staff and organizational harm.

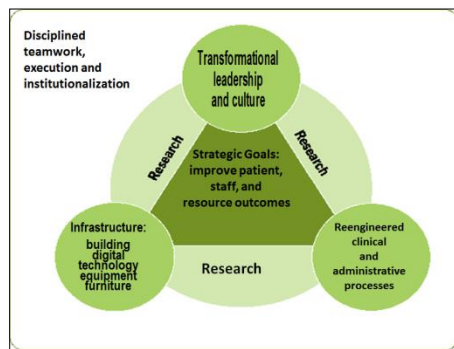


Figure 1 Modified from the Evidence-based Design Model in Malone, E., MannDooks, J. R., & Strauss, J. (2007). *Evidence-based design: Application in the MHS (Military Health System)*. Falls Church, VA: Noblis, p.12 [15]

#### DSS-KJS based on EBD.

The purpose of this paper is to describe the creation of an Evidence-Based Design Health Facility Needs, based on current EBD research findings and Ministry of Health standards. EBD is a process used by healthcare professionals in the planning, design, and construction of healthcare facilities. An evidence-based designer, along with an informed client, makes decisions based on the best information available from research, from project evaluations, and from evidence gathered from the operations of the client. EBD should result in demonstrated improvements in the organization's utilization of resources. At The Center for Health Design, an organization that supports healthcare and design professionals to improve the quality of healthcare through evidence-based building design, researchers have proposed the definition of EBD as "the process of basing decisions about the built environment on credible research to achieve the best possible outcomes" [16]. Healthcare leaders can use the list to make informed health facilities investment decisions to improve healthcare outcomes across the furniture life cycle. We conclude the paper with recommendations for future EBD Health Facility Needs research, government and industry standards development, and further checklist development. Decision support systems

(DSS) are a subset of computer-based information systems (CBIS). The general term 'computer-based information systems' is a constellation of a variety of information systems such as office automation systems, transaction processing systems, management information systems and management support systems [17]. Management support systems consist of DSS, expert systems and executive information systems. In the early 1970s, scholars in the CBIS area began to recognize the important roles information systems play in supporting managers in their semi-structured or unstructured decision-making activities. It was argued that information systems should exist only to support decisions, and that the focus of the information systems development efforts should be shifted away from structured operational control to unstructured critical decisions in organizations. Decisions are irreversible and have far-reaching consequences for the rest of organizational life. The importance of effective decision making can never be overemphasized. Decision making is, in effect, synonymous with management. DSS consists of two major sub-systems – human decision makers and computer systems. Interpreting a DSS as only a computer hardware and software system is a common misconception. An unstructured (or semi-structured) decision by definition cannot be programmed because its precise nature and structure are elusive and complex. The function of a human decision maker as a component of DSS is not to enter data to build a database, but to exercise judgment or intuition throughout the entire decision-making process. Data management in DSS is a necessary function primarily useful in the intelligence stage of the decision-making process, but not sufficient to support design and choice stages of decision-making processes. To adequately support these stages, DSS should be able to include the following activities: projection, deduction, analysis, creation of alternatives, comparison of alternatives, optimization and simulation. The first step of the decision-making process begins with the creation of a decision support model, using an integrated DSS program (DSS generator). Based on the concept of EBP at this time there are two major categories of decision-making; decision-making which is done without the support of scientific

evidence available and decision-making which is done under the circumstances to support the availability of scientific evidence. There is a situation when there is no scientific proof, but the decision must be made as an example of the health budget allocated to provinces and districts of the central government, the deployment of doctors in remote areas and difficult, activities for disease prevention because the surveillance system is not running as well as health financing policy. In this situation scientific evidence was needed from basic and clinical research, and processes performed Evidence Based Policy. One example is the health program CWSHP, Pamsimas Program; there is scientific evidence from basic research yet Evidence-based Policy Process is not running. For example the spraying fogging policy; the purchase of AIDS diagnostic test using saliva by the government of Jakarta, supplementary feeding, cancer drugs policy and the AIDS Drug policy. The policy on the poor families has begun since the Health Fund program in the 1980s up to the HIP system in the 2000's. In 2006 and 2007, the HIP program conducted through PT Askes Indonesia [18]. In 2008, they went back to the direct subsidies; Askeskin no longer used an insurance mechanism. In early 2014 the Ministry of Health decided to return to the model of direct subsidies that the program is done through direct mechanisms, with a new name Community Health Insurance (JAMKESMAS). The quality of care in hospitals became much discussed topic; the numbers of existing hospitals increase as well as the number of people using hospital facilities for health services. On the other hand, the public is increasingly critical of the health care received in the hospital. The quality of health care in hospitals is a unique phenomenon, because the dimensions and indicators can differ among people involved in health care. Nevertheless, whatever the type of hospitals, the quality of health care in the hospital is one important factor in fulfilling the right of people to health. Various activities and infrastructure of health services is a major determinant of patient satisfaction which reflects the quality of the hospital. As for hospital owners, the quality health care is able to generate revenue to cover operational and maintenance costs. There are several factors that can affect the quality of health care in hospitals.

However, the guidance and supervision must be done to be able to provide quality assurance of health services to the community. One of the efforts is the accreditation of the hospital so that the quality of health care in hospitals can be integrated and acculturated into the hospital service system that is more qualified. Assuring the quality of health care as an integral part of the activities of health services can not succeed without the commitment and involvement of all stakeholders. To that end, health care professionals should always pay attention to the quality of health care when they want to retain its credibility. Supporting the financing system of government should also be seriously and continuously implemented. Thus, hospital can also follow the ever-evolving demands of the changing times, as a result of disease epidemiological changes, changes in organizational structure, development of science and technology, socio- economic changes, more effective service, friendly and able to meet their needs. The setting of clear division of responsibilities between the state and the management of health care facilities will provide protection to patients, society, and human resources at the hospital it will also maintain and improve the quality of hospital services, the presence of legal certainty and legal protection for both service providers and recipients of health services for the community. There should not be differences in treatment between patients out of pocket by the patient's insurance coverage, especially non-commercial insurance. The collateral for ease administrative procedures for fast and straightforward is needed. The management about the Minimum Service Standards (MSS) should be implemented, including technical standards to ensure the safety of patients. In addition to ensure the quality, standard-setting is also related to the cost calculations. With these standards, the patient only pays the appropriate standard of health care otherwise there should be an agreement with the patient. To that end, it is necessary for each hospital to set a target of achieving standards of care indicators. Criteria of JAMKESNAS holder should be stricter, so JAMKESNAS can be given to people who are truly needy and poor not mock poor. In addition, the independent Supervisory Board of the Hospital where both at the central and provincial are badly

needed. Besides, the government also must consistently enforce the application of the laws of the National Social Security System (Social Security) No. 40/2004, which requires all residents of Indonesia can be guaranteed health care.

### KJS implementation vs Good governance principals



Figure 3: The principles of good governance/ owsposters.org. Source : Anggarani.M (November 23, 2013), <http://globalgial.net/2013/11/23/evolusi-jaminan-pemeliharaan-kesehatan-2/> [19]

Participation, KJS excellent programs is means for the poor of Jakarta. Healthcare providers should collaborate. This is because of the overload of health workers' workload without balanced compensation. Ideally, the KJS program is supported by local hospitals, private hospitals, clinics and independent laboratories, medical professional associations (doctors, dentists and specialists), other health professions Association (nurses, midwives, pharmacy, etc.). Law Supremacy, KJS programs are more likely to see a process of trial and error implementation of the concept of KJS, without being bothered by the bureaucracy. When the implementation is stabilizing, it will create new legal regulations. Transparency, the transparency KJS program implementation is still unclear and difficult to prove its feasibility because no evidence supported the data (evidence based). Responsiveness, Jokowi team responsiveness to various problems that arise related KJS are commendable; it started from getting the feedback from the hospitals and health workers. The addition of bed, increased recruitment of new physicians, collaboration with the Faculty of Medicine for medical help until analysis for tariff revision is done as quickly as possible. Consensus Orientation, KJS program dynamics problems should meet the consensus for the common good. So there is a point

where a mutually agreeable consensus is reached, not only unpleasant for the poor, but also as a health worker with the tip of the spear legawa, because of their hard work should be appreciated professional. The directors and hospital managers in Jakarta would heartily endorse, to ensure the best quality of health services, if the hospital made no losers. In the end, the advantage will be accepted by the public as well as health services free of discrimination and hospital health workers appreciated his professionalism. Equality, health services to the people who have already registered demand KJS or medical and non-medical services free of discrimination for KJS holder. Effectiveness and efficiency, It is applied to the use of chips, the use of information technology for the data coordinating hospital bed, coordination of human resources with the Faculty of Medicine, the launch of the 119 health service phone numbers and innovation to the effectiveness and efficiency of the service. The target is 100% are protected by Jakarta Health Insurance and they have access to information and quality health services with ease. Accountability, KJS program accountability also has not seen, there is no evidence of operational support data KJS for public. Currently this is still the trial phase at this point where it is a period of learning for all components of health maintenance Jakarta residents.

### Conclusion

KJS program will keep problematic if it doesn't come with the prevention. The first preventive service is through community health service so the numbers of patients can be handled in this level. Health providers, hospital managements find this program is still hard and difficult to implement; on one side they experience the lack of facility and human resource and on the other side they have to follow the instruction of the government.

Based on the Evidence Based Policy making perspective, Dana Sehat Program has unclear evaluation. There is a few of independent study to fit and proper this program. Based on the record of the ministry of health, there is no scientific evidence to prove the Aseskin Policy. The next question is whether the government bases on Aseskin in

allocating the budget and whether they do that transparently.

DSS needs to integrate KJS and hospitals; the government of DKI province has created collaboration with PT Askes. Both private and public hospitals need to integrate the online system for billing. The availability of specialists' has increased to help the current doctors. DSS call center access 119 can speed up the updated information in hospitals.

KJS program has 3 components: billing reformation, service reformation and community relation reformation. KJS program will be accountable when academics support in KJS program policy based on Health Evidence Based Policy Making to provide a more responsible and scientific evidence.

More people use health facility and they are more critical in the service. They are hoping the legislative to solve the problems increased.

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## THE FACTORS OF CHANGES IN THE ORGANIZATION OF BINA RAHARJA CIVIL SERVANT COOPERATIVE IN KEBONAGUNG DISTRICT, DEMAK

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### Abstract

The paper discusses the changes in the organization, that is the development of cooperative in Kebonagung District, Demak. Dampak of change is positive there is a conflict but does not affect change. The writing approach used a model of Kurt Lewis with three stages, namely 1) Liquefaction (unfreezing) - old ideas and practices need to be removed so that new ideas and practices can be learned; 2) Conversion (Changing) - the steps to learn new ideas and practices so that employees can think and perform with new ideas and practices; 3) Freezing repopulating (refreezing) - the things that have been learned are integrated into actual, practice - practice which works out to be the final goal of this step. Factor in organizational change depends on the circumstances of the organizations leadership. Changes in the organization, turned out to be part of the development although initially difficult and must be done by force, but has a positive impact.

**Keywords:** *organization, change, development, cooperative*

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### INTRODUCTION

Servants Cooperative Development Prog Kebonagung formed originated from the desire of civil servants in the District of Demak, Central Java Kebonagung Indonesia. Beginning of complaints that some members say that a strong economy will motivate and improve performance, when the economy is less robust in performance will slow down performance even could rise much less produce achievement. Beginning of small capital of several members of the majority are teachers in elementary schools in the district Kebonagung with a strong desire to eventually form a " Servant Cooperative Development Prog Kebonagung District of Demak. Strategic location at the curb between the road Dempet - Kebonagung become profitable assets because they are easy to reach by members of the various regions Kebonagung. because besides savings and loans in the form of money is also a store that provides basic food needs of the household also to the needs of its members. Over time the State Employees Cooperative Development Prog Kebonagung undergo changes in service or stewardship. Change actually make progress for cooperative raharja Development in

achieving the objectives for the welfare of its members. Writers observe and observe the cooperative management of Development Prog management in two periods of 2008-2010 and 2011-2013, namely an increase in the service of the board members. turnover be a key solution in the management of the Cooperative Development Raharja. From board professionalism, experience a capital increase, the adequacy of fulfillment member, as well as the provision of basic needs. Organizational change is a change relating to the development, improvement, or adjustments which include structure, technology, work methods and management system of an organization. an organization does not have to implement a change. This is an overall strategy to meet several objectives of an organization. Organizational change is often contrary to the values that respect the members in the organization. Many sources discuss the organizational changes required changes in the culture of the organization, including changes in beliefs and values as well as members of the trust and how to put these values. Organizational change can be a change in technology, structure, and physical individuals who need the knowledge, skills and a new culture. In making changes to organisassi

many factors that inhibit these changes include organizational culture that refuses to change and weak leadership. The statement is supported by the opinion of Daff (1988 : 659) that the leadership can encourage and support creativity to help followers and organizations to be more accepting and ready to change. Further research Bishop (2001 : 2020-227) stated that leaders at the summit level to facilitate the ability to change the level of support and develop the ability to change. The results of these studies imply that the stronger a person's leadership in taking action to change the organization that will be the higher level of achievement of organizational change, the weaker the opposite one's leadership in influencing and mobilizing others to make changes, then the lower the level of achievement of change. Organizational changes also occur in the Cooperative Development Prog. The existence of the Cooperative Development Prog can support government programs for the welfare of its members and it can be prepared alone, with only ensure sufficient capital for State employees. Optimizing existing facilities and merely renovate and add capital is still needed to optimize the well-being of the cooperative in ti members. Once Kebonagung Cooperation which has been successfully held directly by the bank's efforts made by the management in order to increase capital, it is still not taken into consideration and be a further development of programs that will further the process. However, to be successful and whether or not the development of a business is determined by the presence of an absolute sincerity in implementing or planning strategies that have made together and evaluated together in a compact team work, and agreed to always keep improving and eventually to achieve the expected objectives of the cooperative is to improve the welfare of its members. In this paper, we will describe the various changes in the organization of the Cooperative Development Rahaja Kebonagung Demak district. This organizational change using a model of Kurt Lewin's three stages which includes the step of unfreezing, moving, and refreezing.

### **Problems**

From the background above, the writer makes the formulation of the problem as follows :

1. " How cooperative management Servant Development Prog Kebonagung District of Demak in serving its members ? "
2. " What factors are making changes to the Civil Service Cooperative Development Prog District of Demak Kebonagung better ? "

### **Purpose**

1. To determine the cooperative management Servant Development Prog Kebonagung District of Demak in serving its members.
2. To determine what factors make the changes to the Civil Service Cooperative Development Prog District of Demak Kebonagung better.

### **Benefits of Writing**

1. Can take the positive side of the Servants Cooperative management in the District Development Prog Kebonagung Demak To be applied to the management of elementary schools.
2. Attitude to leadership committee as a model to be applied in the cooperative organization as a leader in managing the school.

### **THEORY STUDY**

A. Change in Organizations (Organizational Change) To understand organizational change in theory, the authors collected several definitions and concepts scientists. Michel Beer (2000 : 452) states that change is to choose a different action than before, differences that result in a change. If the option is equal to the previous result means will strengthen the existing status quo. Furthermore Winardi (2005 : 2) states that organizational change is the shift of any organized action of the conditions prevailing now headed to future conditions in the desired order to improve its effectiveness. In line with the Anne Maria (1998 : 209) argues that organizational change is an act of reassembling the components of the organization to improve the efficiency and effectiveness of the



organization. Given the importance of changes in the fast-paced environment it is time for change in the organization do not delay, delay means the organization will confront the deterioration process. However, keep in mind that not all the changes will lead to better conditions, so it is necessary that these changes are directed toward better compared to the previous conditions. Opinions expressed by JO matching. Bryson (1990 : 374) an expert in library management stated that " when one or more elements in a library change it is called organizational change " Bryson Opinion showed that only one element in the organization has changed, it can be said as an organizational change. From the definition of the above changes can be drawn that the notion that organizational change is an action taken against the elements in an organization to improve the effectiveness of organizations towards a better than ever. The change is part of human life, and can also occur in the organization, including library organization.

### Three-Phase Model of Kurt Lewin

Kurt Lewin developed a three- stage model of change include changes in how to take initiative, manage and stabilize the process of change itself. Lewin further explain these changes in terms of stage of unfreezing, moving, and refreezing.

Unfreezing is the first process of the phase change. At this stage of the search behavior occurs and the old system (the status quo). The contradiction between the factors that drive change and against will happen at this stage. Search phase runs smoothly if the driving force dominates. The driving force further changes and move to the desired system behavior. Moving a pembelajaran stage. At this stage, the workers were given new information, models and systems of work that are expected to be applied later, or a new perspective to the level of policy makers. Refreezing is freezing back stage behavior, and the system is expected outlook. At this stage required an affirmation and reaffirmation of the importance of the changes that are being executed. In order to support long-term changes required a system that guarantees the implementation of changes to escort dn that is being executed. In a three- stage model of change,

Lewin uses several assumptions that underlie the success of the change. The assumptions used by Lewin include. :

1. Process of change involves learning something new, and not continue the attitude or behavior now.
2. Changes should be driven by the desire and motivation to change.
3. Humans are driving the change.
4. Existence of a change in resistance is a necessity, even though the purpose of the change is very desirable.
5. Effective change requires a reinforcement of new behaviors, attitudes, and organizational practices..

C. Eight stage of Kotler In 2002, Kotter publish The Heart of Change, which contains the translation of the eight steps of organizational change that has been published six years earlier. In this book, Kotter dig deeper into the core issues facing the third change agent implementing the eight steps. Here is Eight - Stage Process Kotter style is :

#### 1. Establishing a sense of urgency

A change would occur if all members of the organization or company wants. Develop a sense of urgency on all employees is needed to create a corporate body changes. Stimulation motivation of the leader is the initial step is the development of a sense of urgency. The stimulation can simply be started with an intense and communicative dialogue with the leaders and subordinates related to the problems that arise in the company.

#### 2. Creating the guiding coalition

The next step is to create a coalition of guidelines for organizational change. Strong leadership requires the collective support of the subordinates. Such support can be created by the coalition. Coalition members or alteration consists of influential people within the company based on

job title, status, keahliaan, even political interests. This coalition will be moving and instill the values change (sense of urgency) to other employees.

### 3. Developing a vision and strategy

When a leader start thinking about changes, then it first appears is the ideas and solutions around change. Connect these ideas to create a vision of the desired changes. A clear vision will facilitate employee understanding of the concept of change desired by the leader. Once vision changes created, the next step is a creative strategy selected changes. If vision is able to change both the internalized by employees, then the strategy will be much easier to run.

### 4. Communicating the change vision

The next step is to communicate the vision that have been previously to all employees. The process of internalising the vision of these changes simultaneously executed by a team or coalition changes. Leaders must implement this change in behavior vision first. Communication of vision perubahan done every time with employees, not just merely as formal meetings alone. Vision changes can also be communicated through relaxing activities, such as outbound training and so on.

### 5. Empowering employees for broad-based action

What happens if there are employees who are resistant to change? What is needed is the strengthening of the internalization of the vision and strategy to employees perubahan. It takes skill to recognize the characteristics of each employee, so that the pattern approach taken was appropriate. A change agent must also remain sensitive to any obstacles encountered when implementing a change in corporate strategy. Continue to minimize these obstacles with the coalition changes.

### 6. Generating short-term wins

Nothing can be more motivating individuals other than success. Success is a triumph in implementing strategic change. Change agents

need to make a short-term wins at the start of the process of change. Create short-term targets so that employees can immediately enjoy the success of achieving the vision of change. Achievement of this target must be gradual, similar steps, so that employees will continue to be motivated to achieve success in the long term. Leader also need to appreciate that there is a failure in the short-term targets, so that employees are able to react on the positive feedback and improve performance on the next target.

### 7. Consolidating gains and producing more change

Kotter argues that corpulent change projects fail because victory is declared too early. The success of the short-term target of achieving the vision is just the beginning of a change in the long term. Each success provides an opportunity for change agents to establish what is true and identifying what are the sectors that can still be improved. Evaluate each of the achievement of short-term targets for improving the achievement of the quality of the next target.

### 8. Anchoring new approaches in the culture

Lastly, the change agent must make changes inherent vision and become a core part of the organization. These changes become internalized vision of a new organizational culture. Vision changes has been the culture of the organization will be reflected in the behavior or performance of day-to-day employee. Corporate leaders must keep this organization budaya running properly. Perform ongoing efforts to ensure that these changes are visible in every aspect of the organization, so as to create a solid organizational culture.

## Research Measures

Action research refers to a change process based on systematic data collection and the subsequent selection of a change action based on that indicated by the data that has been analyzed. The process is as follows:

### 1. Diagnosis

Change agents asking questions, interviewing employees, reviewing notes and hear the concerns of employees.

## 2. Analysis

Change agent to synthesize this information into a variety of primary concern, the midwife problem, and possible actions.

## 3. Feedback

Regulate the sharing of information with employees about what is obtained in the first stage and second. The employee, with the assistance of a change agent, preparing an action plan to realize the necessary changes.

## 4. Measures

The employees and agents of change taking certain actions to fix the various problems that have been identified.

## 5. Evaluation

By using data from the early stages that have been collected as a benchmark (benchmark), any changes are next compared and evaluated.

## E. Organizational Development

Organizational development is a term used to encompass a collection of planned change interventions are developed based on a variety of humanistic - democratic values, that seeks to improve organizational effectiveness and employee benefits. Six interventions that can be used by the agents of change are as follows :

### 1. Sensitivity training

A method of behavior change through group interaction was teststruktur. The members are invited to a free and open environment where they can talk about themselves and the interaction between them and get briefed that are not too tight of a professional scientist. The goal is to increase awareness of the perpetrators against their own behavior and how others perceive them, are

sensitive to the behavior of others and gain an understanding of the processes of the group.

### 2. Feedback Survey

Is one of the tools to assess the attitudes of members oanisasi, identify the differences between the perceptions of members and solve the differences. Usually by means members must fill out a questionnaire. Data obtained from the questionnaire can be used as a basis to identify problems and clarify issues that may cause difficulties.

### 3. Consultation Process

Is the process by which an outside consultant to help managers to perceive, understand, and act upon process events which must be faced is the manager.

4. Development Team (Team Building)  
That is by using the interaction group activities to improving mutual trust and open among team members. Activity in the construction team is setting goals, developing interpersonal relationships between team members, analysis of the role to clarify the roles and responsibilities of each team member and the analysis process.

### 5. Development of Inter- Group

This intergroup development seeks to change attitudes, stereotypes, and perceptions of one group against another group in a way bring each group to register their perceptions of the other group and the group itself and how the group believes the other group berpersepsi against them and do exchange list.

### 6. Appreciative Inquiry

Emphasizing the positive things and focus more on the success of an organization rather than the problem, such as : search for unique properties and specific strengths of an organization, which can then be developed to improve its performance. Stages of appreciative inquiry are as follows :  
1) Discovery (Discovery Efforts)

Is to find what is seen as a strength of the organization.

## 2) Dreaming (Dream)

Information of discovery is used to predict the future of the organization.

## 3) Design

Based on the process of dreaming, the participants were directed to the search for a shared vision of how the organization will view and agree on its unique properties.

## 4) Objective (Destiny)

Participants discussed how the organization will fulfill their dreams by writing and preparation of action plan implementation strategies.

### DISCUSSION

#### A. Analysis Approach Change : Three Phase Model of Lewin

Kurt Lewin stated that successful change in the organization to follow three stages, the release (unfreezing) the status quo, movement (movement) toward a desired end state, and the standardization of back (refreezing) new changes to perpetuate. For cooperatives in the District Development Prog Kebonagung elements become a factor driving organization - existence perubahan. Faktor factors driving the change are :

##### 1. Internal Factors

Internal factors that are influenced by human resource and managerial behavior or decisions that occur within the body of the organization itself is part of a reorganization changes private. presence character development is also a driving factor related to personal character and behavior changes as well as managerial decision. The individual is the most important variable for the development of personal character in the organization because they are decisive and do everything in the organization. Individual quality is very important and meaningful to the organization because it does not make much sense if they are not supported by the quality of its individual members. The development of personal

character is a quality management process and Cooperative Development Prog depends heavily on the quality of the individual characters.

##### a. Release (unfreezing) Status Quo

Before untouched changes, Prog Employees Cooperative Development was allowed to proceed with his own will despite the instruction of the chairman in the works, but from human factors and the response is less impressed indifferent. This condition runs long enough, eventually forming personal character of employees who tend to be productive and work at will, despite having command of ketua. Dalam administration also less orderly, and it is difficult to evaluate, who know only the management of the shopping treasurer self. Also knows only store employees. Chairman who became boss feel capable and clever to do everything themselves, can not provide a clear indication of an activity, bahkan not trust in subordinates about their work, and impressed scared assume responsibility for errors bawahan. hal the impact on the other board that is, glad to be an easy job for fear of being criticized for the mistakes he did, but it was too much wor, become less confident and less positive encouragement. Leadership Strategies long over the principles of leading the staff of the Civil Service and more organizations are still regarded as a small cooperative, so that not waking up with a good performance of the organization. In addition to the different character of the man and the different problems also occur in members, in a lot of loan repayment is also problematic, so the orderly management of the cooperative was not impressed.

##### b. Movement (movement) toward a desired end state

After Substitution of a new board, touch is very pronounced change in the leadership. Climate society together are placed in the correct position - right as an organization and not as service. touch change in emphasis reflects the internal organization and the development of personal character. Chairman Provides thorough explanation of the background, purpose, how consequently, of the holding of the changes are communicated to all

relevant parties in a variety of forms. Lectures, discussions, reports, presentations, and even socialization. The next step chairman assured the members that are afraid or anxious to change by implementing, and consulting, while also training, related to the development of individual capabilities. The goal is to reduce the rate of rejection of the chairman change. Selain in conveying the results of the analysis of the problem and propose actions always ask for suggestions and criticism on another board, employees of the store is also considering its response to the committee. For the final decision left to the organisation. In services to customers or members should emphasize the principle of friendly, Serving / Ministry, Harmony (always maintaining harmony), Cooperation, Integrity, Trustworthy. Similarly, the credit repayment discipline, the board held a personal approach with individuals who are troubled which ultimately piecemeal condition.

c. Standardization of return (refreezing) new changes to perpetuate.

In perpetuate change, the next step and establish the board confirms that the changes to be made must be originated from internal factors prior to the development of strong personal character. for the development of strong personal character. In Cooperative Development Prog mebaik since the change gradually. Below is the composition field Servants Cooperative Organization Development Prog District of Demak Kebonagung year period 2014-2016 :

- Membership

End of 2013 Male : 87 people And Women's 80 people, so the number of members : 167

- Leadership

- a. Chairman : H. Pasmun, S.Pd Elementary School Teacher Kebonagung 3 Demak in Central Java Indonesia..
- b. Secretary : Bambang Subagyo, S.Pd Elementary School Principal Sokokidul Kebonagung Demak, Central Java Indonesia.

c. Treasurer : Suyadi, S.Pd Elementary School Teacher Mijen 1 Kebonagung Demak, Central Java, Indonesia.

- Board of Supervisors

a. Chairman : Suyono, S.Pd

b. Members : H. Sutrisno, S.Pd

c. Members : H. Haryanto, S.Ag

- employee

a. Store Employee : Ninik Kuswati

b. Employees USP : Edy Triyono, S.Pd

2. External Factors

External factors can occur due to technological advances, changes in market and social and political pressures.

a. Release (unfreezing) Status Quo

Technological progress related to the facilities and infrastructure at the cooperative office Bina Prog ago and many still manually using handwriting and a very old-fashioned typewriter miss zaman. Kesejahteraan neglected member, does not meet the principles of welfare so that customers are turning to small Cooperatives Cooperatives high - interest. because the service is still manual and typewriters are still not wearing ancient computer. Influx Affects the administrative services will slow members so often mistaken in calculating payroll deductions on many customers who komplin and continues on the problem.

b. Movement (movement) toward a desired end state

With the use of modern technology Cooperatives Development Prog conditions can be accessed by the customer and all components that require calculation informasi. Dalam also just click all was in order, so as to produce a satisfactory customer service. In addition to technological advances, changes in the market Koprasi bina raharja also occur, which determine the quality of consumer

goods and services with the presence of price suitable level. With shopping is a core competency in providing basic necessities for basic food needs are also provided cloth members. Selain purposes also school. almost complete, although still in small quantities but not disappointing and can meet the needs of members. fact, in addition to members of the public are also many who shop at the cooperative building raharja, because the price is more lighter and friendly service debt. Apart also social and political changes in market pressures associated with kejadian social and political happenings.

#### B. Rejection of Changes in Cooperatives Development Prog

Changes in the Cooperatives Development Prog, does not necessarily have the support of all parties. Managers and employees as forced to follow change. however finally able to accept change and as needs. A lot of members who are not able to follow the new rules in a change in the Cooperatives Development Prog. Because the salary conditions of customers who can not cut. The members who are unable Many are out of the organization. Surviving members are members choice and with good salary position. In addition to the major banks started pierce. In early 2010 Economic Prosperity Bank provide capital investments and even the banks were able to contribute a door prize at the meeting did not materialize RAT. Indeed issued building cooperative raharja when RAT but only for Doorprize nearly ten million more. with the participation of banks greatly ease the Welfare Economics raharja cooperative building to achieve the expected progress of members. Changes in an organization turned out to be part of the development of an organization. If you find management companies stop growing or may not go ahead then the organization must dare to make bold policies, although perceived by all stakeholder extreme at first.

#### c. Standardization of return (refreezing) new changes to perpetuate.

The change was not a necessity, but it proved to be a necessity for organizations that want to move forward and succeed Cooperatives Development

Prog since 2013 when the management changed and continue to take bold decisions to manage change, the results of which found the effectiveness and progress of the organization entrusted with the capital increase of the Bank's Economic Welfare and participate in the distribution of current Doorprize RAT so that further adds to the trust members and may increase welfare of the members.

## CLOSING

### Conclusion

After conducting a description of some of the theories of managing change and find evidence of the management of change in Cooperatives Development Prog authors to conclude as follows :

1. Substitution Bina raharja cooperative management solution turned out to be key in managing the impact on improving the welfare of the members are also in the development of cooperative management bina raharja character the better.

2. Factors affecting changes in the organization of the State Employees Cooperative Development Prog Kebonagung District of Demak are internal factors and external factors that are both didominasi by the development of personal character.

### Recommendations

1. Managed cooperative organization should be balanced with the quality of leadership that is always evolving his personal character.

2. Regard to addressing factors should make changes to the cooperative individuals strong personal character as a driver of change.

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## ENTERPRISE ASSET MANAGEMENT HOSPITAL

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### Abstract

This study was conducted as the growing concern towards the lack of management of the hospital assets. It leads to the absence of services to the patients as a core business for the hospital. This study was expected to apply hospital asset management well and responsibly. Most of medical equipments have been based on IT to fit the vision and mission of the hospital which is unique, specific and contains competitive advantages. Each hospital has its own strategy to suit the business characteristics. The hospital utilized IT to manage both their tangible and intangible assets through programs of Enterprise Asset Management (EAM) Hospital. EAM Hospital is a hospital integrated asset management system in which the success rate was concerned with the planning, improvement and control of hospital-owned assets in the hospital business processes for the realization of hospital operational excellence.

**Keywords:** *tangible asset, intangible assets, enterprise asset management, hospital*

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### Introduction

This asset is a very important work capital in supporting the work of the institution. The asset needs to be identified, managed and taken care of so that it is always in an optimum condition. Hospital is a medical center for community. In order to give operational excellence, medical equipments are in need. Medical equipments are one of the main components beside human resource and medicine. Technology for medical equipment is improving. All medical assets that belong to the state owned hospital need maintenance, improvement for the operational purposes. Each decision making related to the purchase of a new equipment needs long procedures. To guarantee the quality of the medical equipment, the medical equipments have to fulfill the requirements of Ministry of Health Law [1]. Inventory of small numbers of the hospital assets can be done manually through Ms Excel while the bigger numbers will find difficulties in using manual inventory. Asset management needs specific application with intranet media which can be accessed anytime, using login. This application can give simple notification to the users in budgeting, supplying new asset fast and easily. This system can

also present the status of the assets. The purpose of this paper is how intranet-based hospital asset management assist the management in providing data and information, in making decision quickly, correctly and accurately. This specific application is provided for Class A General hospital.

### Discussion

Enterprise generally includes productive systems, procurement systems and sales system. Throughout the system is a process of value added. A complicated system with a variety of tasks related to the dimensions of the task dimension is related to the stakeholders, and performance related to the value adding chain. Enterprise collaboration systems are cross-functional information systems that enhance communication, coordination, and collaboration among the members of business teams and workgroups. The goal of enterprise collaboration systems is to enable us to work together more easily and effectively by helping us to communicate, sharing information with each other; coordinate, coordinating our individual work efforts and use of resources with each other; collaborate, working together cooperatively on joint projects and assignments [2].



What is Asset Management? Asset management is the process of organizing, planning, designing and controlling the acquisition, care, refurbishment, and disposal of infrastructure and engineering assets to support the delivery of services. It is a systematic, structured process covering the whole life of physical assets [3]. The objective of asset management is to optimize the service delivery potential of assets and to minimize related risks and costs and ensure positive enhancement of natural and social capital over an asset life cycle. Good governance and the intelligent deployment of business systems, processes and placement of human resources that have the appropriate capability is essential factors in achieving the above objectives. In the study of the properties of a newly developed theory, it is known as asset management (asset management). Britton, Connellan, Crofts (1989) expressed the opinion that *"define good asset management in terms of measuring the value of properties (assets) in monetary terms and employing the minimum amount of expenditure on its management"* [4]. In the newest development, asset management is getting wider so it can monitor the operational performance and the investment strategy for asset to function as efficiently as possible. In Indonesia this development is still difficult to be implemented. One of the problems is the inefficiency of the asset data management. It will create difficulties for the government to get the exact data of their asset. This difficulty will lead to ineffectiveness and more inefficiency in the future. It also leads into discrepancy among the use of the equipment, the value of the equipments and the potential in the asset. This is stated on the Keputusan Menteri Dalam Negeri No.49/2001 as *"...rangkaian kegiatan dan tindakan terhadap asset daerah yang meliputi perencanaan, penentuan kebutuhan, penganggaran, standardisasi asset dan harga, pengadaan, penyimpanan, penyaluran, inventarisasi, pengendalian, pemeliharaan, pengamanan, pemanfaatan, perubahan status hukum serta penatausahaannya"* [5]. Asset management can be divided into five phases, namely asset inventory, legal audits, asset valuation, asset optimization and development of SIMA (asset management information system). These five phases are interrelated and integrated [6]. The first

phase, Asset Inventory, consists of two aspects, namely the physical inventory and the legal / juridical. The process is a collection of work done, codification / labeling, grouping and documentation in accordance with the purpose of asset management. Asset Inventory is intended to provide convenience in bookkeeping or implementation of asset administration / administration so that all assets be recorded uniformly and can be easily known physical quantity, location and condition. The second phase, Legal Audit, is the scope of work in the form of an inventory asset management ownership status of assets, systems and procedures possession or transfer of assets, the identification and finding solutions to legal problems and strategies to solve a variety of legal issues relating to tenure or transfer of assets. Legal audits will be of great benefit, especially to determine which assets should be included in the recording of fixed assets in the financial statements. The third stage, Asset Valuation, a work process to conduct assessment of aspect-controlled. Assessment of these assets will be able to know the existence of assets that cannot be assessed the fair value of the asset at the time the assessment is due to the very old and no longer a market for these assets, so it is difficult to estimate the value of assets in the present, or the existence of goods grants without information acquisition value. The fourth stage, Asset Optimization, is the process of working in the asset management aimed at optimizing physical potential, location, value, quantity / volume, legal and economic assets owned by them. The end result of this phase is a recommendation in the form of goals, strategies and programs to optimize assets controlled. The fifth stage, Monitoring and Controlling the use and transfer of assets is effective for improving the performance of assets through the development of SIMA. Through SIMA asset management transparency is guaranteed, and all four aspects accommodated in this system by adding aspects of monitoring and control. So any handling of assets are clearly monitored, ranging from the scope of who is responsible for handling up to handle it.

### **Government Regulation of Hospital**

Regulation of the Minister of Health of the Republic of Indonesia number 340/Menkes/III/2010 is about Hospital Classification. Hospital is a health care institution that is organized as a complete individual health care that provides inpatient, outpatient, and emergency department. General Hospital is a hospital that provides health care services to all areas and types of diseases. Classification is the grouping class hospital based on facilities and service capabilities. The facilities are everything matters relating to facilities, infrastructure and tools (both non- medical equipment and medical instruments) required by the hospital in providing the best possible care for patients. The facility can also mean are all physical objects that can be visualized by the eye or palpable by five senses and can easily be recognized by the patient, and (generally) a part of a building or the building itself. Infrastructure is the object or the network / agency creating a tool that is able to function in accordance with the expected goals. Labor force is still working at the hospital full time and permanent employee status. Based on the facilities and services capabilities, General Hospital is classified into Class A; General Hospital of the Class B; General Hospital Grade C; General Hospital General Hospital Class D. Class A has the facilities and capabilities of medical services at least four (4) Basic Specialist Medical Care, 5 (five) Medical Support Specialist Care, 12 (twelve) and Other Specialist Medical Care 13 (thirteen) Sub Specialist Medical Services. Criteria, facilities and capabilities General Hospital Class A as referred to in paragraph (1) shall include the General Medical Services, Emergency Services, Basic Medical Services Specialist, Specialist Medical Support Services, Other Medical Services Specialist, Medical Services Specialist Oral Dental, Medical Services subspecialist, Nursing and Midwifery Care, Clinical Support Services, and Non- Clinical Support Services. The availability of health personnel tailored to the type and level of service. In the Primary Medical Services must be at least 18 (eighteen) general practitioners and 4 four) dentists as permanent workers. On the Basis of Medical Services Specialist must each have a minimum of 6 (six) specialist with each two (2) specialist doctors as permanent

workers. At the Care Medical Support Specialist must each have a minimum of 3 (three) additional specialists with each one (1) person as permanent workers. In Other Specialist Medical Services there should be at least each three (3) additional specialists with each one (1) person as a permanent worker. For Oral Dental Specialist Medical Services each should have at least one (1) person as a specialist dentist as permanent worker. At the subspecialty of Medical Services should each have at least 2 (two) subspecialty physicians with each 1 (one) person subspecialty physicians as permanent worker. The ratio of nursing staff and the bed was 1:1 with qualified nursing personnel in accordance with the services at the Hospital. Supporting staff based on the needs of the hospital. Hospital infrastructure equipment must meet the standards set by the Ministry of Health. Radiology and nuclear medicine equipment must meet the standards in accordance with the provisions of the legislation. The numbers of beds are at least 400 (four hundred) [7]. In the process of asset management and non-medical equipment medical equipment, hospital management is always faced with problems which arise especially medical equipment such as equipment inventory is not exhaustive and well-documented, making it difficult for the hospital management to track the presence of the tool, knowing the real condition of the equipment (tools in good condition, broken or damaged light weight), the percentage whether it is still worthy tool or not feasible to use, the value of assets that have been invested, how much depreciation annually, how the track record/history medical equipment, how many times had improved during his life and how costs are needed, how to record or documentation of maintenance performed, what tools are often susceptible to interference/complaints, why are common complaints, how the results of the calibration tool for this and many other problems. In order to assist the hospital management to manage assets and non- medical equipment medical instrument well, effectively and efficiently it is necessary to support the form of software applications and hardware, which is able to assist in managing the assets of the hospital.

### Features IT Support for AM

Intranet-based asset inventory RS is able to take good notes and complete the data properties ranging from appliance, vending supplier database tools, actual medical equipment condition data, determine the value of the assets to the value of depreciation, a track record of repair, maintenance and calibration of each instrument is equipped the image tool unit. The ease of documenting all activities of maintenance, creating worksheets of maintenance, repair and calibration of medical equipment including scheduling, reporting and calibration reminder medical tool that will be due. Application assets are also created in support of the hospital accreditation compliance (KARS), an ISO 9001-2008 quality conformity or the Joint Commission International (JCI) and Law No. 44 of 2009 on the hospital which includes management of facilities, infrastructure and equipment in order to be properly managed, effective and efficient. Details of the module consists of module inventory (includes Building Inventory, Room Inventory, Medical Equipment Inventory, Spare part Inventory, Accessories, Technician Database, Supplier Database, Track Record, Calibration Record, Maintenance Record, Repair Record, Depreciation, and Equipment Image; maintenance module (Maintenance Schedule Data Entry, Set up Maintenance form, creating maintenance worksheet, Generated Maintenance form, and Maintenance Report; Calibration module (Calibration Schedule Data Entry, Calibration Report Data Entry, Calibration Report, Calibration Reminder; Compliant module (Complain Data Entry, Complain Report); MODUL REPAIR (Repair Data Entry, Repair Report); Report module (Report, Graphic Report). Enterprise application is designed to support organization-wide process coordination and integration. These enterprise applications consist of enterprise systems, supply chain management systems, customer relationship management system and knowledge management systems [8]. Features in the Enterprise Asset Management applications Hospital (EAM RS) was designed and developed using some of the main features of the flagship of the benefits of good asset management is the application of technology Web Base System. This technology enables the

application software can be accessed anywhere in this hemisphere with an internet connection, not just confined in a hospital environment; UMDNS Code Compliant, standardize the naming of medical equipment as per international standards UMDNS Code (Universal Medical Device Nomenclature System) to help minimize errors in recording medical instrument naming the Inventory module; Standardize Risk Level Medical Equipment SAMRS already equipped with medical equipment standardization level of risk (Risk Level). With this feature all the medical equipment will be classified as equipments that require to be calibrated according to the standard of PERMENKES No.363 of 1998 and do not require to be calibrated; Calibration Reminder; Medical Equipment Calibration, Maintenance & Repair History / Track Record; Set up Maintenance Form, this feature provides a facility for the manufacture of medical equipment maintenance worksheet; Graphic Report, the report can be displayed in the form of attractive graphs to help analyze the data [9].

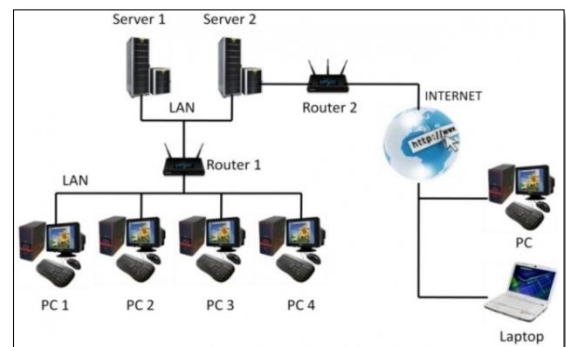


Figure 1. Configuration System EAM Hospital

Hospital EAM application design technology based on Internet / Web base system is more practical to apply, because it only needs to be installed on all client servers connected directly online by simply using a web browser. There is no need to install applications on each client computer, so it's free of the license fee per user. Setting based on the authority and right only through a configuration management system of the server is needed so that users have high practicality. For maintenance, this system is only performed on the

server. It does not need to go to each client computer so it will not interfere the service, even the activities can be done with the practical and efficient Remote Procedure System maintenance remotely. The advantages of using a design EAM Asset Management is the hospital asset management system is designed based on the needs of the hospital asset management, particularly medical equipment both from the technical and management aspects. It will facilitate the management of the hospital to perform control functions, monitor, evaluate and plan that can be the basis of a decision-making related to the Improvement to do the hospital management. It will also help to keep a good record of all work related to inventory, calibration, maintenance, and repair tool handling complaints, to facilitate hospital accreditation in the face of the hospital (KARS) or Joint Accreditation International (JCI); Multi User. Hospital EAM can be used by more than one user at the same time and can be mutually connected among users by using the user account and setting its level; Integrated Data System (data obtained is a single data and can be accessed by multiple users at the same time so that data validation can be justified); easy to operate (User Friendly) and attractive design (Eye Catching Design); Flexible Design System (System process is flexible to follow the flow of business processes as needed hospital although EAM Hospital has had its own standard system concept.

### Conclusion

EAM Hospital has a very important role in the development of the hospital high valuable asset investment, it is necessary to properly manage. In addition to fulfilling the Hospital Accreditation (KARS) or ISO 9001-2008 medical equipment maintenance management program is also aimed at compliance with patient safety and customer satisfaction. The design of EAM Hospital application as tools is very helpful in the Asset Management in

the Hospital so that these activities can run smoothly, effectively and efficiently. Hospital EAM application design is an answer that has been the question of the hospital technician, chief medical support, stakeholders in the hospital who are dealing with medical equipment in the hospital.

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## EFFECT FINANCIAL AND NONFINANCIAL ASPECTS TO VALUE OF BUSINESS THROUGH THE VOLUME OF BUSINESS IN COOPERATIVE SAVINGS AND CREDIT

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### Abstract

The purpose of this study was to examine the effect financial and non-financial aspects to value of business through business volume on credit and savings cooperative in North Aceh. The data used in this study are secondary data from 12 credit unions that hold annual member meeting and reported on the financial statements for 2009 to 2012 the Ministry of Cooperatives and SMEs North Aceh. This study analyzed data using PLS regression method with software version 2.0.M3. The study found that the financial aspect is still very important role to improve the value of business cooperative. Appropriate, the participation of the members is also crucial for the success of the credit and saving cooperatives.

**Keywords:** examine, volume, cooperatives, pls

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### Introduction

The role of cooperatives in Indonesia has received recognition from the UN in terms of the ability to survive during the crisis, 2008 crisis, increase economic growth, create jobs, reduce poverty, and improve the prosperity and welfare of the people. It was found in the resolution in 2012, through its resolution 64/136/2012.

[1] mentions that cooperatives are an important part in the economic development of countries in the world, because cooperatives can generate revenue. [2] said that cooperative would restore income to its members, or the number of patrons that will be allocated to members and can also be saved for use as a future capital. [3] says the cooperative has a uniqueness that all members of a user of the services provided by the cooperative. For example, credit unions will provide full service to all its members, or prospective working group, and contribute back to after a successful cooperative effort. It was also dismissed the issue of the application of the principles of classical economics that the profit [4].

[5] says that the cooperative is a company that should be able to stand alone to run its business activities to earn profits or revenues. In Act No. 25 Article 45, Paragraph 1 of 1992 stated that 'SHU' is

a cooperative income earned within one year reduced the costs, depreciation, and other obligations, including in the tax year concerned.

In Aceh, the total assets of the cooperative in Aceh has reached Rp 3, 518 trillion. In addition, Section Head of Organization and Management *Disperindagkop* Aceh, there is lots of cooperative growth in three areas, among others, Banda Aceh, Aceh Besar, and Aceh Utara. Banda Aceh number of cooperatives as much as 780 units, 657 units Aceh Besar. While as many as 521 units of North Aceh, and to other areas still under five hundred [7] and [8].

The motivation of this study is that most previous studies done used few mediating variables to examine the effect of financial and non-financial variables to the 'SHU'. Like [9]; [10]; [11]; [12]; [13]. Based on the above, the purpose of this study was to examine the effect of financial and non-financial aspects of the business revenue through business volume as a mediating variable.

### Literature

Financial and non-financial aspects

Law of cooperatives [6] and [14] concerning the cooperative mentioned that the indication of the direction of financial and non-financial aspects. The

financial aspect is composed of its own capital, external capital or foreign capital. While the financial aspects of a number of board representation, the number of inspectors and the number of members. Essentially, cooperatives have the same effort with other financial management services, including economic benefits distribution and oversight through the balance sheet and income statement to see the company generating profit / of net income [15].

[13] put the number of members, the development of a cooperative effort that is reflected by the financial and non-financial indicators. Cooperative financial indicators, capital itself, outside the capital/ foreign, and the business volume of net income. Non-financial indicators is the number of members, number of employees, business unit cooperative. The existence of these two aspects makes the cooperative managed to meet the welfare of its members. Cooperatives have been successful is that effective and sustainable cooperative accomplishes two goals at once, namely enhancing the ability to serve members and make more economical cooperative, competitive and [16].

Several studies have tested the effect of Indonesia's capital and cooperative member of the SHU. But there are still a few who use business volume as a mediating variable. [11] examine the effect of the involvement of the builder, the ability of management and participation of members of the cooperative financial performance boarding school. [17] using a structural equation model approach the performance of village cooperatives in the province of Bali. [18]; [19]; [20]; analyze the performance of cooperative – balanced scorecard approach. [21] who analyze the financial performance of savings and loan unit Employees Cooperative Republic of Indonesia at UB. [22] analyze the performance of cooperative with CAMEL. [23] to measure the performance of the cooperative with the Regulation of the Minister of Cooperatives and Small and Medium Enterprises Republic of Indonesia Number 14/Per/M.KUKM/XII/2009.

[12] studied the effect of number of members, number of deposits, loan amount and the amount of working capital to the rest of the results of operations of savings and credit cooperatives (KSP) in Badung Bali Province. [10] examine the effect of its own capital, external capital, and the business volume of net income of cooperatives in the province of Yogyakarta Special Region. Research in Aceh also analyzed the performance of the cooperative. [24] examine the impact of a revolving fund program Rehabilitation and Reconstruction Agency for Aceh and Nias (BRR NAD-NIAS) through cooperatives and microfinance institutions to improve household incomes of beneficiaries in Aceh Province. [25] analyzed the performance of cooperatives in Banda Aceh and Aceh Besar. Their research uses only test test by comparing the average performance of the cooperative from year to year. Performance seen from the number of members, profitabilit, liquidity, profitability, solvency and cooperative activities in Banda Aceh. [9] studied the effect of the amount of equity and the amount of outside capital to variable volume SHU through the efforts of cooperatives in the city Lhokseumawe.

## **Research Method**

### **Data**

The data used in this study are secondary data from credit unions and savings and loans unit, the Islamic financial services cooperatives and savings and loans unit and the financial services unit of sharia (KSP / USP KJKS and / UJKS) at the Ministry of Cooperatives and SMEs North Aceh during the year from 2009 to 2012. The data obtained by opening one by one and see the financial statements that perform cooperative savings and loan business. The presence of USP because there are many cooperatives that still permits in accordance with the Cooperative Act No. 25 of 1992. Upon opening the file all of the 22 cooperatives that there are only 15 active cooperatives financial statements.

The name is the name of the cooperative Kopkar. PT. PIM, Primkoppol A. Utara Police, KPN- Kopebun, KJKS Samudra Pasai, KPN-Image Master, KJKS Dewantara, KPN Shoots, Kopwan Assorted Enterprises, KJKS Arafat, Koptan Harkat Tani,

Kopbun Cut Mutia, Primkoppau satrad 231, Kop.Jasa Ade Beurata, Kopwan For Beusare, Kopbun Resource Farmers. And after staying 12 cooperative data tabulation because there are three cooperatives that do not have foreign capital and there is also a negative SHU (excluded from the sample), the cooperative is cooperative Primkoppolres A.Utara, Kopbun Resource Farmers and Primkoppau satrad 231.

#### Measurement of Variables

Measurement variables of financial and non-financial aspects in a cooperative refer to Cooperative Law [14]. Naturally, the goal is the welfare of members of income cooperative distribution. Under the law of net income is largely determined by foreign capital and own capital (financial aspects as well as the volume of business as a mediating variable) and the number of members, number of officers and the number of supervisors (non-financial aspects). However, this study only uses the number of members as the number of administrators and supervisors illegible channeled through PLS program.

#### Research Model

This study uses Partial Least Square analysis tool that was first developed by Herman Wold in 1985 as a data analysis techniques to software version SmartPLS 2.0.M3 which can be downloaded from <http://www.smartpls.de>. This software program runs on Java Runtime Environment version 1.4 can be downloaded from the webpage of Sun Microsystems Inc. in <http://java.sun.com/j2se/1.4.2/download.html>.

#### Creating Line Diagrams

Constructing the path diagram of the modeling is to construct a structural model linking latent variables endogenous and exogenous variables. Next, construct measurement model by linking indicators and latent variables. As for the endogenous latent variable (Y) is the remainder of the results of operations and business volume as a mediating variable. Furthermore, exogenous variables (X) is its own capital, foreign capital and the number of members. Because this study examines the effect of the relationship between

latent variables in the PLS operation, and test inter-relationship between different variables [27]

#### Outer and Inner Model Test Model

Because it is assumed that among the indicators are not correlated, then the size of the internal consistency reliability are not required to test the reliability of formative constructs [28] This is in contrast to reflexive indicator that uses three criteria to judge the outer models, namely convergent validity, discriminant validity and composite reliability. Since the formative construct is basically a regression relationship of indicators to construct, then how is the vote to see the value and significance of the regression coefficients of the regression coefficients. Testing structural inner models or models is made to see the relationship between the constructs, significance and value of the R-square of the model study. Structural model was evaluated using the R-square for the dependent constructs, Stone - Geisser Q-square test for predictive relevance and significance of the t test and the structural path coefficient parameter

#### Discussion

##### Model Evaluation: Outer and inner test models

Path diagram presented in Figure 1 below is a form of testing using PLS. In the first test 1, the financial aspects of the exogenous variables (equity and foreign capital) associated with the endogenous variable (business volume) in 2009, 2010, 2011, and 2012. Models using PLS test 2 is shown in Figure 1 below.

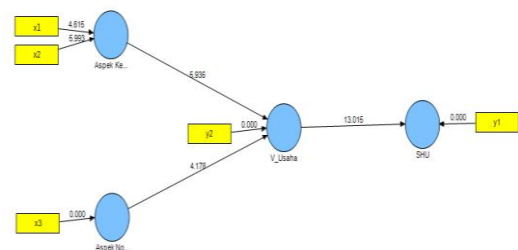


Figure 1. Strip Diagram

Table 1 below is the result of the estimation model and the inner outer test calculations using the PLS models to the data of this study.

Table 2. Testing outer and inner

Outer Weights (Mean, STDEV, T-Values)

|                          | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics ( O /STERR) |
|--------------------------|---------------------|-----------------|----------------------------|------------------------|--------------------------|
| x1 -> Aspek Keuangan     | 0.552127            | 0.579456        | 0.119644                   | 0.119644               | 4.614744                 |
| x2 -> Aspek Keuangan     | 0.661730            | 0.630732        | 0.110410                   | 0.110410               | 5.993400                 |
| x3 -> Aspek Non Keuangan | 1.000000            | 1.000000        | 0.000000                   |                        |                          |
| y1 -> SHU                | 1.000000            | 1.000000        | 0.000000                   |                        |                          |
| y2 -> V_Usaha            | 1.000000            | 1.000000        | 0.000000                   |                        |                          |

Source: Data processed, 2014

Furthermore, using *Goodness of Fit testing models* in the inner structural model using the R-square value [29] Value of R-square value of the function to see the significance of latent variables. In Inner testing the model R-square showed business volume (Y2) is 0.684, meaning that 68.4 % of business volume variable is affected by the financial and non-financial aspects and the remaining 31.6 % is influenced by other aspects beyond this study. Furthermore, for the variable 'SHU' financial and non-financial aspects and business volume to the SHU was 67.6 % and the rest is influenced by other variables outside the model of this study was 32.4 %.

Table 2 R-square value

|                 | R square |
|-----------------|----------|
| financial       |          |
| Non financial   |          |
| Business Volume | 0,684    |
| SHU             | 0,676    |

Source: Data processed, 2014

To see the relevance of the size of the prediction (predictive relevance) of the endogenous latent variables with reflective indicators to assess the magnitude of the square Q ( $Q^2$ ), where a latent variable has predictive relevance of good if you have  $Q^2 > 0$ .  $Q^2$  In this study, the amount can be calculated as follows:  $Q^2 = 1 - (1 - R_i^2)$ . From the equation above, the value of  $Q^2 = 1 - (1 - 0.6842) = 1 - (1 - 0.467) = 1 - (0.533) = 0.467$  and  $Q^2 = 1 - (1 - 0.6762) = 1 - (1 -$

$0.457) = 1 - (0.543) = 0.457$ . Based on the test results obtained by  $Q^2$  and  $Q^2$  values are 0.467 and 0.457, meaning the model in this study has a good prediction, because  $Q^2 > 0$ , which means having a good predictor of the latent variables endogen.

## Hypothesis Testing

Limitation to receive or accept test 1 and 2 seen from the criterion value of t statistic  $> 1.96$  (Latan and Ghazali, 2012). More results in regression coefficients can be seen in the following table:

Table 3. Coefficient regression

Total Effects (Mean, STDEV, T-Values)

|                               | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | Standard Error (STERR) | T Statistics ( O /STERR) |
|-------------------------------|---------------------|-----------------|----------------------------|------------------------|--------------------------|
| Aspek Keuangan -> SHU         | 0.484270            | 0.471765        | 0.093475                   | 0.093475               | 5.180753                 |
| Aspek Keuangan -> V_Usaha     | 0.589183            | 0.574314        | 0.099253                   | 0.099253               | 5.936150                 |
| Aspek Non Keuangan -> SHU     | 0.295124            | 0.292116        | 0.077752                   | 0.077752               | 3.795690                 |
| Aspek Non Keuangan -> V_Usaha | 0.359060            | 0.354064        | 0.085941                   | 0.085941               | 4.177983                 |
| V_Usaha -> SHU                | 0.821936            | 0.819297        | 0.063153                   | 0.063153               | 13.015039                |

Source: Data processed, 2014

Based on Table 5 above can be explained all the components of both financial and non-financial aspects from tests 1 and 2 values using t statistic is greater than 1.96. Furthermore, the value of each component is the financial aspect of the business revenue and business volume are 5.180 and 5.936, while the non-financial aspects of the business volume and the rest of the effort is 3.795 and 4.1779

## Effect of Financial and Non-Financial Aspects of the Business Volume

In the first equation we can conclude that both exogenous financial and non-financial aspects affecting both endogenous variables (business volume) credit unions in North Aceh district. This conclusion is based on the results of the PLS output that indicates the value of t-statistics for the



financial capital variable with a value of  $5.936 > 1.96$  and non-financial aspects of the value  $4.177 > 1.96$ . Results from the regression coefficients in the model calculations can be concluded that both the exogenous, finance exogenous variables is a very dominant variable affecting the increase in the volume of cooperative efforts in the North Aceh district by 58.9 %, while non-financial variable itself is only 35.9 %. This conclusion is based on the model of the first equation, namely;  $Y = 0.589 + 0.359$ .

The above findings indicate that credit unions in North Aceh district during this mostly depends on the financial aspects than the non-financial aspects of the run the business activity. The findings are similar to previous research conducted by Lukman, (2011) and Ward, 2009. They state that the capital is an important aspect in a cooperative and dominant. These findings were also found participation of the members of credit unions in North Aceh participatory yet so good at doing deals on cooperatives. This finding is contrasts with studies Rusdarti (2009) who found the participation of Cooperative members in Semarang Pasantren to 50 % to make better financial performance of cooperatives.

#### Effect of Financial and Non- Financial Aspects through the Business Volume of Business Against

In the second equation is concluded that the three exogenous financial, non-financial and business volume, all of which affect SHU credit unions in North Aceh district. This conclusion is based on the results of the PLS output that indicates the value of t statistic  $> 1.96$  for the financial variables of 5,180 to 0,379 and for non-financial variables in business volume amounted to 13.015. Results of the regression coefficients in the model calculations it can be concluded that the three variables (financial, non- financial and business volume), variable volume of business is a very dominant variable affecting the increase of net income (SHU) credit unions in North Aceh district, amounting to 82,1 %, while the financial and non-financial variables in business sisahasil increase respectively by 48.4 % and 29.5 %. It is based on the second equation models, namely:  $Y = 0.484 + 0.295 + 0.821$

The equation shows that, for the savings and loan cooperatives in North Aceh remainder of his efforts is largely determined by the volume of business, followed by the financial aspects and finally non-financial aspects. This finding is consistent with research that has been done by Atmadji, 2007; Ayuk; 2009; Sari; 2010, which concluded that the SHU is determined by the cooperative finance and the financial aspects. However, a different study by Lukman (2011) which states that the volume is determined by the cooperative effort, especially the financial aspects of foreign capital. But the use of foreign capital itself akana resulted in a decrease in the cooperative SHU Lhokseumawe. This happens because the cooperatives that use a lot of capital from outside parties bear the cost of capital so high business volume earned runs allocated to pay the cost of borrowing capital from outsiders.

#### CONCLUSION

This study found that most cooperatives in North Aceh are still highly dependent on foreign capital or the financial aspect in increasing the volume of its business. In addition, this study also found that the low influence of the non-financial aspects of the business volume. These findings indicate that members of credit unions are still not yet fully active or fully participative in the cooperative. Participation here is the activity of members to do buying and selling or savings and loans were stable at least congestion in cooperative loans should not be too big.

The study also found that of net income is strongly influenced by the volume of business, the financial aspects and non-financial aspects. High volume of business transactions occur because the activities carried out by members of the cooperative, the more transactions the greater welfare of members of the SHU is finally better. So, become a member of the cooperative is not enough only as a member, but need the active involvement and equally maintaining financial discipline and orderly administration that the cooperative has grown and become more prosperous members.

This study suffered from the limitations of the data as it only uses 12 cooperatives in North Aceh

actively execute RAT. In addition, the data used have not been audited and may not be similar with other cooperatives. Future research should be focussed on well performing cooperative as the sector of non-financial aspects to increase number of administrators and supervisors variable instead of number of members only.

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## EFFECTIVE IMPLEMENTATION OF QUALITY MANAGEMENT SYSTEM (QMS) ISO 9001: 2008 DEVELOPMENT IN SCHOOL BASED MANAGEMENT IN STATE SMK 1 SAYUNG

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### Abstract

This study was aimed at investigating the effectiveness of the implementation of Quality Management's System ISO 9001:2008 at SMK Negeri 1 Sayung viewed from the aspects of context, input, process, and product. This study used *ex-post facto* approach. The subjects in this study were 220 respondents. The data analysis technique used in this study used T-score. The results showed (1) The aspect of context was categorized as effective where the difference between the positive and negative percentage was 56.00% and 44.00%, (2) The aspect of input was categorized as effective where the difference between the positive and negative percentage was 64.00% and 36.00%, (3) The aspect of process was categorized as effective where the difference between the positive and negative percentage was 61.48% and 38.52%, and (4) The aspect of product was categorized as effective where the difference between the positive and negative percentage was 60.00% and 40.00%. From those 4 aspects explained above, it can be seen that the aspect of input showed the most effective result. Based on the aforementioned results, it can be concluded that the implementation of Quality Management's System ISO 9001:2008 at SMK Negeri 1 Sayung was effective.

**Keywords:** context, input, process, product, and Quality Management's System

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### INTRODUCTION

Law of the Republic of Indonesia No.20 of 2003 on the National Education system mandates that the National Education serves to develop skills and form the character and civilization of the nation's dignity in order to achieve the life of the nation, aimed at developing the potential of students to become a man of faith and fear of God the Almighty, who have a certain character precious, healthy, knowledgeable, skilled, creative, independent, and become citizens of a democratic and responsible.

Education is a means of improving human resources advantage to build competitive advantage of a nation. National education has the function of maintaining and developing a national identity, namely that human and Indonesia remain to survive in a global society. Here we go in to the importance of education and it's core issues is to find the strategic issues of education in Indonesia. Every citizen has the same rights to obtain quality

education, is a shared responsibility between government, agencies and the public of Education in order to improve the service and ease of implementation as well as ensure quality education for citizens without exception. The low quality of national education has been affected directly or indirectly to the low quality and competitiveness of Indonesian human resources in the era of globalization. Referring to the national education standards, vocational curriculum has been developed basically by a competency-based approach, broad-based since 1994 and perfected on the 1999 edition of the vocational curriculum through the process of adjustment (Sync) in 2004 with the competencies required in the Business and Industrial World, which then began the 2007-2008 school year enacted Unit Level Curriculum Lesson (SBC) with vocational skills programs spectrum changes according to the Decree of the Director General of Primary and Secondary Education Management Number : 251/C/KEP/MN/2008 Date

August 22, 2008. Then since 2013 in the enacted curriculum in 2013. Improving the quality of education is expected to improve the dignity of the nation and the state, education reform in Indonesia need to be implemented continuously and sustainably in order to create a world that is adaptive to the development of education in a global world.

Awareness of the importance of education that can provide hope and the possibility of a better future, has prompted various efforts and attention of the whole society to each step and the development of education. Education is one of the efforts in order to improve the quality of human life, mature, behavior and improve the quality becomes better, so it can adapt itself to any development. But in reality, education is not a simple thing, but rather an activity that is dynamic and full of challenges. Education will always change with changing times. Therefore, education has always been the center of attention and the topic for the public because of concerns the interests of everyone's education. That is why education is always in need of repair and improvement in line with the needs and demands of the high society life. In order to obtain a high quality education quality should certainly be supported by personnel (administrators, teachers, counselors, administrators) quality (professional), educational infrastructure, facilities, media and adequate learning resources both quality and quantity, the cost of an adequate, proper management and supportive environment. The quality of education is comprehensive, involving all the components, and implementing educational activities or often called the total quality or "Total Quality ". Is something that is not possible, the results of quality education can be achieved only with one component or high-grade activity alone. Educational activities is quite complex, the activities, components, actors, time - related and requires the support of the activities, components, other time offender. The low quality of graduates is very heavy thrive in an educational environment, particularly in Indonesia as a developing country. One reason is from year to year vocational school and college graduates in the labor force who do not obtain

employment numbers are growing. Identification of the condition of the poor quality (quality) graduates, in terms of knowledge, skills, and expertise that are not controlled in accordance with the qualifications that are in demand jobs (Nawawi,2003). Thus, quality assurance is becoming the era of globalization demands for government agencies, communities through the implementation of standards that apply nationally and internationally. One of the measures taken to improve the quality of vocational high school graduates is adopting quality management system ISO 9001:2008. The implementation of standard ISO (International Standardization Organization) in recognition of a requirement for quality assurance agencies, particularly the role is to provide services to the public. Through these ISO standards are slowly but surely will be enforced through a certification as a guarantee of quality, and this has been developed through vocational education as a labor provider that controls competence in their fields of expertise. Quality Management System (QMS) ISO 9001:2008 applied to an organization, if the organization intends to demonstrate its ability to provide products and services that meet customer and applicable regulatory and aims to enhance customer satisfaction and other interested parties (Gasperz, 2003). ISO is an international organization for standardization which was founded in 1947 and based in Geneva, Switzerland. ISO is intended to demonstrate the ability of the organization to be consistent in providing services to meet customer demand and regulations with the aim to increase the "customer satisfaction" through the implementation of effective quality management system, including the repair process (control) sustainable. When examined more deeply, then the question arises why should the ISO quality management is applied, while the implementation of the School -Based Management Improvement (MPMBS) also is an attempt to improve the quality of education in schools, especially in the Vocational School. Faced with this phenomenon, there are things that need attention, ie schools that implement a Quality Management System (QMS) ISO 9001:2008 that the process is actually controlled by a certifying body recognized by the International Certificate of bodies such as ISO,

whereas MPMBS this recognition has not been seen significantly.

But the realization of this program is certainly not easy because of the condition of vocational school until today still require a serious problem especially with regard to funding, facilities and adequate infrastructure, sufficient financing, administration and good management so that students can take pride in the service beneficiaries. Of all components in the school, the teacher is the most important component. However good the other educational component, if a teacher lacks executive power is adequate performance, then the learning process will not run properly. Besides school employee performance factor also has a significant role to the success of learning programs in schools. School officials were less do their job properly, will greatly affect the success of school programs, especially in an effort to improve the quality (quality) administration services to teachers and students in accordance with the demands of the Quality Management System (QMS) ISO itself. Where one charged in QMS ISO is lack of uniformity in the administration both within the school and outside of school, which will all these factors will provide greater influence in creating a working climate that will directly affect what the school program in improving the quality of education that itself.

Directly or indirectly, that the teachers and their employees as one of the parties take responsibility for the operation of the education at the school level to improve the quality of education in addition to the existence of infrastructure facilities in the form of learning practices also play an important role. Teachers and employees as human resources in the field of education indicated in its lower (performance) especially in his profession and the administration implement the learning process, it is not out of the teacher's performance (performance) or the performance of the teachers and administrative staff employee performance or highly affect the the creation of a mini arrival of the organization will determine the output (output) of the quality of education itself. In addition to teachers and staff, organizational climate also has a big influence in the educational process, especially

in improving the performance of teachers and staff so that the educational process can run well.

SMK Negeri 1 Sayung implementing ISO 9001:2008 QMS Certification institutions PT. TUV Rheinland Indonesia. Although the program, it can be done, but there are still many obstacles that need attention, such as infrastructure and facilities required primarily for implementing competency test, the ability of the student, the teacher who has the competence limitations. See the progress and results achieved by SMK Negeri 1 Sayung in the implementation of the educational programs since 2012, SMK Negeri 1 Sayung have implemented ISO 9001-2008 to establish quality objectives as follows: 1) 80 % of students received grades  $\geq 70$  Indonesian, 2) 80 % of students received grades of English  $\geq 70$ , 3) 80 % of students gain math scores  $\geq 70$ , and 4) 80 % of students received grades productive test  $\geq 70$ . With the application of ISO 9001:2008 SSM at SMK Negeri 1 Sayung expected can contribute to the process of education as an effort to increase the motivation and quality of service. Reality on the ground that the authors observed that the teachers and employees have diverse views and perceptions of the application of ISO 9001:2008 QMS, so that the necessary steps to make the perception that the system is running effectively and can satisfy customers school. In addition, the low intensity of the principal monitoring of personnel in charge of preparing the application and Quality Management System (QMS) ISO 9001:2008, so the things that need to be improved to see the effectiveness of school programs. Implementation of Quality Management System (QMS) ISO 9001:2008 is not maximized so necessary to build the school community 's commitment to implement the ISO 9001:2008 QMS related to the satisfaction of the customer (customer focus). The low teacher motivation and employee performance, so it will have implications on organizational climate in order to implement the Implementation of Quality Management System (QMS) ISO 9001:2008.

Evaluation is one of the functions of management. The management functions absolutely must be done in any organization or institution. Incompetence or negligence do fingsi pose significant achievement of common goals

(MONE, 2001). Evaluation is the consideration of making a device according to agreed criteria and accountable Fattah (2001:107). Evaluation can be two functions, namely formative evaluation function is used for the improvement and development of ongoing activities (programs, of people with, products, and so on) function summative evaluation is used to account information, or further selection. So the evaluation should help the development, implementation, needs a program, goodness programs, accountability, selection, motivation, knowledge and support of those involved (Tayibnapis,2004:4).

The purpose of this study is as follows : (1) To determine the effectiveness of the implementation of the Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung in terms of aspects of the background (Context), (2) To determine the effectiveness of the implementation of the Quality Management System (QMS) ISO 9001:2008 in SMK Negeri 1 Sayung review of aspects of the input (input), (3) To determine the effectiveness of the implementation of the Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung in terms of aspects of the process (process), (4) to determine the effectiveness of the implementation of the Quality Management System (QMS) ISO 9001:2008 in SMK Negeri 1 Sayung review of aspects of the outcome (product), and (5) to know the constraints faced in the implementation of school management with ISO 9001:2008 Quality Management System The SMK Negeri 1 Sayung and how alternative solutions.

## METHOD

Judging from his approach, this research uses empirical approach (ex-post facto) the expost facto research approach to dealing with variables that have occurred and the researcher does not have to provide treatment of the variables studied). According Sugiyono (2005:7), is a researcher conducted to examine the events that have occurred, and then trace kebelakangan through the data to find the factors that cause the occurrence of the events studied.

In methodological, including the researchers who carried out a quantitative evaluation researchers,

intended evaluative analysis conducted by program evaluation-oriented approach to management, which shows the procedures and processes of the program. Subjects of this study was 60 respondents. Collecting data on the implementation of quality management system (QMS) ISO 9001:2008 using a questionnaire that has been conceived and developed by researchers based theories. Before data collection, first ask permission from the principal studies, consultation with the management, teachers and staff of SMK Negeri 1 Sayung. To solve the problem of this research, the data from each variable that has been processed and then analyzed descriptive. To find the level of effectiveness of the Quality Management System (QMS) ISO 9001:2008 conducted an analysis of the background variables, input, process, and output through quadrant analysis Glickman. Quality scores for each variable are positive and negative as calculated using the T - score. If  $T > 50$  is directed to the positive (+), and  $T < 50$  direction is negative(-).

## RESULTS AND DISCUSSION

Object of this study is the variable context, input process and product of the Effectiveness of Application Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung. Data context variables, input variables, process variables 1, 2 process variables, and variable overall product that is after the data tabulation process. Based on the calculation, then composed a score classification variable background (context) in Table 1 below.

Table 1. Classification Variable Background Score (Context)

| Criteria           | Specification |
|--------------------|---------------|
| 105,00 ≤ A <       | Very Good     |
| 95,00 ≤ B < 105,00 | Good          |
| 85,00 ≤ C < 95,00  | Good Enough   |
| 75,00 ≤ D < 85,00  | Less          |
| E < 75,00          | Very less     |

In general, the average score of a variable background (context) on the Implementation Effectiveness of Quality Management System

(QMS) ISO 9001:2008 SMK Negeri 1 Sayung of 100.76 and a standard deviation of 14.07. This indicates that the variable component quality background (context) are in both categories, namely at 95.00 score  $\leq B < 105.00$ .

Based on the calculation, then composed a score classification variable inputs (input) in Table 2 below.

Table 2. Classification Score Input Variable Input (Context)

| Criteria |        |   |     | Specification |
|----------|--------|---|-----|---------------|
| 122,50   | $\leq$ | A | $<$ | Very Good     |
| 110,83   | $\leq$ | B | $<$ | Good          |
| 99,17    | $\leq$ | C | $<$ | Good Enough   |
| 87,00    | $\leq$ | D | $<$ | Less          |
|          |        | E | $<$ | Very less     |

In general, the average score of the variable input (input) on the Effectiveness of Application Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung of 110.80 and a standard deviation of 17.33. This suggests that the quality of the input variable components (input) in the category quite well, namely the 99.17 score  $\leq C < 110.83$ .

Based on the calculation, then composed a score classification process variables in Table 3 below.

Table 3. Classification Score 1 Process Variables (Students).

| Criteria |        |   |     | Specification |
|----------|--------|---|-----|---------------|
| 70,00    | $\leq$ | A | $<$ | Very Good     |
| 63,33    | $\leq$ | B | $<$ | Good          |
| 56,67    | $\leq$ | C | $<$ | Good Enough   |
| 50,00    | $\leq$ | D | $<$ | Less          |
|          |        | E | $<$ | Very less     |

In general, the average score on the effectiveness of the process variables 1

Implementation of Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung of 63.97 and a standard deviation of 13.45. This suggests that the quality of the process variable component 1 are in either category, namely the 63.33 score  $\leq B < 70.00$  in the ideal score.

Based on the calculation, then composed a score classification process variables in Table 4 below.

Table 4. Classification Score 2 Process Variable (Master).

| Criteria |        |   |     | Specification |
|----------|--------|---|-----|---------------|
| 50,52    | $\leq$ | A | $<$ | Very Good     |
| 47,50    | $\leq$ | B | $<$ | Good          |
| 42,50    | $\leq$ | C | $<$ | Good Enough   |
| 37,50    | $\leq$ | D | $<$ | Less          |
|          |        | E | $<$ | Very less     |

In general, the average scores on the process variable 2 Effectiveness Implementation of Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung of 51.12 and a standard deviation of 8.49. This suggests that the quality of the process variable component 2 are in both categories, namely at 47.50 score  $\leq B < 52.50$  in the ideal score.

Based on the calculation, then composed a score classification variable results (products) in Table 5 below.

| Criteria |        |   |     | Specification |
|----------|--------|---|-----|---------------|
| 8,40     | $\leq$ | A | $<$ | Very Good     |
| 8,27     | $\leq$ | B | $<$ | Good          |
| 8,13     | $\leq$ | C | $<$ | Good Enough   |
| 8,00     | $\leq$ | D | $<$ | Less          |
|          |        | E | $<$ | Very less     |

In general, the average score of the variable results (products) on the Effectiveness of Application Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung of 8.20, and a standard deviation of 0.18. This suggests that the quality of the component variables in the process



are fairly well balanced category, the scores on the score of  $8.13 \leq C < 8.27$ .

Recapitulation of the results of the calculation of the variable data analysis background (context), input (input), processes, and outcomes (products) on the effective application of the quality management system (QMS) ISO 9001:2008 SMK Negeri 1 Sayung presented according to Table 6 below.

Table 6. Recapitulation Background Calculation Result Variable (L), Input (M), Process 1 (P), and Result (H) of the Implementation Effectiveness of Quality Management System (QMS) ISO 9001:2008 SMK Negeri 1 Sayung.

| No      | Variable           | Frequency |    | Results | Specification                    |
|---------|--------------------|-----------|----|---------|----------------------------------|
|         |                    | F+        | F- |         |                                  |
| 1       | Context            | 14        | 1  | +       | Positive                         |
| 2       | Input              | 16        | 9  | +       | Positive                         |
| 3       | Process (Overall)  | 83        | 52 | +       | Positive                         |
| 4       | Results (Products) | 36        | 24 | +       | Positive                         |
| Results |                    |           |    | ++++    | PositivePositivePositivePositive |

Description:

F+ : Frequency of Positive

F- : Negative Frequency

Based on the analysis of the data in Table 6 shows that the effective application of the quality management system (QMS) ISO 9001:2008 SMK Negeri 1 Sayung can be explained in terms of background variables (context) gained 56.00 % positive category, the variable inputs (input) 64.00% positive category, process variables 1 diproleh 62.86 % positive category, the process variable 2 diproleh 60.00 % positive category, and variable results (products) obtained 60.00 % positive category.

Based on the analysis of data from the four variables are converted into the form of a function or formula LMPH (CIPP) = (+ + + +) is in quadrant I with the category of "effective". Thus it can be said

that the SMK Negeri 1 Sayung in the effectiveness of implementing a quality management system (QMS) ISO 9001:2008.

In the context variables, the effective implementation of the Quality Management System (QMS) ISO 9001:2008 is evident from the existence of the committee help to build relationships between schools and communities, and committees in accordance with its function as institutions that mediate between the interests of the school and the community, or conversely, the presence of togetherness for formulating the vision and mission of the school principals, stakeholders, and the school committee, the socialization of the school's vision and mission schools to stakeholders so that they understand and know about each task, provide the opportunity for teachers to develop themselves, all residents sit together to formulate a mission school school and the school's mission involves formulating the school committee as a representative of the public, especially the parents.

In the input variables, the effective implementation of the Quality Management System (QMS) ISO 9001:2008 is visible from the school program compiled based analysis of the strengths and weaknesses of the school, school programs formulated in the form of academic and non-academic achievement, each school programs implemented by fund owned by the school, the curriculum dissemination in the form of syllabi and lesson plans, textbooks available in the library enough, the principal optimize existing resources in schools with a way to include in any training, principals and teachers strive to develop and enhance the learning innovations to improve quality of education, and schools work together with other agencies in an effort to improve the quality of education in schools.

In the process variables, the effective implementation of the Quality Management System (QMS) ISO 9001:2008 is evident from the teachers always making and preparing a syllabus for each field of study is taught. Competence of a teacher is supported by five components, namely : teaching material component (the teaching subject component), the professional component (the

professional component), the component process (the process component), component adjustment (the adjustment components of), and components of attitude (attitude component), teachers always prepare lesson plans in each of the material being taught, the teacher gives extra lessons for children are lacking, teachers always give the final evaluation of each subject matter. Evaluation has the functions of motivation, feedback, teachers give homework (homework) for students to want to learn at home, followed by the results of the evaluation of teachers so that teachers know the shortcomings in delivering course material (feed back), and the final evaluation of the school to determine student's or graduation success rate.

In variable products, effective implementation of the Quality Management System (QMS) ISO 9001:2008 is evident from the increase in student grades for each grade, an increase in the average ranking value UAS, the ability of students in an effort to improve the ranking of the school in an exemplary lesson tests, the ability of students to win a championship academic and non-academic at the district level, cities, and provinces, and increasing student achievement from year to year in all subject areas.

ISO 9000 is not a standard product, but it is the standard of management system of an organization which, if applied in the organization will affect how the product was produced, ranging from the level of planning, design, manufacture and assembly to delivery to the customer. This is supported by Gaspersz (2001) which stated that ISO 9000 is an international standard for QMS. Requirements of ISO 9000 specifies requirements and recommendations for the design and assessment of QMS of an organization that aims to ensure the organization is able to provide a product that meets specified requirements. In applying the ISO 9000, the benefits that can be gained by Omar (2000) is to increase customer confidence and satisfaction through quality assurance organized and systematic, organization that has been certified ISO 9000 quality allowed to advertise that the company has an internationally recognized quality audit which is partially ISO 9000 task does not need to be done again oleh organization, operating

organizations can become more effective and efficient, and raise awareness of the quality of the organization's culture including members of the organization to continue to maintain the ISO 9000 certificate.

In general, the emphasis is on the 2008 version of its compliance with the applicable legislation, as well as the requirements of customers and products in the context of compliance with other systems, such as environment management system (EMS ISO 14000) and occupational health and safety management (OHSAS 18000).

However, despite the implementation of the Quality Management System (QMS) ISO 9001:2008 relatively effective, there are some problems in implementation, namely: (1) Teachers and employees have diverse views and perceptions of the application of ISO 9001:2008 QMS, so that the necessary steps to make the perception that the system is running effectively and can satisfy customers' school, (2) low-intensity monitoring principals of the personnel in charge of setting up and implementation of Quality Management system (QMS) ISO 9001:2008, so the things that need to be improved to see the effectiveness of the program schools, (3) preparation of materials providing practical training to support the achievement of less than the maximum as well as the preparation of the financial support that is used in the implementation of school programs less than the maximum, and (4) education programs that have been implemented are still there that do not fit the standards set by the management SMK Negeri 1 Sayung (Quality Manual/MM and Quality Objectives).

#### **CLOSING**

Based on the results of research that has been described above, the following will be presented some conclusions of the study, namely: (1) Implementation of Quality Management System (QMS) ISO 9001:2008 in SMK Negeri 1 Sayung review of aspects of the background (context) relatively effective, (2) Implementation of Quality Management System (QMS) ISO 9001:2008 in SMK Negeri 1 Sayung review of aspects of the input (input) relatively effective, (3) Implementation of

Quality Management System (QMS) ISO 9001:2008 in SMK Negeri 1 Sayung review of aspects process (process) relatively effective, (4) implementation of Quality Management System (QMS) ISO 9001:2008 in SMK Negeri 1 Sayung review of aspects of the results (products) classified effectively, and (5) constraints encountered in the implementation of ISO 9001 QMS : 2008 was : a) Teachers and employees possess diverse views and perceptions of the implementation of ISO 9001:2008 QMS, b) low-intensity monitoring principals of the personnel in charge of preparing the implementation of ISO 9001:2008 QMS, c) preparation of materials providing practical to support the achievement of less than the maximum training and preparation of the financial support that is used in the implementation of school programs less than the maximum, and d) education programs that have been implemented are still there that do not fit the standards set by the management of SMK Negeri 1 Sayung (Quality Manual/MM and targets quality).

Based on the findings in this study, put forward some suggestions as follows: (1) Any program compiled by the school should always pay attention to the input of the community (school committee) for programs to run effectively. Program created by the school with the school committee should consider the social and economic conditions that made the program not borne by the parents, (2) To the teachers of SMK Negeri 1 Sayung should always improve their competence, such as the teaching and learning process, the seminar-seminars, and recommended further studies to meet the

teachers to conform to the standards set by the management of SMK Negeri 1 Sayung, and (3) to other researchers are advised to conduct further research to involve more indicators, in order to improve these results.

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## PROMOTING CASE-BASED TEACHING FOR UNIVERSITY STUDENTS OF SOCIOLOGY

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### Abstract

This paper argues that case-based teaching will promote the performance of students' competency in the social sciences, especially sociology. Case-based teaching is a teaching method in which students play a vital role in a classroom, discussing cases based on academic researches. University lecturers provide reading materials in the forms of journal articles and case synopsis before the classroom discussion takes place. During discussion, the lecturers facilitate and direct flow of discussion. At the end of discussion, they summarise the strengths and weaknesses of journal articles and ideas voiced by the students. Using the author's own experience in teaching and research, this paper explains the basic prerequisites of conducting a successful case-based university teaching. The success of case-based teaching in Indonesia depends on the capability of university lecturers in mastering scientific theories and research methodologies and availability of academic infrastructure such as access to unrestricted online journals. If both factors exist, Indonesian social scientists including sociologists are able to overtake the positions of Malaysian and Thai social scientists in the production of scientific knowledge. As Indonesia is entering a new chapter of research universities supported by Ministry of Education and Culture, there is no doubt that Indonesian social scientists will occupy a strategic position in scientific production in South-East Asia.

**Keywords:** *case-based teaching, teaching note, synopsis, knowledge production*

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### Introduction

Indonesia has adopted competency-based teaching for university students. Case-based teaching complements that teaching method and it will promote the performance of students' competency in social science especially in sociology. Conventional teaching method in social science tends to centre around the important role of lecturers or instructors in conveying knowledge to students. Mastering concepts, theories and research methodologies are prime targets of conventional teaching method.

It is acknowledged that those targets are important for teaching university students to become future social scientists. However, such teaching tends to neglect ways of contextualising concepts and theories and it perpetuates academic dependency on Western social science. Because

most sociological concepts and theories are imported from this part of the world.

Indonesian academic community experienced such dependency at least in the first decade of 2000s. International and multilateral agencies came to Indonesia bringing in 'big luggages' consisted of development funds and social theories and concepts. Their aims are to support Indonesia to become democratic, responsible, and transparent country. Two well-known social theories or concepts they 'sold' to Indonesian educated society were Good Governance and Civil Society. During that period, ordinary Indonesians become familiar with both words as they appeared in national mass media every day.

However, one should immediately ask what are the benefits of the application of the two theories or concepts for the supports of development of Indonesian democracy with free from corruption?

Are there any evidence of mushrooming responsive government and thriving Civil Society organisations in Indonesia?

Concerned scholars who have knowledge on Indonesian studies difficult to find a convincing evidence of successful application of both theories. It is a worth emphasising that the failure of both theories has to be searched on whether or not such theories are contextualised in Indonesian context. Both theories are invented in Western academic environment and the agencies never attempt to problematise and contextualise them in different social contexts. They assume that social contexts are the same every where. Social context is considered as “given”.

Case-based teaching is the first step from long academic journey of educating students to eradicate or at least reduce ‘monocropping’ of alien theories. Because this teaching method promises to critically discuss whether or not any theory is appropriate to be employed to analyse issues in certain social context, be it local, region or national. Based on this promise, this paper advocates or promotes the application of case-based teaching for university students of sociology and social science in general. It aims is to prepare university students to become knowledge producers rather than consumers of social science in the future.

A general question that raises in this paper is that what are the basic prerequisites needed for conducting a successful case-based teaching for university students of sociology? How to promote it? This study employs qualitative method with narrative approach [1]. It focuses on chronologically individual experience of, in this case, author’s experience in conducting case-based teaching for university students.

### **What is Case-based Teaching?**

Judy Garner, a neurobiologist, explains what and how to conduct case-based teaching for university students [2]. According to him, it is a teaching by example or stories aimed at application of concepts to practical experience or vice versa. Moreover, he says that a case is a descriptive document, often

presented in narrative form based on real-life situation or event.

Cases are created explicitly for class room discussion and contain detail information as bases for active discussion and analyses.

Ideally, cases are based on research because it conveys not only detail information but also concepts used. If it is not the case, concerned lecturers or instructors can use journalistic reports that appear on mass media. Case-based teaching is laborious works carried out by lecturers and students. It requires a series of preparations ranging from searching proper journal or newspapers’ articles, synopsis, and teaching note. However, the outcome of this teaching method undeniably is promising because it raises level of critical thinking among students.

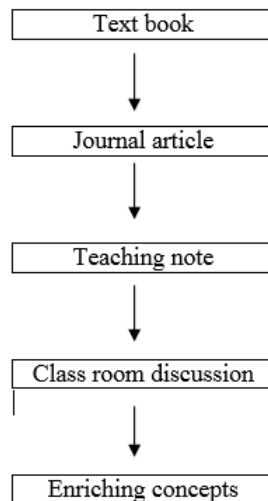
### **Personal Experience in Teaching with Case Method**

The author has introduced case-based teaching to students of undergraduate and master programmes who attend a course of economic sociology. This is the hardest works for lecturer (instructor) as well as students. Because they have to prepare reading materials as good as possible before entering class room discussion. These laborious works make the author decides to take this case method only in several sessions of class room discussion.

The aim of this case teaching is to enrich a concept of social capital, one of well-known concepts in sociology. This concept appeared in American and European universities in the decade of eighties and continues to become one of mainstream concepts up to now. Since then it has been revised and criticised by many sociologists. The concept clearly does not consider institutional contexts in which it is applied.

In order to make concept of social capital appropriately applies to the context of Indonesian society, there are three steps that need to be considered. *The first* is seminar-based teaching, *the second* is selection of published journal article, and *the third* is preparation of teaching note. The following is the breakdown of those three steps.

## Steps in Organising Cased-based Teaching



*The first* is seminar-based teaching of basic concepts, including concept of social capital, in economic sociology in the first half of semester. It is fortunate that the author has published a sort of text book on economic sociology [3]. It consists of basic concepts and the application of those concepts as guiding tools to study certain topics. It is a worth noting that social science research should start with concepts otherwise research will be carried out without any direction.

However, the concepts that are employed have to be considered as guiding tools not as means of applying them. By doing so, researchers can not only broaden social context of research problem but also able to offer new perspectives about the merit of the concepts. Burawoy provides penetrating ideas about the strategic place of theory or concepts in research [4]... We (researchers) cannot see social reality without theory because theory reveals the broader context of our actions. Science offers no final truth, no certainties, but exists in a state of continual revision.

*The second* is selection of published journal articles. This is a demanding work because most journal articles in social science are written as research papers. This is in contrast to journal articles published by most schools of business which publish case papers. However, if lecturers do not have enough time to find an appropriate article, they still can use their short field observations on a

certain issue or use a journalistic report published by mass media. At this stage, the author selects his own article - a case article - published by *Asian Case Research Journal* managed by school of business, National University of Singapore [5]. This is the article that becomes the backbone of explaining my personal experience of teaching with case method.

*The third* is preparation of teaching note. Teaching note is a guideline of organising case teaching which makes up the following components such as case title, case synopsis, case objective, teaching plan, and discussion questions. Case title, synopsis, and points of discussion questions are distributed to students a week or so before organising class room discussion.

It is important to mention that teaching note and case article are useful because they are not only used by a concerned lecturer but also used by other lecturers in other universities, for instance, by uploading in website. The following elaboration informs all components of case teaching based on case article. The case title is "credit union *Pancur Kasih*: a vibrant microfinance institution in a Hostile inter-ethnic society".

### Case Synopsis

The Credit Union *Pancur Kasih* (hereafter refers to as PK) is a rare example of a vibrant microfinance institution in Indonesia. Located at the heart of a hostile inter-ethnic society in the province of West Kalimantan, the PK invents unique types of social capital and financial organisation that bolster its unparalleled financial performance. In recognition of this achievement, the Indonesian government presented the PK with the 2005 Award for Small-Medium Corporate Excellence.

Decades of inter-ethnic hostility inspired school teachers to establish the PK in 1987. They dreamed of creating a big microfinance institution and promoting the economic well being of the Dayak ethnic group. The Dayak, one of Kalimantan's two largest ethnic groups, defines itself as disadvantaged. A sense of grievance evolving around these issues culminated in a series of ethnic conflicts. Today, after more than two decades of operations, the PK has not only won the trust of

most Dayak people but also inspires other ethnic groups to establish microfinance institutions.

This environment has allowed unique types of social capital and financial organisation to flourish. The *Pancur Kasih Foundation* (PKF), the parent organisation of the PK, has set up a variety of social and economic organisations. They work in partnership with the PK in all aspects of its business, from recruiting, disciplining, and empowering clients to weaving organisational networks with other microfinance institutions. The latter plays a vital role in curbing the penetration of modern micro banking in the province. The PKF, therefore, has become an ethnic-based conglomerate in which the PK functions as one its driving forces.

However, the PK faces a number of hurdles. Almost all PK clients, in rural and urban areas, are of the Dayak ethnic group. From organisational and policy points of view, the legal status of the PK is vulnerable as its assets grow beyond the mandatory requirement of the current banking law.

### Case Objectives and Use

The case provides a wealth of information on the social and political contexts in which the PK operates. The availability of such information is useful for making strategic decisions to manage micro banks in multi-ethnic societies. Business students, sociology students, and leaders of micro banks will benefit most from this case teaching.

### Teaching Plan

The instructor may choose to assign the case to groups of 4-5 students to discuss and present on this topic. The discussion questions and answers provide a broad overview for discussion in class, although instructors can engage in their own analysis to guide the discussion.

### Discussion Questions

The whole classroom discussions should focus on the creation and role of social capital in the promotion of successful microfinance institutions. The instructor can steer the discussion towards the circumstances that facilitate the rise of unique social capital and microfinance organisations in

West Kalimantan. The instructor can also direct the discussion to focus on how to promote further development of microfinance.

"Social capital" refers to networks, norms, and trust that facilitate coordination and cooperation for mutual benefit. In the real world of finance, regulation and supervision are the norms. They are closely interrelated: effective regulation requires effective supervision [6]. Social capital enhances the benefits of investment in physical and human capital. Stocks of social capital, such as trust, norms, and networks, tend to be self-reinforcing and cumulative.

Social capital has three dimensions: bonding, bridging, and linking [7]. While bonding and bridging refer respectively to close personal networks and ties with other networks, linking describes the connection between the implementation of state financial policy and the interests of microfinance organisations.

Analyse the societal environment of the PK underlying the emergence of this unique macro social capital.

The hostile inter-ethnic relationship that characterised the societal environment provided fertile ground for the birth and growth of the PK. Business students are used to recognising financial and industrial environments, and here the instructor can steer the discussion towards the societal environment.

Frequent ethnic conflict and the concomitant rise in the sense of deprivation among the Dayak ethnic group had considerable impacts on the ways in which the PK emerged, develops, and grows.

Preparing "the soil" for growing "a healthy financial plant"

The People Empowerment for the Management of Natural Resources (PEMNR), an PK sister organisation, "prepares the soil" by organising Dayak people to resist state policy on the seizure of forest lands. This paves the way for the formation of village groups across the province. The implanted

ideology of ethnic consciousness makes it easier for the PK to recruit the Dayak people as clients.

Group leaders at village and district levels play pivotal roles in persuading their members to become clients of the PK. This also makes it easier for the PK to enforce norms or regulations of discipline in saving and loan repayment. Here, the instructor can steer further discussion towards the merit of a social movement organisation as a customer strategy compared with other modern customer strategies.

**What are the impacts of such a strategy on the development of the PK?**

The positive impacts are: the increase in the number of the branches of the PK, the expansion of the coverage of its operations, and the growth in the number of PK clients. The PK also drives the establishment of other microfinance institutions that are not formally related to the PK but are managed by people of the same ethnic background. The negative impact is the undeniable fact is that this strategy gave birth to the emergence and development of strong ethnic embeddedness in the PK organisation: almost all PK clients are of Dayak ethnic origin.

These two impacts can be discussed within the concept of social capital. Bonding social capital strengthens and leads to geographical expansion at the expense of bridging social capital. This is unhealthy social capital because other ethnic groups are reluctant to become PK clients. Today, the PK leadership has created a new concept of cooperation with other ethnic groups, supervising them to establish their own microfinance institutions. The instructor can steer the discussion on the question of the PK's ability to create bridging social capital. A key issue concerns the possibility of multi-ethnic membership of microfinance institutions.

**Analyse the ethnic conglomerate and ethnic business group as a choice of organisational strategy.**

Why have ethnic conglomerates and ethnic business groups become the norm for microfinance organisations? A conglomerate is a parent firm

which owns a number of firms that it controls or administers directly or indirectly. A business group is a set of legally separate firms bound together in formal and/or informal ways [8].

The instructor can steer discussion of the interconnections between the societal environment and types of financial organisations that operate in an economy. It should be emphasised that the choice of organisational strategies does not occur in a vacuum; it has to do with the societal environment in which the financial organisation operates.

Under the auspices of the PKF conglomerate, the PK and its sister organisations dream of creating prosperity for the Dayak ethnic group in the province. Given the feeling of political deprivation that haunted the Dayak people when Soeharto was in power, it is not surprising that ethnic conglomeration was chosen as the organisational strategy to achieve economic and political empowerment.

This ethnic conglomerate paved the way for the rise of business groups. Led by the PK, other Dayak microfinance institutions engage in the provincial microfinance network called the Regional Coordinating Body for Credit Cooperatives (RCB). As well as mutually strengthening internal organisations, this network provides the force to compete against modern micro banking. Ultimately, bonding social capital becomes stronger because it engages individuals and organisations of the same ethnic background.

Analyse the internal organisational relationships of the PK.

Business students are familiar with the working of the market mechanism in directing everyday activities of modern micro-banks. The PK, however, employs a community mechanism to discipline clients to save and repay loans. This is what economic sociologists called the creation of social capital within an organisation.

Examples of this are the village groups and trusted clients that recommend and supervise potential and current PK clients. The instructor can direct the classroom discussion towards the



working of the community mechanism in recruiting, educating, and disciplining clients, and towards comparison of the operational costs of the community and market mechanisms.

Analyse the consequences of macro financial policy on the PK

Most operators of large microfinance institutions in Indonesia disagree with the 1998 banking law because it obliges them to become commercial banks if their assets exceed IDR 1 billion (USD 111,112). They are also reluctant to turn their foundations into cooperatives, due to negative public perception of this kind of legal entity in the past.

However, the banking law prohibits foundations from engaging in lending and saving activities. The instructor can direct the discussion towards determining the best legal entity for the PK and its implications for its future development.

The following table summarising the PK's stock of social capital and provides the instructor a useful guideline to steer the classroom discussion on the questions above.

Table 1. The Stock of Social capital of the PK

| MFI | Bonding            | Bridging | Linking         |
|-----|--------------------|----------|-----------------|
| PK  | Strong & Extensive | Weak     | Less Supportive |

#### 1. Reflections on Class Room Discussion

There is no wonder that in contrast to conventional teaching, case-based teaching is characterised by lively class room discussion among students. Students are debating the strengths and weaknesses of the concept of social capital by relating to a societal context in which microfinance operates. Students seem to bring all of their knowledge into discussion to scrutinise every conceptual component of social capital. Moreover, they relate this concept to other concepts in economic sociology.

Class room discussions become arena of understanding and enriching the concept of social capital. It also means as an arena of exchange of knowledge among students on how to further

promote the development of microfinance in Indonesia. Needless to say that case-based teaching plays an important role to improve students' academic quality.

## Conclusions

Undoubtedly, the application of this student-centre-teaching to other university's courses is important to facilitate students to become producers rather than consumers of knowledge. By employing this teaching method, students are no longer depended on foreign and Western concepts of social science. Production of knowledge and science become a life blood of universities across the globe.

Such knowledge production is not meant to invent new and noble knowledge or theory. Knowledge production in developing countries is understood to improve and enrich existing knowledge so that it appropriately uses to analyse and solve social issues and problems faced by those countries.

A successful case-based teaching in Indonesia will depend on capability of university lecturers in mastering scientific theories and research methodologies and availability of academic infrastructure such as access to unrestricted online journals. Because academic journals are the life blood of every university.

As Indonesia is entering a new chapter of research universities supported by Ministry of Education and Culture, there is no doubt that Indonesian social scientists will occupy a strategic position in scientific production in South-East Asia.

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## CASE STUDY OF DEVELOPING APPERCEPTION IN THE MICROTEACHING ACTIVITIES FOR UNDERGRADUATE STUDENTS OF MATHEMATICS EDUCATION

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### Abstract

This paper describes the development of basic teaching skills for undergraduate student of mathematics education in particular apperception activities that should be owned. There exists no definite definition for apperception activity as it can be viewed from different perspectives. In this paper, the apperception activity in tending learning process. Students' ability of the initial activity (entry behavior) and continue with activities based on the ability to review the material early and associate with the material to be studied. A theoretical framework, developing of students' ability apperception activities was formulated based on three phases activities, given example, evaluating the activity apperception through the video content and try to do the activity apperception.

**Keywords:** *apperception, microteaching*

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### Introduction

Teaching and learning of mathematics covers the philosophical and psychological grounds of mathematics, school mathematics, teachers' styles of teaching and students' learning. The mathematics teachers should make clear about the existing trend of theory and paradigm behind their teaching activities. In whatever the approach of teaching, the teachers need to develop the scheme for achieving students' competencies in such a way that it is reflected in the preparation and implementation of teaching. Teaching learning process can be perceived as various activities or interaction in which the teachers strive to facilitate their students to perform their competencies in mathematics i.e. the students need to construct their own mathematical concepts. Lesson Plan should be developed to guarantee that in the class teaching there will be an appropriate students' apperception, various scheme of students' activities supported by various media and or teaching aids, small group discussions, students' presentation, and students' conclusions. Students Works Sheet has its role to facilitate the students to perform their activities and gradually to

find the characteristics of mathematics, its procedures and possibly the patterns and formulas.

In general, teaching learning process consists of three components: introduction, main activities and conclusion. The crucial thing should be considered in the component of introduction is about students' apperception. The student's apperception have its role to give the chances for the students to prepare their readiness to involve in learning activities. Hence, the students' apperceptions can be characterized as – *related activities leads to psychologically ready to perform the tasks*. In order that the students are able to understand a certain mathematical concept, they need to understand its pre-requisite one. Therefore, the apperceptions activities consist of a complex not only psychological aspect of learning but also cognitive one. It leads to the understanding that the apperceptions is one of the components to achieve students competencies. The teachers need to understand and possibly to research the characteristics of apperception based on the educational paradigms laid down in their teaching. Contextual based apperception can be related to the following educational paradigms:

constructivism, scientific approach, realistic mathematics, etc.

This case-study strive to develop the scheme of apperception in the class of micro-teaching of the undergraduate students of mathematics education in which they have no prior experiences of teaching. The aspect of apperception can be traced through Lesson Plan development, Students Worksheet, and the implementation of peer-teaching. The introduction step is the crucial time for the students to perform their apperception activities. The research provides the candidates of mathematics teachers to freely emerge their origin concepts of apperception, implement them in the micro-teaching class, and reflect them after the session. The results of the research indicate that initially most of the students have partial understanding of the apperception by perceiving that it mostly just about "*remembering the old concept*". So, most of them performing apperception by suggesting the students to remember the old concepts of mathematics before learning the new one. The research recommend the teachers to perform apperception by providing their students the space and time to do small problems or mathematical activities in order that they are ready to involve in the following learning activities.

#### THEORETICAL REVIEW

The discussion about apperception and its role in education has long history emerging as philosophical and psychological ground. Kant I, in Brandom, R.B, 2014, indicated that synthesizing a unity of apperception is the activity that provides the background and the context in which episodes can have the significance of judging. In this case we should pay attention to the meaning of judging that it presently mostly indicates about evaluation step in thinking process. Therefore, he further noted that apperception as a synthetic unity can be produced, sustained and developed through student's engagement in a certain learning activity. It leads to the role of a students to be a self or subject in his/her learning activities. From Kant, we learn that in learning mathematics, the students should actively integrate new knowledge into the whole that comprises previous ones successively; this

successive integration can be thought of as involving three sorts of learning activity i.e. critical thinking and justificatory or evaluation. The students need to be encouraged to be able to judge whether a new certain mathematical concept is compatible to previous ones. Kant concluded that if there is no compatibility in the series of understanding the mathematical concepts, the mathematical reason is ext int.

In the psychological aspect, Arnold, F., 2014, indicated that, in general, the former knowledge is made use of in learning activities i.e. the use of an acquired stock of ideas involves a constant working over of the old ideas and so fixes them by repetition. Further, he suggested that due to the experience is unified and organised by the formation of mental systems and series, the child gradually acquires a stock of ideas upon which the teacher can draw in such a way that there is a consciousness of power due to the ability to make use of knowledge and the apperceptive process works towards the development of general notions. He recommended that the lesson plan should be developed based upon the notion of acquiring knowledge by the assistance of accumulated funds so that the teacher is able to supervise and guide apperception.

While Marsigit, 2007-2013, in the series activity of supervising micro-teaching for Undergraduate Students of Mathematics Education, found that in order to develop apperception in constructive mathematics teaching, the candidate of teacher should develop and implement: constructive lesson plan, constructive students worksheet, small group discussion, various teaching method, various students interaction, various media and teaching aids, cognitive scheme, students' reflection and classroom-based assessment.

Adapting from Arnold, F., 2014 and Marsigit, 2007-2013, the apperception of learning mathematics can be developed through considering the rules of practice in the teaching learning as the following:

- a. Empower the students to be the active learner of mathematics and appeal to their experiences.

- b. Prepare lesson plan to facilitate the needs of students learning mathematics.
- c. Prepare various media, teaching aids, and mathematics learning resources and make them close to the students' mathematical experiences.
- d. Prepare various activities including small group discussion to let the students doing in-depth investigation of mathematical concepts; as well as reflect and conclude their finding.
- e. Prepare various and flexible method and approach to manage the mathematics classroom.
- f. Develop activities and materials scheme or scenario to achieve students' competencies including the series of activities and materials arrangement in such a way that each topic should form a strong aid for the apperception of the next topic; as well as, its association to the students' mathematical experiences based on the law of concentration, assimilation and correlation in learning activities.

## METHODOLOGY

The case-study was carried out in the class of micro-teaching of 7 under-graduates mathematics education students (teacher and student model) in which the researchers were simultaneously their supervisors. The scheme of micro-teaching implementation consists of : 1. Preparing and developing the Lesson Plan and Students Work Sheet by the students; 2. Consulting and supervising the Lesson Plan and Students Work Sheet to the supervisors (one week before peer-teaching); 3. Peer-teaching of mathematics by teacher model; 4. Reflection of teaching learning processes activities by teacher model, students model, and supervisor; and 5. Follow up to improve and prepare the following class.

The apperception aspects can be emerged through the following: : 1. Lesson Plan and Students Work Sheet; 2. Introduction step in peer-teaching activities; 3. Perception of teacher and students model. The data of the aspect of mathematical apperception were collected through: 1. Written

documents i.e. writing in the Lesson Plan and Students Work Sheet; 2. Questionnaires; and 4 Photograph documentation. Qualitative approach was to used to analyzed the data by making categorization and description; and to cross-check the finding to get the thoroughly picture of apperception development and their problems and solutions in mathematics teaching. Photo documentations were to be used as part of the components of the structure apperception development. The questionnaires were to be used to collect perception of apperception prior and after the intervention.

## DEVELOPING APPERCEPTION IN THE MICROTEACHING ACTIVITIES

There are two kinds perceptions of mathematical apperception i.e. prior intervention and after intervention. Prior intervention is the condition in which the candidates of teachers have not experiences in conducting related peer teaching; while after intervention is the condition that the they have already experienced doing peer-teaching. The perception of apperception in the prior intervention indicates the notions produced by them as the following:

1. Apperception is activity in the beginning of teaching and learning process. It is a simple activity, teacher have to know the prior knowledge of the student that can support in the matter that will learn
2. Apperception used in learning is the teacher delivering learning objectives that aim to motivate learners by giving an explanation of the importance of studying the material that will be taught
3. Apperception in teaching mathematics is to remember the previous subject that already learnt by students, just by asked one of them without giving question to all students in the classroom

In the prior intervention step, most of the candidates of the teachers perceive that apperception is the students' act of remembering the prior knowledges of mathematics. Some of them indicate that apperception is the teacher's act to know the student's prior knowledge. Further,

their perception of apperception were reflected in the Lesson Plan document as show in Figure 1.

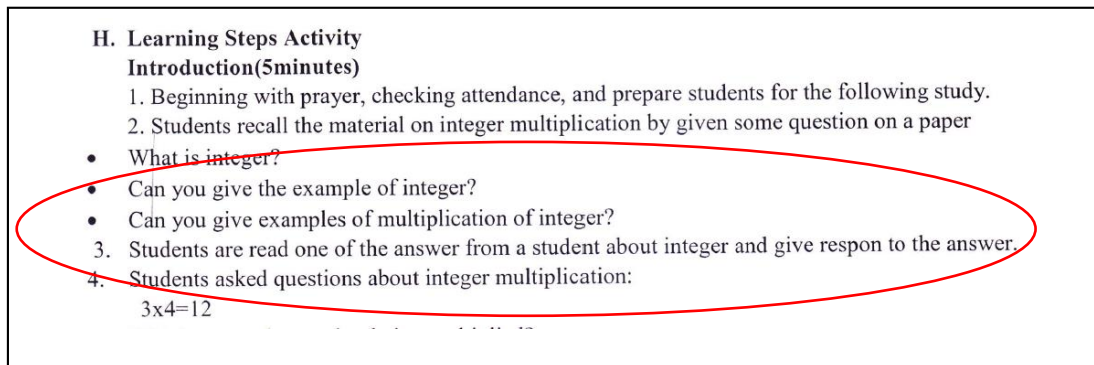


Figure 1: Lesson Plan Document

It seemed that in teaching the integers multiplication, the candidate of teachers strived to recall the material of integer multiplication by just expecting the students to remember or give the example of integer. They have not developed yet the scheme of apperception by considering the various consisting concepts inside the integers; and possibly various degrees or stages of students understanding of the prior mathematical knowlledge.

Interventions were carried out to improve the perception of the candidate of the mathematics teachers about mathematical apperceptions. The intervention consists of the following:

1. Exposing the examples of initial scheme of apperception

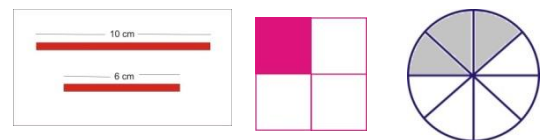
In the relation to teaching integers multiplication, the supervisor exposed the following examples of problems as the initial scheme of apperception.

Answer the question below!

1. {1; -4; -3;  $\frac{1}{2}$ ; 5; 0.3; 4; 2}
2. From some integer number in no 1. Find adding operation from no 1 that the answer is also in that integer!

While, for another topic i.e. to teach the Scale, the following scheme of apperception was to be exposed.

Look at the picture below and find the ratio !



The ratio is :

.....

The ratio

is

.....

The ratio is :

.....

Rasio is :

.....

The supervisor, as the researcher, then facilitate the candidate of students to discuss the above of apperception scheme. From above activities, the candidates of teachers find the following:

- a. There are many kinds of prior knowledge from a single concept of mathematics want to be learned.
- b. There are different degree of difficulties of a single concept of mathematics to be learned.
- c. There are much more different and complex degree of difficulties of prior knowledge to be used as apperception.
- d. There are various form of example from the similar degree of prior knowledge e.g. two or three dimmensional objects.
- e. It needs serious effort to learn all above points.

## 2. Reflecting the Video Tape Recorder of apperception scheme development

Playing the Video Tape Recorder (VTR) was intentionally due to facilitate the candidate of teachers to in-depth learn about the aspect of developing the scheme of apperception. The VTR were specially prepared by Mathematics Education Department to facilitate Micro-teaching programs. They were expected to observe, identify and give comment or input on apperception development. From above activities, it can be learned that the candidates of teachers perceive that:

- Apperception activities can be related to pre-test.
- The prior concepts apperception can be taken indiscriminately to be used as problems (pre-test)
- The teacher needs to comment or evaluate the result of students' work in pre-test; and to continue to give the problems to the students to enter to the main activities.
- They feel to be able to learn much about apperception through VTR.
- It is important to learn in-depth about the relationship between pre-test and apperception.
- The supervisor give important contributions to improve their understanding of apperception.

## 3. Developing Apperception in Practice

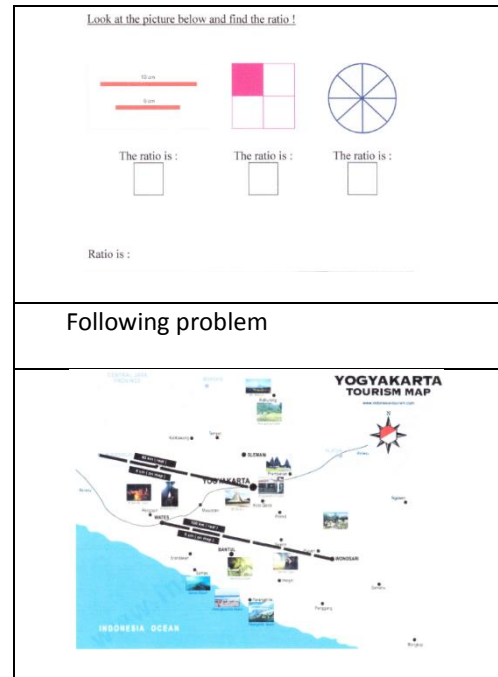
The following are the cases in which the candidates of teachers strived to implement apperception development in their peer-teaching.

### 1. Teacher Candidate A

Students: Junior High School Grade VII

Topic : Scale

Pre-test as apperception



In this activity, the candidate of teacher developed apperception to learn the Scale by using the Ratio; and expected her students use the Map of the Provinve of Yogyakarta to find the comparison between the "distant" in the map (to be measured using the ruler) and "real distant" that was written in the map. The following is the result of students activities:

| Distant in the Map | Real Distant |
|--------------------|--------------|
| 10 cm              | 40 km        |
| 10 cm              | 40.000.000   |
| 1                  | 1.000.000    |

The candidate of teacher A then deliver her question: " Can you estimate the real distant of two cities in the Map?". "When you have already known the scale and its real distant, how you indicate the position of two cities in the Map?".

### 2. Teacher Candidate B

Students: Junior High School Grade VII

Topic: Set

The following pre-test was intendedly as an apperception activities

Look at the zoo picture below

From the picture, Mention what you find!



From the picture, Mention what you find!

| Group A                                             | Group B                                |
|-----------------------------------------------------|----------------------------------------|
| a) 4-legged animals = <del>elephant</del> crocodile | a) Funny animals = <del>bird</del> two |
| b) <del>elephant</del> 2-legged animals:            | b) bird                                |
| c) <del>crocodile</del> bird                        | c) monkey                              |
| d) <del>cow</del> mammals = cow                     | d) tiger                               |
| e)                                                  | e) zebra                               |
| f)                                                  | f) favourite animals: bird             |

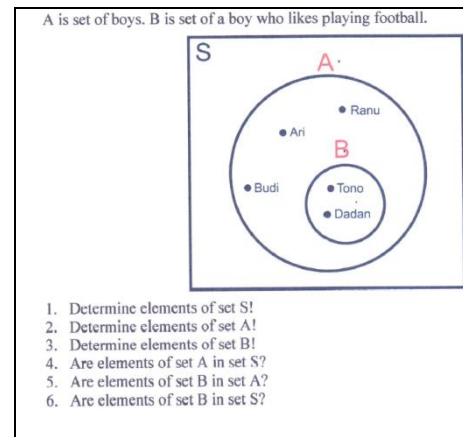
By exposing the above pre-test the candidate of teacher B expected the students to find the similar pattern of the collection of objects, to promote contextually their understanding of Set. The candidate of teacher B assumed that for the Junior High School students, the concept of collection is a prior concept to understand the concept of Set. The teacher then asked her students to identify the characteristics of Set.

### 3. Teacher Candidate C

Student: Junior High School Grade VII

Topic : Subset

Pre-test as an apperception



By exposing the above pre-test the candidate of teacher C expected the students to find the similar pattern of the collection of objects, to promote contextually their understanding of element of the Set. Using the question number 5 the candidate of teacher C guiding students about subsets and ask students to form the same thing, although students do not know the definition of subsets

### RESULT AND CONCLUSION

The results of the research are reflected in the "after intervention" perception i.e. the teacher candidates perceptions after getting intervention from supervisor as the researcher. Following are their perceptions:

1. Apperception in the learning of mathematics is the students' activities to prepare their readiness to involve in learning mathematics.
2. Apperception does not means just to remember but the more complicated one.
3. Apperceptionactivities should link to what the students want to learn.
4. Apperception should be based on contextual resources.
5. Apperception activities can be related to pre-test.
6. The prior concepts apperception can be taken indiscriminately to be used as problems (pre-test)
7. The teacher needs to comment or evaluate the result of students' work in pre-test;



and to continue to give the problems to the students to enter to the main activities.

8. They feel to be able to learn much about apperception through VTR.
9. It is important to learn in-depth about the relationship between pre-test and apperception.
10. The supervisor give important contributions to improve their understanding of apperception.

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## **ROLE OF STUDENT CENTERED LEARNING(SCL) BASED ON CASE-BASED LEARNING (CBL) TO IMPROVE THE LEARNING METHOD OF AGRARIAN LAW IN INDONESIA**

**Imam Koeswahyono SH., MH, M.Hamidi Masykur SH.,M.Kn**

### **ABSTRACT**

The paper discusses the study on a method of Student-Centered-Learning (SCL) Based on Case-based Learning(CBL)to maximizing learning methods in thecourses of Agrarian Laws at Brawijaya University, Malang.The learning process in the university involve Student Centered Learning (SCL) in a more in-depth learning experience, with the aim of giving meaning to constructing learning knowledge, learning to do, learning in a diverse team, learning to livetogether. Furthermore, Ade Sunandar provide clear information that the learning with electronic media can help increase the effectiveness of learning as stated below: (1) 10% is obtained by reading the information (text), (2) 20% of information was obtained by means of hearing (voice), (3) 30% of information was obtained by means of notice (graphics/photos), (4) 50% of information obtained by way of seeing and hearing (video/animation), (5) 80% of information was obtained by means of speech, (6) 80% of information was obtained by means of speech and conduct (interactive).

**Keywords :** *learning method, agrarian law, Student Centered Learning(SCL), Case-based Learning(CBL)*

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### **INTRODUCTION**

The College is the container to pass down knowledge through teaching and learning between professors and students, not only adding to his knowledge but also helped to cultivate attitudes and values (values) that are associated with the development of creativity, polite attitude, critical, objective and responsible. A college professor is not only do knowledge transfer (delivering knowledge) to students, but also to transfer value (transfer of value).

The old paradigms are in the process of teaching and learning a lot more professors teaching in the classroom and lecture scheduled time than learning activities of students. Learning methods the lecturer focused on Teacher-Centered Learning-(TCL) rather than on the students. A college professor is often asked already up where? instead of asking what can already?, of which this is one of the prominent feature of TCL. A new paradigm in learning in College should involve Student Centered Learning (SCL) in deeper learning with the aim of giving the definition of experience constructing knowledge knowledge learning to dolearning to be, and learning diversity in team learning to life together.

Learning method student-centered-learning (SCL) actually has written into the strategic plan of University of Brawijaya at year 2011-2016 improvement program quality of learning process and evaluation study result of the, showed that program purposes is to improve quality learning process and evaluation study result of the line with development of technological innovation learning and information technology his supporters to improve time study effective and the ratio of output to input.The program are:

- 1.The quality of learning process by using paradigm teaching: learn how to replace teaching knowledge.
- 2.The quality of learning process through increased quality lecturer and source of teaching materials.
- 3.To develop teaching materials being up to date and based technology information through the development of learning based e-learning.
- 4.To publish the teaching through various institutions publisher who very (national international), followed by system development reward adequate.

5. To increase fund the lab work and practice the field to student.

Strategic plan University of Brawijaya and plans a superior above, being one proof of the commitment University of Brawijaya in order keep maintaining improve quality learning process and evaluation study result of the line with development of technological innovation. Although not all the lecturer and employees on a University of Brawijaya especially in law school University of Brawijaya maximize or done the quality of learning process by using the method of learning student centered learning (SCL), were still held method of learning teacher-centered learning (TCL) finally stuck inside dependence students to faculty, and making lecturers as a source of of all source of information. It is when allowed will make college student law school will weak in purport knowledge learning to constructing knowledge center flood current information and technology of various lines.

The faculty of law University Brawijaya has mainstreaming a method of student centered learning (SCL) in the strategic plan (Renstra) at the year of 2006-2011, has done programs and activities with a guide policy the base to which aims at:

A. To develop a curriculum oriented in improving the quality of graduates in competition in the world of work and to develop learning process that refers to the problem based learning (PBL) and student center of learning (SCL) by making use of technological sophistication.

B. To provide a lecturer of quality, facilities and educational infrastructure sufficient and modern in facilitating learning process in the atmosphere academic conducive.

On its progress in 2011 strategic plan (Renstra) of FH-UB at the year of 2011-2015 underscored learning method student centered learning (SCL) in chapter IV about policy base and plan program mention: a field of the quality of learning teaching quality program is aimed for accelerating quality improvement learning referring to international standard to improve the quality of graduates. The aim of these program is expected to achieved by policy base and plan program follows.

Fields quality of learning teaching quality program is aimed for accelerating quality improvement learning referring to international standard to improve the quality of graduates. Program purposes is expected to achieved by policy base and plan program follows.

- a. Increased the ratio of lecturer and students ideal; selection was based on the system through recruitment for civil servant and contract.
- b. Improve the quality of learning techniques 1) the intensification blended-e learning 2) an increase in the teaching based multimedia
- c. Implementation CBC/KBK intact 1) reconstruction curriculum at CBC 2) the development method of learning of SCL and 3) making the learning module and a system of evaluation

The strategic plan of the Faculty of law of the University of Brawijaya in 2011-2015 on top, it can be concluded that the method of learning Student Centered Learning (SCL) absolute is used to increase the quality of the graduates of high competitive power. The question is then why the civitas academica at the University of Brawijaya in particularly in the Law Faculty of the University of Brawijaya is not maximizing Student Centered Learning as a method of analytical study.

Agrarian law courses is one of the compulsory subjects taught in the Faculty of law, University of Brawijaya, but from some experiences in the process of teaching and learning in academic year 2011 to 2012 found decreased interest in agrarian law concentration to follow after following the agrarian law courses. The next question is why does this happen? How do I raise the interest of students to learn in an agrarian law implementation, many pose interesting cases in the community such as cases, cases in Timika, Mesuji, etc but it does not arouse concern students to learn them. Departing from the above interesting problem to do the review as follows:

## PROBLEMS

Why is the role of Student Centered Learning (SCL)-based) based case base learning (CBL) is

required in the improvement of the learning method of agrarian law in the Faculty of law, University of Brawijaya Malang?

## DISCUSSION

### A. Educational reform in Indonesia

Based on modernera's especially in the era of globalization as it is now it demands human resources of high quality. Improving the quality of human resources is an absolute precondition for achieving development goals. One vehicle for improving the quality of human resources is education. Education is a conscious effort to develop the potential of human resources through the teaching activities. Legislation System of National Education No. 20 year of 2003 stated that the purpose of national education is the intellectual life of the nation and develop the whole Indonesia namely human human being cautious against God Almighty and ethical sublime, have the knowledge and skills, physical and spiritual health, a steady personality and independent as well as civic and national responsibility.

Previous national education system is basically aims to cultivate the students. The policy is determined very centralistic (etatism point of view), so as not to give opportunities for the region let alone College and lecturer to develop initiatives that suit learner characteristics and environmental conditions. In fact protege indoctrinated to swallow the lesson given. Educators also conduct as teaching which programed or to teach which mean to carry out his education in accordance with certain guidelines. The fact it's basically deny the rights of a person, or less humanizing learners. With approaches from the bottom up so the main concern is given to learners so that they master the learning task and able to cope with issues of learning. College as one of the compulsory education providers manage the necessary resources and regulate its use. This paradigm change (from culturalization to the empowerment of participants).

Table 1 : Lessons TCL Method(Teacher Centered Learning) in FH-UB

| YEAR | NAME OF COURSE               | SCORE                                         |
|------|------------------------------|-----------------------------------------------|
| 2011 | Agrarian Law (HUKUM AGRARIA) | A : 5%<br>B: 15%<br>C: 55%<br>D: 20%<br>E: 5% |
| 2012 | Agrarian Law (HUKUM AGRARIA) | A :7%<br>B: 18%<br>C: 59<br>D: 10%<br>E: 3%   |

Source: Primary Data 2011-2012 (diolah)

From the table above can be known that success rates in Agrarian Law courses learning at the Faculty of law, University of Brawijaya is still evident with low achievement grades A and B is still very lacking. Therefore, the author tried to conduct discussions with the team teaching (teaching group) to amend or improve learning strategies by applying a Student Centered Learning (SCL)Case Base learning (CBL). To conduct an evaluation of the use of the new method is applied to the odd and even half the academic year 2013.

B. The role of Student Centered Learning (SCL)-based) based Case Base learning (CBL) in improving agrarian law learning methods in the Faculty of law, University of Brawijaya Malang.

Conducting courses-based Strategy issues or PBL (Problem Bases Learning) or in the language of the author is using the term Case Base Learning (CBL) has been accepted and is believed to be effective in some discipline.

In Agrarian Law courses curriculum there is a competency level one is of competence level II i.e. about Agrarian principles as follows:

- Basis of Nationality (article 1 BAL)
- The right of the state principle (article 2 BAL)
- Not alienated (article 3 UUPA) Legal basis of the Agrarian
- Based on national customary law (article 5 BAL)

- e. Basic social functions (article 6 BAL)
- f. Land reform Principle (article 7, 10 and 17 BAL)
- g. Basic land use (article 13, 14 and 15 BAL)
- h. Public interest Basis (article 18 BAL)
- i. Basic land registration system (which mentioned article 19 BAL)

Whereas the objective of the study is the student can understand the principle of nationality, the principle of right of control of the State, the principle of recognition of rights to not alienated, National Agrarian Law Principles based on customary law (Adat law), Basic social functions, the basic principle of Land reform, land use for Public Interests and land registration principles. Often students had difficulties in understanding the agrarian law principles as based only on the-article in the rules.

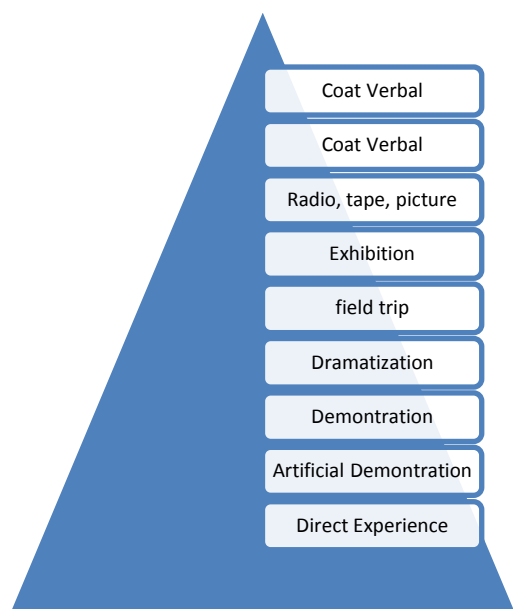
In order to provide convenience to students in understanding the principles by giving the task to them to form the SGD (small group discussion) is a model of learning by sharing material of agrarian law principles above. These principles are analyzed with an example of facts relevant to the agrarian law principles are arranged neatly with the format of the paper. Assessment of the paper is to pay attention to how sharp analysis students in analyzing cases related to agrarian law principles above, for this assessment according to Hamdani says that methods Case Base Learning is also known by the brainstorming method i.e., methods that stimulate thinking and using insights from the student. How to teach a paradigm shift from lecturing method to the development of the ability/skill to ask which was centred to the student that is one hallmark of the collation method.

Seels mention that a learning technology is a combination of three streams that are mutually interested parties, namely the media education, psychology of learning, and systems approach to education. Sadiman added that in the further development of learning technology uses three basic principles that need to be made a reference in

pengembangan and its utilization, namely: 1) approach system (system approach), 2) learner-oriented (learner centred), and 3 make the learning resource utilization) and various possibilities (utilizing learning resources).

The principle approach system means that any student have troubleshooting effort which is based on the concept of learning technology should apply the principles of the approach system. It means, looking at everything as something thoroughly (comprehensive) with all its components are integrated. the approach has been used in applying the system, analyze, and evaluate the educational process.

While the three principles that make the learning resource utilization and various possibility, mean learners learn because interacting with a variety of learning resources optimally and varied. The application of this principle of learners provide a variety of learning resources both in print (textbooks, modules and others) and non-print (program audio, video, online learning materials) or other learning resource (message, person, etc.) to reach certain competencies. There are a few videos that are on show at the time of the lecture took place before the start of lectures for the students ' passion for evocative actively involved in analyzing the problems of agrarian law. This is in accordance with the opinion of the Istiningsih said that to strengthen ICT (Information Communication Technology) can support high level thinking skills by engaging the student will carry out tasks that are authentic and complex in conditions at any places as well.



Source : Edgar Dale (Seels& Richey, 2000:15)

From the picture we can see the stretch of level of experience learned from the nonprofit directly to experinces through verbal symbols symbol, which is a span (continuum) of concrete that is abstract, and of course provide specific implications of the election methods, strategies, and learning materials, particularly in the development and utilization of technology in learning.

From the picture we can see the stretch of level of experience learned from the nonprofit directly to penglamam through verbal symbols symbol, which is a span (continuum) of concrete that is abstract, and of course provide specific implications of the election methods, strategies, and learning materials, particularly in the development and utilization of technology in learning.

Edgar Dale's thinking about the experience of Cone (cone of experience) this is the first effort to provide reasons or basis of the link between the theory learning with audiovisual communication. Cone based on Dale has been bringing together educational theories Jhon Dewey (one of the streams of progressivism) with the ideas in the field of the Central popular psychologists at the time. Whereas, James Finn has merit in the proposed field of audiovisual communication becomes a learning technology later evolved to the present into one

profession only, with support by the research, theory, and technique.

The idea of the integration system and Finn process able to include and expand on the idea of Edgar dale regarding the link between learning materials with the learning process. Edgar Dale's thinking about the experience of Cone (cone of experience) this is a great starting point for demonstrated to us that there's a reason or basis between the theory learning with the audiovisual communication as long as this is not yet the significance of learning was struck by using technology.

Furthermore, in Ade Sunandar provide clear information that learning with media eletronic can help increase the effectiveness of learning as expressed in the following:

1. the information obtained with 10% how to read (text) 2
2. 20% of information obtained by way of a hearing (sound)
3. 30% information obtained by way of a notice (graphics/photo)
4. 50% of information obtained by way of seeing and hearing (video/animation)
5. 80% of information obtained by way of speaking
6. 80% of information obtained by way of talking and do

From the explanation above it can be concluded that there are levels in measuring the ability of student's absorption of the learning methods used by professors or lecturers. That means learning methods by using Teacher Centered Learning TCL using a talk only acceptance rate information by 20%. This is in contrast to wear Student Centered learning methods Learning the SCL level information obtained by 80%.

The change of teaching methods lecture by involving students in methods of CBL (Case Base Learning) in the process of teaching and learning the law of agrarian subjects may reasonably. There are

some cases that are purposely given to students to learning student interest in such evocative analysis of the cases below:

In refining the learning strategies we are get optimum results from your existing data before the activity is done as follows:

1. Play short film about indigenous community land disputes in Papua.
2. Playing a short film about the dispute of land in Malang Town Square (MaToS)
3. Play short film about land disputes Mesuji Lampung

In addition to these three films we formed Small Group Discussion consisting of 5-10 students. Each group has representatives who will run a pawn on the Board game. Every ledge that will be made compulsory in the Group discussed each refer to the legislation and textbook. Lecturer as fasilitator will act as the person who always give you a critical question-the question that its nature and invites feedback analysis and critical attitude to all the participants. For example why Farmers lost in courts? What to do when there are citizens who were arrested and sentenced to the jail?.

As for how to play as follows:

1. The Teacher as a facilitator divides participants into small groups of 4-5, with one person as the representative of Group
2. Each Group is given 2-3 the book of acts and legislation that must be read in the group before the game starts.
3. Discussion of the Opportunity to read about 30 minutes. The next game starts with a throw of the dice, and the first step of the participants based on the order.
4. Any pause or stop fasilitatpr ask a live representative group of pawns to read out the sentence in the box. Fishing with a facilitator some questions as feedback.
5. The player will earn a bonus when in a single throw of the dice from 1 digit appears thrown first. Move a pawn to be performed is the sum

of the numbers of the dice throw of the dice with numbers first thrown on the second and subsequent throws.

6. In a game neither side win or lose because the important thing is analyzing in depth legal problem.

As for the stories in the game is diambilkan the true story or real file problems as follows:

1. The stories of the struggles of people's rights over the land " Nan Never Extinguished"
2. The stories of the struggles of people's rights over the land "Our land Free Determine"
3. The stories of the struggles of people's rights over the land " The throne for the people"

Based on method of learning which we have perfect on academic year 2013 and obtained the happy result proved by the achievement score which students gained as stipulated in the table below

Table 2: Lessons SCL based CBL in FH-UB of Agrarian LawCourse in 2013

| YEAR                         | COURSE                      | SCORE   |
|------------------------------|-----------------------------|---------|
| PERIOD I<br>(Ganjil)<br>2013 | Land Law (HUKUM<br>AGRARIA) | A : 27% |
|                              |                             | B: 33%  |
|                              |                             | C: 26 % |
|                              |                             | D: 10%  |
|                              |                             | E: 4%   |
| PERIOD II<br>(Genap)<br>2013 | Land Law (HUKUM<br>AGRARIA) | A :30%  |
|                              |                             | B: 35%  |
|                              |                             | C: 20%  |
|                              |                             | D: 10%  |
|                              |                             | E: 5%   |

Source: Primary Data 2011-2012

One of the efforts made by the lecturer as facilitator in learning this is prod a student to be courageous stating opinion based on reading materials as enrichment for understanding in cases of agrarian materials coupled with the ability to find the issue of the law and the issue of the law.Next push the participants learning to do the analysis afterwards law in a critical manner.This is in accordance with the opinions a philosophical notorious ofChina, Confucius said that~~what I heard, I forgot, what I looked at, I remember, what I'm doing, I understood~~".When university students and

students just audio exposure would be easy to forget what he heard, but with seen and heard it will facilitate students to understand the material that is being discussed, while by involving students in cases of interesting about struggle a farmer's community for the land will again to develop awareness of them.

#### CONCLUDING REMARK

Role of SCL based on CBL was needed to increase in learning method in college course agrarian law in Faculty of Law University of Brawijaya

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## STUDENT'S PERFORMANCE PREDICTION MODEL OF ONLINE TUTORIAL OF THE LABORATORY TO ACCOUNTING INTRODUCTION

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### Abstract

The objective of this research is to develop a logit model to predict the performance of accounting students in the online tutorial of Laboratory to Accounting Introduction in the Open University (Universitas Terbuka-UT) of Indonesia. Online tutorial is one of learning support services for students which held eight weeks in a semester. Student performance is measured by the course grade of Laboratory to Accounting Introduction. The logit analysis is used because dependent variable in this research model is dichotomous. Data consist of 531 students who registered on the semester of 2012.2 and 2013.1. Based on the logit analysis, it can be concluded that the gender variable, the grade of Accounting Introduction and the grade of the online tutorial assignment of Laboratory to Accounting Introduction able to predict the graduation of students in Laboratory to Accounting Introduction. The other variables which are age, educational background, employment status, number of credits taken, and the grade of participation in the online tutorial are not able to predict the graduation of students in the Laboratory to Accounting Introduction course.

**Keywords:** *student's performance, online tutorial, laboratory to accounting introduction*

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### Introduction

The relationship between academic ability and student's performance in an accounting class has a lot of the attention of researchers (Rohde and Kavanagh 1996). Learning aspects that are likely to affect student's performance is learning assistance provided by the college.

Open University (UT) as an open and distance university still uses printed materials or often called "module" (BMP=buku materi pokok (subject matter book)) as the main learning materials. Following the development of information and communication technology today, in addition to BMP / modules, UT also has provided a variety of learning materials that are nonprinting supporting, among others, in the form of audio-video CDs and various web-based enrichment materials.

Learning support services for UT's students are also available in tutorial. There are face-to-face (classical) and nonclassical tutorials such as through

radio, television, and internet. Tutorial that utilize internet technology called online tutorial.

Online tutorial held each semester within a period of 8 (eight) weeks, that there are at

least eight (8) times the initiation of material and discussion forums, as well as three (3) times the tutorial task. Online tutorial that have been started in 2001, showed that student participation increased along with the development of information technology. (Wong 2012) that there are now declared the expectations and demand for higher education to increase the use of information and communication technologies in the design and implementation of the curriculum. Based on the author's observation as a tutor online tutorial of Laboratory to Accounting Introduction (EKSI4101) that most of students have accessed at least 100 times in a semester. Each class consists of 1-2 tutors Tutor and a maximum of up to 300 students in it. In addition there is also a supervisor in charge of controlling the implementation online tutorial. As

the service structured learning assistance, UT gives policy that online tutorial contributes of 35% to the final grades of the course Introduction to Accounting Laboratory. In addition to three (3) assignments given to students, the final grade of online tutorial also consider student's participation. Participation is measured from the liveliness of students accessing and posting opinions in discussion forums.

Student's performance in this study is measured by the graduation of student in the course of Laboratory to Accounting Introduction (EKSI401). Monem (2007) states that the performance of students in a course is measured from the grade obtained when the final exams.

Turner (1997) developed two models for predicting the grade of a student in a course Intermediate Accounting I. The first model predicts the variation of the initial exam Intermediate Financial Accounting I. Average GPA, student courses, course registration status (first/remedial), exposure accounting principles in the early lectures, Accounting Principles course obtained in the beginning of semester is used to predict the first model. The second model predicts the grade of final exams courses Intermediate Accounting I. The results of this study indicate that the initial test scores Intermediate Accounting I, GPA, program of study, course grades Accounting Principles obtained in the beginning of semester was significantly associated with the grade of Intermediate Accounting I. Furthermore, the application of the two models show that the results of prediction accuracy reaches 41% in the acquisition of the initial test scores Intermediate Financial Accounting I and 66% in the semester final exam grades for the course.

Tho (1994) have developed a model that identifies the factors that can explain the performance of the University of Malaya Malaysian accounting students in the first year of their studies. There are three factors that significantly academically able to explain the variation in performance, i.e.: the grade of mathematics and economics in college and accounting subjects in high school. Socio-demographic factors, namely the

origin area of students and gender did not contribute significantly to the variability of performance.

Gul and Fong (1993) examine the factors that affect the performance of accounting students. This research was motivated consideration of getting the results of research in developed countries such as Hong Kong, in order to harmonize international accounting education accounting. They added that predictor variable in personality research. Results of studies using 455 student respondents introductory accounting classes showed that expectations of self over exam results, education in English during high school, a certificate of proficiency in English and math during high school, personality, motivation to get a business degree, and prior accounting knowledge as a significant predictor of student performance.

Limited or even no published research results regarding the prediction performance of accounting students in Indonesia to be the main motivation of this research. The other researchers tend to choose the issue of accounting financial accounting, management accounting, and auditing.

Prediction of student performance into something that is important for the following reasons. Graduation is one of the goals of students studying. Although the Open University apply the concept of lifelong education that does not recognize the DO (dropout) but most of the students still want to graduate on time. Their motivations are career, personal development, as well as support for other social status. Graduation status is still to be student's achievement.

The low retention rate and time studies which are relatively long in Open University show that most students have not been able to perform well. These problems can be anticipated by prediction study of student's performance.

This study sought to identify the relevant variables will be used to predict the completion rates of students, so that is used logit model. Logit model used in this study consisted of a dependent variable or dichotomous nominal data that is passed and did not pass. Performance is measured by

graduate students. Students are considered to pass is that getting an A, B, and C, while those who do not pass are getting a D and E on Laboratory to Accounting Introduction (EKSI101) course.

Based on the various results of previous studies that the results are not consistent with each other, this study uses independent variables include gender, age (Monem, 2007), the number of credits taken (Wong 2012). Different from previous research, this research adds employment status and educational background variable.

In addition to socio-demographic variables above, the variables that must be considered are academic ability. The independent variables associated with the academic side is the grade of the task and participation in online tutorial. Based on the background above, the problem can be formulated in this study that how to develop a logit model to predict the performance of accounting students who follow online tutorial in Laboratory to Accounting Introduction (EKSI4101). Accounting student performance on previous research is determined by many factors. These factors can be divided into academic and non-academic factors. Academic factors described in the previous section. Academic factors used in this study are online tutorial grade and final grade of the Introduction to Accounting course (EKMA4115). Wong (2012) in his study states in addition to the variables of age, gender, number of courses taken is also a concern. In this study used a variable number of credits registered in the semester.

Nonacademic factors that are potentially capable of affecting the performance of students, among others, gender, ethnicity, and age (Monem, 2007). Further stated that compared to white students, black students have lower expectations, the performance is worse, although his fighting power is higher. In terms of age, some studies stated maturity age was associated with higher motivation, higher practice experience, and the ability to adopt a variety of learning approaches (Monem, 2007).

Based on the results of previous studies, that the academic and non-academic variables can

potentially be a predictor of academic performance of students, the hypothesis proposed in this study are:

H1: The variables of age, gender, educational background, employment status, number of credits taken, final grade of the Introduction to Accounting course, participation grade of Laboratory to Accounting Introduction online tutorial, assignments grade of Laboratory to Accounting Introduction online tutorial, effect (being able to predict) the graduation of students in the Laboratory to Accounting Introduction course.

This study used data application data in the form of secondary student records system (SRS) in the Open University. Secondary data are student registration data of Laboratory to Accounting Introduction course, the number of credits taken, student personal data that include gender, age, and employment status. These are from SRS application. Other secondary data are student participation in online tutorial class measured from the amount of student access and assignment grade of online tutorial. These are from statistics online tutorial. Course final grade is obtained from the testing center of Open University.

The study period covers the registration period/semester of 2012.2 and 2013.1. The study population was all students who register Laboratory to Accounting Introduction (EKSI4101) course. All members of the population to be sampled in this study.

The dependent variable in this study is a nominal variable, 1 for graduate students (final grades A-C) and 0 for students who do not pass (final grade D-E). It is different measurement from the Open University policy. The academic rule that the grade of D is considered passing, but for this study was considered not pass. It aims to clarify the difference of students who graduate with good and who is not.

This research is the prediction of events and not for students graduating. Appropriate analytical tools is a logit regression model. The logit regression will measure the strength of the studied variables to predict student performance. (Foster 1986: 546) states that one of the statistical techniques most

frequently used in research in addition to discriminant analysis, logit analysis also aimed to estimate the probability of occurrence of an event (event).

Logit model developed in this study i:

$$P_i = 1/[1 + \exp - (B_0 + B_1X_{i1} + B_2X_{i2} + \dots + B_nX_{in})]$$

$P_i$  = probability of a student graduating and not graduating

$X_{i1}$  = age variable (TTL)

$X_{i2}$  = gender variable (JK)

$X_{i3}$  = educational background variable (DIDIKcode)

$X_{i4}$  = employment status variable (Kerjacode)

$X_{i5}$  = number of credits taken variable (SKS)

$X_{i6}$  = final grade of the Introduction to Accounting course (EKMA4115code)

$X_{i7}$  = participation grade of Laboratory to Accounting Introduction online tutorial (EKSI4101partis)

$X_{i8}$  = assignment grade of Laboratory to Accounting Introduction online tutorial (EKSI4101tugas).

Logit model that is built will be seen, that is by testing the level of significance of each variable as a whole (overall model fit), the value of  $R^2$  Nagelkerke, and regression coefficient (Gudono 2011: 170-173). Goodness of fit test to determine whether the overall independent variables have an influence on the dependent variable is categorical; can be known from Nagelkerke  $R^2$  value.

The hypothesis tested in this study are:  $H_0$ : The variables of age, gender, educational background, employment status, number of credits taken, final grade of the Introduction to Accounting course, participation grade of Laboratory to Accounting Introduction online tutorial, assignments grade of Laboratory to Accounting Introduction online

tutorial has no effect (not able to predict) the graduation of students in the Laboratory to Accounting Introduction course.

$H_1$ : The variables of age, gender, educational background, employment status, number of credits taken, final grade of the Introduction to Accounting course, participation grade of Laboratory to Accounting Introduction online tutorial, assignments grade of Laboratory to Accounting Introduction online tutorial, effect (being able to predict) the graduation of students in the Laboratory to Accounting Introduction course.

In the logit regression equation, the independent variables included in the model were age (TTL), gender (JKcode), educational background (DIDIKcode), employment status (KERJAcodes), the number of credits taken (SKS), final grade of the Introduction to Accounting course (EKMA4115code), participation grade of Laboratory to Accounting Introduction online tutorial (EKSI4101partis) and the assignments grade of Laboratory to Accounting Introduction online tutorial (EKSI4101tugas).

With some 531 students of data, the logit regression equation shows that the value of Chi-square to the Hosmer and Lemeshow test was 8.508 with a significance level of 0.385 (greater than 0.05) which means that the model is able to predict the value of observation, or may be acceptable as suitable models with the data observations. Furthermore, the value of Nagelkerke  $R^2$  of the equation showed a value of 0.506 which means that the variability of the dependent variable that can be explained by the variability of the independent variable of 50.6%. Based on the Classification Plot, prediction accuracy of this equation is equal to 84.7%.

From the results of the logit regression equation also can be seen that:

- gender variable (JKcode) significant at the 0.001 level (less than 0.05). Regression coefficient for the variable gender is 1.2303 and is negative, which indicates that the gender variable negatively affect

student graduation in the Laboratory to Accounting Introduction course.

- final grade of Introduction to Accounting course (EKMA4115code) significant at the 0.000 level (less than 0.05). Regression coefficient for the variable course Introduction to Accounting value is 0.826 and is positive, which indicates that the value of the variable course Introduction to Accounting positively affect on graduation of students in the Laboratory to Accounting Introduction course.
- assignment grade of Laboratory to Accounting Introduction online tutorial (EKSI4101tugas) significant at the 0.000 level (less than 0.05). Regression coefficient for the variable course Introduction to Accounting value is 0.043 and is positive, which indicates that the assignment grade positively affect on graduation of students in the Laboratory to Accounting Introduction course.

## 1. Conclusions

Based on the results of the logit analysis, it can be concluded that only variables of gender (JK), the final grade of Introduction to Accounting (EKMA4115code), and the assignment grade of Laboratory to Accounting Introduction (EKSI4101tugas) are powerful (able to predict) the graduation of students in the Laboratory to Accounting Introduction course. The variables of age (TTL), educational background (DIDIKcode), employment status (KERJAcodes), the number of credits taken (SKS), and the participation grade of Laboratory to Accounting Introduction online tutorial (EKSI4101partis) had no effect (not able to predict) to graduation students in the Laboratory to Accounting Introduction course.

The ability of the gender variable (JK) predicts graduation students in the Laboratory to Accounting Introduction course (EKSI4101) is consistent with the previous study (Tho 1994). Tho (1994) explains that gender and regional origin of the students had no effect on student performance.

The ability of final grade of Introduction to Accounting course (EKMA4115code) predicts graduation students in the Laboratory to Accounting Introduction course (EKSI4101) can be said to be consistent with the previous study (Monem 2007 and Turner 1997). Both indicate that the final grade of the Introduction to Accounting course affect the performance of students in other accounting courses.

The ability assignment grade of the Laboratory to Accounting Introduction online tutorial (EKSI4101) cannot be confirmed because this variable as far as our knowledge has not been used by previous researchers.

Future studies should identify the factors why the gender variable effect (being able to predict) the graduation of students in the Laboratory to Accounting Introduction course. This explanation can be supported by the relevant behavioral accounting theory. Study period which includes 2 registration periods/semesters are 2012.2 and 2013.1 should be extended to better research results

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## WRITING A CONSERVATION BASIC DRAMA SCRIPT THROUGH WORKSHOP TECHNIQUE COOPERATIVE MODEL FOR COLLEGE STUDENTS

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### Abstract

The aims of this research are 1) to find out the college students' difficulties in writing a drama script and 2) to propose a model of applying a conservation-based workshop technique of cooperative model for college students. This research methods are descriptive qualitative. The data and detailed analysis are descriptive in nature. The data of this research were collected from observations. The students who took the drama class were observed and the difficulties in writing drama scripts were found. The results of this study are 1) the conservation-based drama script writing through workshop technique of cooperative model learning was needed by either the lecturers and the college students as one of solutions to overcome the difficulties in learning drama, namely the time limitation, media, and teaching material, 2) workshop technique of cooperative model was applied the learning steps based on fun and democratic learning principles.

**Keywords :** *writing, drama script, conservation, cooperative workshop technique*

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### Introduction

During this time, writing a drama script for college students is activity which is considered as difficult things. For that, it is needed a model and technique which can give an alternative to get optimal learning result.

Cooperative learning model research with this conservative basic workshop technique in order that lecturing activity have more meaning because the college students can produce articles with natural conservation knowledge and the important meaning of gracious environment. This technique make the college students can explore their ability but still in direct and have a good comprehension basic. The college students who have the less competence are also helped with the existance of workshop technique, because in this technique, the cooperation which wich is happened not only to the fellow college students but also with the advisor. Information or material which is given by the advisor in the beginning then practised by the college students in product result, it is called script.

Conservation basic learning is aimed to intergrate the college students' theory, practice, and behaviour comprehension with natural eternity

points, environment, and raise up culture points as local wisdom of creation source.

The problem formula of this research are 1) what are the difficulties have been around the college students in writing drama script? 2) how is the form and application of workshop technique conservative basic cooperative model in writing drama script learning for college students? The approximation which is used in this research is descriptive qualitative. Qualitative research make serious efforts to deliver condition, data, and analysis detally in description form. The data source of this research is the college students' competence in writing drama script conservation knowledge. This research data is observation result data to the college students who have passed drama inspection lecturing sort of the difficulties which is faced during attended this lecturing, specially in writing drama script competence.

Cooperative learning model is a kind of learning model which contribute the contextual learning. Cooperative learning system can be defined as structured team working/studying system. There are 5 main elements implied in this structure (Johnson & Jhonson in Yuwono 2011), are positive

interdependence, individual responsibility, personal interaction, cooperation ability, and team process.

The philosophy which is based cooperative learning (mutual assistance learning) in education in "homo homini socius" which emphasize that human being is a social creature.

Cooperative learning is a teaching learning strategy which is emphasized to the togetherness attitude and behaviour in working or helping between the fellow in regular cooperative structure in a group, which consists of 2 people or more.

According to Lie (2002) Cooperative Learning model is not same as just studying in a group, but there are some basic elements which is distinctived with the randomly group distribution. Roger and David Johnson said that not all of group work can be considered as Cooperative Learning, for that it has to be applied five mutual assistance learning model elements, they are:

1) Positive Interdependence

The success of a creation very depends on each member's efforts. To create an effective work team, a teacher need to arrange assignment in such each group members have to finish their own assignment in order to the other can reach their aim.

2) Individual Responsibility

If the assignment and assessment are made according to Cooperative Learning model procedure, each students will have a responsibility to do the best. An effective teacher in Cooperative Learning model makes the preparation and arranges the assignments in such manner until each of the group members have to execute their own responsibility in order to the next assignment in group can be implemented.

3) Face to Face

In Cooperative Learning each group must be given chance to meet up and have a discussion. This interaction activity will give the students to form a beneficial synergy to all of members. Point of this synergy is to appreciate the difference, utilise the excess, and fill the lack.

4) Communication of each members.

This element requires the students are supplied by various communication skill, because the success of a group also depends on the willingness of the members to listen each others and their ability to express their opinion. The communicate skill in group also a long process. But, this process is usefull process and need to go through to enrich the study experience and the students' mental and emotional developmental training.

5) Group process evaluation

Teachers need to arrange schedule a special time for group to evaluate group work process and their cooperation result in order to cooperate more effective.

Workshop technique cooperative learning is a training technique, information sharing, and live practice. Workshop is a kind of learning form which is aimed to give chance to the college students to cooperate in a team in spite of individually practice that have been delivered by the lecturer before. After the workshop participants do the assignment or practice the next activity is to show their work or presentation result form a drama script conservation basic points.

The therminology of drama is Greek language "draomae" its mean are take step, behave, and do an action. Drama script can be given a limit as a kind of literature creation which is written in dialog that is based on internal conflict and have a possibility to be performed. Drama performance according to Moulton can be defined as human being's life that is described with an action. That human being's life which is described with action have to be written first. So, although script drama or performance drama are always relate to literature language (Waluyo 2001:2)

In Indonesia, there are two kinds of drama. They are traditional drama and modern drama. Traditional drama include folk theater, kethoprak, wayang, and etc. Modern drama in script form usually use western concept. This is usually theater act form, performance art. The next development appears monolog drama therminology. If the drama



script in a general way is acted and in dialog form with more one actor, in monolog drama there is no dialog between one actor to another concretly.

Waluyo (2001:8) said that the elements which is included in script drama are : plot, characters, dialog, theme, and moral value. Beside that, the support elements which is existed are technical instruction or text side that can give instruction when the actor motionless, start to move, dialog, small respite, how is the actors' condition and so on. (Juanda 2002:81)

### **Discussion**

One of point that can be developed in character education is conservation basic learning. Conservation gives a comprehension to young generation about the important meaning of natural eternity. Education or comprehension about environment and the important meaning of natural eternity can be done to children and teenagers early. This effort is important to do in order to the young generations train to care the nature and environmental early. Even, after they grow up the reinforcement of environmental gracious points still necessary to be continued. Conservation knowledge learning can be done in many ways, one of them is intergrate conservation knowledge in lecturing for college students, script dramawriting learning through workshop technique cooperative model.

Writing a script drama becomes one of the important competence that is had by college student in language and literature major. But, until now there are still found kinds of problem and closure in drama writing lecturing implementation.

The difficulties and closures are: 1) most of the college students are not minded in drama writing activity which is though monotonous and passive. They think that drama inspect only look as literature apreciation that isn't needed a special skill. 2) the college students didn't have consultation place and institution to existance themselves because when they attend the lecturing the lecturer doesn't have enough time to guide them one by one. The other reason is they have reluctant to give the feed back

because the lecturer doesn't apply an exact learning model when they arrange this lecturing subject. The scripts which are became inspect material or performed in the end of examination later also to be done less maximally, although in the preparation have already fulfilled performance production procedure (rehearsal, preparation, and performance).

The difficulty and closure that is happened to the lecturers is they don't have enough time to give guidance intensively to the college students in writing so, they only give the assignment to their students. The lecturers often less responsive and sensitive about their students' requirements. This time unsufficient can be caused the teaching full schedule of the lecturers, the lecturers' less sensitive, they don't care about their students' requirements, or they can't arrange the model and strategy drama learning correctly.

To optimize the script drama writing learning result then it needs to do an exact learning model inovation and relevant. One of the model that can be done is conservation basic drama writing with the implementation of workshop technique cooperative model. This learning is done by learning requirement principle from the students and teachers point of view.

Based on the data requirement that is analysed it conclude that the college students like an expresive learning form, consider as most responsibility, and grow the curiosity. The college students need to be given chance to attend in directed learning and lecturers' guidance. Charactered learning and conservation knowledge are needed for the college students more care and love the nature. Especially writing a drama script as an effort to conservation campaign through literature creation.

From the analysis result of kinds of requirements aspect, according to the lecturers and college students so, it is formulated in 7 learning model principles: a) fun and motivation principles b) group cooperation principles and assignment distribution c) correct and critical principles d) information provide and disinter principles e) direct

and guidance principles f) democratisation principles g) evaluation and achievement principles.

Learning components which are implemented in this learning include: 1) aim and assumption, 2) syntagmatic (steps), 3) social system, 4) reaction principles, 5) side system, 6) accompanist and learning impact.

### **Purpose**

Purpose is a condition for anything that wants to be achieved in a learning model. The purposes and assumptions in this learning model are:

The creative power of learning active and involve all of learning elements proportionally.

The purpose of learning is to make a democracy group that can solve many kinds of global issue problem through many kinds of alternative solution.

3.) In learning activity workshop is applied as an effort to dig a real potential of the students.

4.) A classroom becomes a collective room which is used as practice place and to show their representative work openly, an university student as a student also pass a social developmental seriously.

5.) Students get a natural, direct and real knowledge to be an individual and also a social group which is more effective than before.

6.) With a new creation and product which are eco-friendly. What is meant by product in this context is drama script based on student conservation creativity.

### **b. Social System**

Social system social can be described as a whole of social element which is related one to another,

can be influential in a whole. System social in writing a drama script context is through cooperative workshop technique model based conversation are :

The strength of tolerance, eco-friendly, and responsive to all situation in around environment.

The lecturers mixed up in the learning activity from the class begin until the end of the class as a learning control not to dominate the class.

Students do the practice directly. Lecturer as a consultant, guide and provider. Student as an agent.

Active learning is created, communicative, a deeper discussion, pleased, and also invest a load of character to a student about the importance of natural ever-lasting and eco-caring as a basic to a continuous living.

### **c. Syntagmatic**

Syntagmatic is a step or action in applying a learning activity. The learning step of cooperative workshop technique in writing this drama script refers to syntagmatic group investigation type that have developed, which is involving lecturer as a democratic learning source and student can be mastered information through direct practice in small groups.

The steps that mentioned above are : 1) the gift and delivery of information. 2) the selection of material topic that appropriate with conservation themes. 3) Preparing cooperative learning 4) implementation of practice/ rehearsal in writing drama script based conversation. 5) Internal guidance in group and individual 6) analysis and synthesis 7) last product presentation 8) and evaluation and appreciation. The following table are the steps or 8 learning steps that meant above.

Table 2.1 The Steps in Writing Drama Script Based Conservation Through Cooperative Workshop Technique Learning

| Lecturer Activity                                                                                                                                                                                                        | The Steps                                                                                | Student Activity                                                                                                                                | The Character Value that Occur                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| 1                                                                                                                                                                                                                        | 2                                                                                        | 3                                                                                                                                               | 4                                                                                                        |
| Giving information which concerned with the material that will be learned by the student                                                                                                                                 | Step 1<br>The delivery of information                                                    | Observing and paying attention to the information that gets from the lecturer                                                                   | Be careful, admiring the other people argue.                                                             |
| With students choose to determine an appropriate topic by agreement.                                                                                                                                                     | Step 2<br>The selection of topic that appropriate with conservation                      | Choosing topic with a friend in a group                                                                                                         | Creative, curious, discipline, responsibility                                                            |
| With students plan the procedure, task, and the certain destination of study which appropriate with sub topics that chose in the step                                                                                    | Step 3<br>Planning a cooperative learning                                                | Planning the way to solve the task and destination of drama analyzing that appropriate with the topic that have chose                           | Responsibility, tolerance, communicative, bookworm, mutual cooperation                                   |
| Following and observing each groups development closer and offering some helps if needed                                                                                                                                 | Step 4<br>Implementation/ practice/ rehearsal in writing drama script based conservation | Doing the learning step which involving such kind of activities and creativity and instructing the student to a variety source in or out campus | Hard work, discipline, bookworm, communicative,                                                          |
| Giving some argues more intensively for each groups to know the weakness and each groups. This activity is done with the purpose to maximize the lecturer influence as a provider.                                       | Step 5<br>Guiding an internal group and individual                                       | Doing a deeper discussion that concerned with drama that have watched and read, arranging a task arrangement and material that have learned.    | Creative, honest, autonomous, responsibility                                                             |
| Giving argue and a kind critical to the first result of work each groups or each members of group.                                                                                                                       | Step 6<br>Analysis and synthesis                                                         | Analyzing and evaluating information that gets during the step 3 and 4, planning how information in that drama which can be summarized          | Creative, tolerance, appreciating achievement, peaceful, curious, responsibility, autonomous             |
| Providing and be a motivator if the disagreement in members of group happened.                                                                                                                                           | Step 7<br>Presentation the last product                                                  | Presentation the result of drama analysis in the degree of group with evaluator each member of the group itself                                 | Honest, appreciating achievement, democratic, creative, peaceful, responsibility, tolerance, nationalism |
| With student evaluating the contribution of each group to the whole. Evaluation can be an assessment of individual or group. A lecturer also give appreciation for the group work as a form of confession and motivating | Step 8<br>Evaluating and appreciation                                                    | Evaluating the contribution of each groups to the totally result of the classwork. Evaluation can be an assessment of individual or group.      | Honest, appreciating achievement, communicative, responsibility.                                         |

d. Reaction Principal

through cooperative learning workshop technique, are :

Reaction principal in learning application model in order to write a drama script based conservation

1. The lecturer act as a resource person, consultant, counselor, instructor, and a

kind critical giver when the problem in the group occurs.

2. The lecturer gives a colleague or an intensive guidance while the practice or rehearsal activity goes on.
3. The lecturer gives a motivation to each individual to be active in the process of discussion and also to be able to work autonomously.
4. The lecturer doesn't need to be too dominant while a discussion process and work analyzing goes on.

#### e. Supporting System

Supporting system is an aspect that supports the achievement of learning model that materialized in the form of means and infrastructure which exist in the school or campus.

Supporting system in learning model are:

1. The availability of means reference provider and information that concerned with drama material, it can be a library that completed with internet access
2. The availability of rooms : multimedia laboratory, opened stage, auditorium and hall.
3. Tools and medias that support the workshop like: LCD, tape/ sound system
4. Need drama script collecting book that have a language as an additional reference and student reading material before writing or making a script.

#### f. Learning Effect and Escort Effect

Learning effect Javanese drama analysis are:

1. Understanding form and structure Javanese drama, it can be script drama or show drama.
2. To be able to construct plot draft or story frame of a script.
3. To be able to develop a frame or story plot to a whole drama script that appropriate

with the theme that have determined before.

The negative effects in developing that learning model are:

1. The study that has a direction system and guidelines on to another with a belief situation, giving a positive responds for all that have been negotiated and discussed.
2. The comprehension about the importance of environmental continuity for the living persistence in the future.
3. To be able to choose and classify the drama script based conservation as a tool or living environmental campaign through drama script shows that have made.
4. Reinforcement of conservation values in a whole of nature aspect, environment, and culture.
5. The creation of nurture effects for the students, lecturers and society.

Basically the application of this model could be done in the study of writing a drama script for group of character class. Nevertheless, the application of this model more recommended for higher class category which is relative active. It because in a higher class can be assumed that the students have had a writing skill theory that adequate so, when the workshop technique applied, the students are able to analyze and work by themselves.

#### Conclusion

Based on the description of the discussion above so defined conclusions that can be concluding in this working paper are: 1.) the study of writing a drama script based conservation through cooperative workshop technique model is needed by lecturer or student as a solution to solve a problem in the study of drama that was going on so far, that are: the limited time, media, and teaching material. 2.) the form and implementation of cooperative workshop technique model are done by applying learning steps that refer to learning principals which are pleased and create a democratic situation insightful conservation. 3.) cooperative workshop technique model that have a steps in group investigation

concept can be an alternative way to increase the competence and students interest in writing a drama script. 4.) as one the literary works, a drama script could be a media of nature conservation campaign and also culture.

The suggestion that recommended are: 1.) the study in writing a drama script can be done by using cooperative workshop technique model for the students to reinforce caring values and kind environment. 2.) This learning model is advised to be applied for the category of the higher class which is relative active. It because in a higher class can be assumed that the students have had a writing skill theory that adequate so, when the workshop technique applied, the students are able to analyze and work by themselves.

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## PICTURE PAIRED RETELLING TO IMPROVE OF LAW FACULTY STUDENTS' IN LEARNING ENGLISH DESCRIPTIVE TEXTS

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### Abstract

The action research was aimed at improving the teaching and learning process and the motivation to learn English. It was carried out at UNNES Law Faculty. The samples of this research were 50 semester one students, an English lecturer and two other lecturers as collaborators. The research consisted of two cycles and implemented four actions, each of which was conducted in two meetings. Each cycle consisted of four basic actions -planning, acting, observing, and reflection. The first cycle consisted of two actions in which cooperative learning management using picture paired retelling was implemented. The result of classical achievement before the action was 61.68 (below average), the result after the first cycle was 74.68 (average), and the result after the second cycle was 83.93 (good). The average score of motivation in the first cycle was 79%. The second cycle has the same actions as the first. It dealt with only improving the management as the result of reflection of the first cycle was 91.34%. The research ended in the second cycle because it was due to the achievement of high motivation in the average score. It could be concluded that (1) the lecturer was able to improve the learning process, and to increase the students' motivation in the first semester of Law Faculty of UNNES by using picture paired retelling; (2) the learning process became more active, creative, and innovative in the English communication or in discussions; (3) giving rewards as appreciation for students was recommended to increase their motivation, activities, and enthusiasm in the learning process; and (4) high extrinsic and intrinsic motivation can help students in the English communication..

**Keywords:** *picture paired retelling, motivation, cooperative learning, descriptive texts*

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### INTRODUCTION

The demand of globalisation era supports the English learning to be more variative, communicative in enhancing university' students to be able to communicate in English correctly and fluently. One of the solution in facing the problem is having learning process which is able to attract learners to learn actively. It is expected that the atmosphere of learning can be fun so that the result of the study can be optimal. The fact that we have right now, there is a deep gab between the demand and the low learning motivation in the process of teaching and learning.

There are many efforts in improving the education quality, especially in increasing the capability of English learning done by the government, or the education stakeholders, such as training of attractive methods, innovative models, or fun teaching techniques.

Based on the explanation above, the research was focussed on the following topic: Picture Paired Retelling in Improving Law Faculty Students' Motivation in Learning English Descriptive Text.

The problem of this research is discussing the exact method and the stratetic of teaching and learning, by using limited time but the students can optimize the time learning.

The problem focussed on the method of *picture paired retelling* to enhance the sudents' motivation in learning english descriptive text for Law Faculty students.

The problem researched was as follows: how can *picture paired retelling method* improve the law faculty students in learning English descriptive text?

The aim of the research is: to find out the alternative solution to overcome the problems happenened in the teaching and learning process of English Descriptive text for Law Faculty Students.

### 1. Descriptive Text Learning

Descriptive text has the following generic structure:

a. Identification: it identifies noun, people or something will be described.

b. Description: it describes the characteristic the noun described such as where was it from, the color, the size, the favourite, etc. The description gives information about the subject, or people discussed. The descriptive text learning is a process of knowledge development to get higher understanding by using spoken and written text.

### 2. Learning motivation

Syamsudin said that motivation is a power or forces or energy or a complex condition and preparatory set inside individu to move forward into certain destination. Whether it is realized or not, the motivation grows up by the following ways: (1) intrinsictly, (2) extrinsictly.

It can be said that there are two kinds of motivation:

a. intrinsict motivation: the motivation is brought since the human was born. It can not be learnt because someone who has high curiosity to know, he/she will learn, as a result, the knowledge and activities based on intrinsic motivation will stay longer.

b. extrinsict motivation: the motivation that underlies the individu participant. The extrinsict motivation can be an honour, a compliment, a reward, a punishment. Extrinsict motivation is highly used to achieve the result of the study.

Petri dan Helbert said that *Motivation is the concept we use when we describe the force action on or within an organism to initiate and direct behaviour*. Motivation can be an aim and tool in the learning and teaching process. Motivation as a factor which can determine the succeed of the students learning in the field of knowledge, skill, and value.

Dimyati and Mudjiono stated that there are three main components in motivation. They are as follows: 1) need, 2) encourage, dan 3) aim. The need happens when there is unbalance between what is needed and what is expected. Encourage is a mental power oriented to fulfill the expectation or reach the goal. Encourage which is oriented to the goal belongs to the core of motivation. Whereas, the goal is something needed to be reached by the individu.

Dimyati expressed that learning motivation consists of some functions of learning motivation, they are: supporting to act, determining the way of the action toward the expected goal. Motivation can give direction and activities must be done based on the formulated goal. Learning motivation is encouraging appeared from the intrinsict and extrinsict toward certain ways started by the need existence which create efforts to achieve the need satisfaction or the expected goal. The measurement of learning motivation is scored continoumly from the highest to the lowest, in the form of code, VR (*very good*) with the score 86-100, code G (*good*) with the score lai 81-85, code A (*Average*) with the score 71-80, code UA (*under average*) with the score 61-70, and code P (*Poor*) with the score 51-60.

### 3. Paired Retelling

There are some meaning of retelling, they are as follows:

1. Retelling is away to help learning that can be used with listening, reading, writing.

2. In discourse analysis, a measure of comprehension. In miscue analysis the process in which the reader, having orally read a story, describe what happened in it. The purpose of retelling is miscue analysis to gain insigt into the reader's ability to interact with, interpret, and draw conclusions from the text and retell.

Retelling can be said that research indicates that retelling increases both the quantity and the quality of what is comprehended. Teacher can use retelling as a way to build silent reading fluency and to measure comprehension. Having student retell allows a teacher to assess a student's understanding.



Retelling allows teacher to gain insight into what a student views as important and also how the students organize the information. Retelling can determine whether the students knows the main idea, can make

Based on above explanation, retelling can be used in English learning based on the following reasons: 1) students can understand generic stucture and word meaning, 2) increasing the discourse text, and 3) being able to cooperate with listening, reading, and writing assignments.

#### 4. Pictures media

Nana Sudjana and Ahmad Rivai said pictures media is a media which combine the fact and the idea clearly and strongly through the combination of expressing words and pictures. Picture is a media which have function to distribute the message from the source of message to the message receiver. Specifically, picture has function to attract people, stresses on the idea, illustrate or give variation to the fact. Picture is a simple media, easy to made, cheaper media.

The use of media in the process of teaching and learning will arise the desire and the new interest, increase the motivation and the stimuli of learning activities, even it can bring psychological effect toward students. Besides, media can increase the learning motivation, enable to learn independently based on the interest and the skill.

#### DISCUSSION

##### PLANNING

In this research, the researcher prepared everything needed in the process of teaching development. Here are some steps prepared:

The population of this research is the first semester Law Faculty students of Semarang State University. Because English is taught in the first semester. Whereas the sampling is random sampling.

The teaching instrument is a method of *picture paired retelling* to improve the process of English teaching and learning.

There are three instruments used in this research. The instruments are as follows: 1) the instrument of Speaking score. The instrument is used as a tool of collecting data. The process of data collecting was done in the teaching and learning process. In this case, the teacher is an observer and also facilitator in the process of teaching and learning. As the observer, the teacher will observe the cycle and give the intervention needed in every cycle, so that it will influence the process and the result of learning. As the facilitator, the teacher has function as the source of information in the process of teaching and learning. The learning process based on the system of *student learning center*, where the focus is on the students. The teacher as a facilitator will help students in the process of teaching and learning. 2) questionnaire form which reveal the result of students motivation. 3) the instrument of students opinion about cooperative learning using a method of *picture paired retelling*.

#### ACTIVITY

##### 1. Research Characteristic

The research was done in the class of 50 Law Faculty students as the subject of the research, one English teacher, and two other teachers as the collaborators. In generally, the plot of the research can be described in the following steps:

Assessing the English material

Field Orientation

Interview

Action

Early reflection

Identify the problems and the action plan

Assessing the theory and research relevance between Picture Paired Retelling and motivation

The action plan using Picture Paired Retelling in increasing the learning motivation

The implementation of using Picture Paired Retelling

## **Data**

The ways of collecting data: a). Interview after the process of teaching and learning, b). Questionnaire, is used to explore other aspects such as student opinion on the use of PPR and student motivation toward learning English, c). Field notes, to record important events related to materials research, especially at the time of the learning process takes place, d). Instruments Learning Motivation Motivation to learn is the encouragement that comes from within and outside the self impetus for learning. The indicators for variable learning motivation is curiosity, love to learn, desire to excel, penghargaan existence, the existence of sanctions or punishment, as well as the attention of the competition, so it will achieve the expected learning objectives to obtain maximum results.

## **RESULT**

Aspect of learning outcomes To view the student learning outcomes, assessment is divided into 5 categories. Very good (85-100), good (81-85), average (71-80), under average (61-70), and poor (51-60). Aspects speaking on the condition before treatment has average value average of 62.06 (including the poor category), the first cycle of the average value of students increased to 71.74 (including category average), and the two-cycle rise higher to 83.72 (including good category). Aspects of the structure of the text on the condition before treatment has average value of 60.94 (including the poor category), the first cycle of the average value of students increased to 75.16 (including category average), and in the second cycle structure of text rising higher to 82.72 (including good category).

Aspects of vocabulary on the condition before treatment have value average of 61.44 (including under the category average), the average value of the first cycle. average students increased to 76.88 (including good category), and the second cycle rise higher to 85.64 (including very good category). Aspects of Fluency on the condition before treatment have an average value of 57.98 (including the poor category), the first cycle of the average

value students increased to 73.02 (including category average), and the cycle The second rise higher to 84.03 (including good category). Aspects of pronunciation in the state before treatment has average value of 66 (including under the category average), the first cycle value average student increased to 76.64 (including category average), and the The second cycle of increased higher to 83.38 (including good category). Overall there is a good improvement from the aspects of the spoken aspects of assessment before treatment the average of each aspect of the category of poor and average but has increased in the first cycle to the second cycle categories of good and also in the good category.

### **Students' motivation**

Students' motivation in the first cycle has a number of scores of 79.00 with average motivation category. This means that the students' motivation in the first cycle are categorized high enough. Learning motivation will be high when there is a boost in both the student and the outer self In the second cycle has a number of scores of 91.43 with very good motivation category. This suggests that there is an increase in the relative motivation of students become very good average.

### The Result of cooperative learning

| Aspects of assessment                                     | cycle 1 | cycle 2 | Average |
|-----------------------------------------------------------|---------|---------|---------|
| The use of images to help the monologue                   | 100     | 100     | 100     |
| Lecturers use the images for descriptions                 | 98      | 98      | 98      |
| Pictures make learning more happy                         | 100     | 100     | 100     |
| Application of descriptive text images in monologue       | 98      | 100     | 99      |
| Image according to the learning descriptive text          | 100     | 100     | 100     |
| The use of images according to age                        | 98      | 100     | 99      |
| The use of images in accordance with the thinking ability | 98      | 98      | 98      |
| Cooperative learning is helpful                           | 100     | 100     | 100     |
| The method of paired retelling help the monologue         | 100     | 100     | 100     |
| It is delightful retelling paired method applied          | 100     | 100     | 100     |

From the above data it appears that the average cooperative learning outcomes are very high. This suggests that cooperative learning is relatively beneficial to the students and help their learning process. Does not appear to have a significant increase of cycles one and two, but on average the results showed very good results.

### CONCLUSION

From the research that has been done can be taken several conclusions as follows :

1. Models developed in this study is the use of cooperative learning PPR (Picture Paired retelling) combined with four stages of learning English is Building knowledge of field (BKOF) ; Modelling of text (MOT) ; Joint construction of text (JCOT) ; and Independent construction of text (ICOT).

2. Findings on the second cycle of the entire student otherwise completed (passing grade). There is a growing mastery learning in the second cycle and an increase in the average value of the first cycle category 74.68 (Good) to 83.93 category (Very Good) on the second cycle. Therefore, there is an average increase significant value of the first cycle.

3. Motivation to learn in the first cycle has a number of 79.00. In the second cycle has a number of scores of 91.43 with very high motivation category. So there is an increased motivation to learn significantly.

4 Opinions of students about cooperative learning using PPR in the second cycle an average of 99.6 %. So there is an increase of 0.4 % when compared with the opinions of students on the first cycle, because the picture used in the second cycle sought by students, so the percentage of the second cycle of the opinion of the use of PPR has increased

### SUGGESTION

1. Use of the images used to describe something should be sought by students in order to be better and more interesting according to the ability of thinking.
2. Division in cooperative learning groups should be heterogeneous, in accordance with the ability to think that varies and is determined by the lecturer.
3. At the stage JCOT guiding the activities of both faculty and student peers to be more intensive especially when collaborating fill retelling records sheet.

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## QUESTIONING SKILLS OF PGSD STUDENTS IN SEMARANG STATE UNIVERSITY

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### Abstract

PGSD students as candidate of elementary teachers are required to master basic teaching skills. There are nine teaching skills, and one of it is questioning skills. The questioning skills become very important, because of the regulation of Education and Culture Minister (Permendikbud 81a, 2013) about implementation of 2013 curriculum. There are five learning experiences in the learning process: observed, questioning, gathering information, associate and communicate. In this paper will be describe the acquisition of questioning skills of PGSD students and discussed about the importance of questioning skills and its relation in the learning process.

**Keywords:** *questioning skills, learning process, Curriculum 2013, teaching skills*

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### Introduction

Classroom interactions can be seen as a good approach in order to deliver the lesson in more effective way. The two-way interaction could also raise student's awareness in thinking out on every idea or new information that comes to their mind during the learning process. Delivering questions is one among several ways on enhancing a classroom interaction. Questioning is among the oldest and most commonly used in teaching and learning strategy[1].

Questioning is another form in classroom interactions, teachers here poses some questions dealing with the lesson delivered and requiring students to give their response at the moment. There are many ways to pose questions. Thus in particular there are also levels in questioning. In this case, the leveling technique of the question is by applying Bloom's taxonomy. Here Bloom's taxonomy helps teachers clarify their intentions in teaching and testing, make their tests more challenging by teaching and testing to higher levels.

The quality of the question determines the quality of the student's answers. The question can provoke students to think more complex or not, it is also can bring students to think on low or high level of thinking. Questioning skills is one of teaching

skills. According to Rusman[2], teaching skills is common characteristics of a person that associated with knowledge and skills in an action. This skills perform fundamental behavior that is owned by a teacher as initial capital in carrying out learning task. PGSD students as the candidate of elementary teachers are required to master teaching skills. There are nine teaching skills, and one of it is questioning skills.

The questioning skills is become more important because of the regulation of the Minister of Education and Culture about the implementation of 2013 curriculum. In the 2013 curriculum developed two modes learning process: direct learning and indirect learning. The direct learning process guide students to have learning experiences through five activities: observe, questioning, gathering information, associate and communicate[3].

In this paper will be describe about the acquisition of questioning skills of PGSD students, and discussed about the importance of questioning skills and its relation in the learning process.

### 1. Questioning Skills

Teaching skills according to Rusman is common characteristics of a person that associated with knowledge and skills in an action. There are nine

teaching skills that must be possessed by teachers. One of nine teaching skills is questioning skills. Delivering question is one way in which teacher assist students in receiving information or develop high-level cognitive skills. Things that need to consider in order to deliver question are: (1) the purpose of the question, (2) phrasing, (3) the structure of the question, (4) the scope of the question, (5) move shifts, namely the provision of questions to some students respectively, (6) random distribution question, (7) giving time (pausing) to the students to think of an answer, (8) nature warm and enthusiastic teachers in response to students' answers, (9) guided prompting students to answering questions properly, and (10) the conversion of questions based on the cognitive level[4].

There are several types of questions (1)questions that focus on the teaching process, (2)questions that focus on the learning process, (3)questions that focus on specific objectives[1]. While some things that need to be avoided when the teacher deliver question, for example: (1)repeat the question using the same words, (2) repeating the student's answer, (3) answer his own question, (4) require an answer simultaneously[4]

According to Djamarah [4] there are two questioning skills: basic questioning skills and advanced questioning skills. How to ask for a whole class, in groups, or to individuals, have a very significant impact, not only on student learning outcomes, but also on the social and emotional. By asking the teacher can help students learn with his friend, can help students in receiving more information, or can develop a high-level cognitive skills.

## 2. Questions that Develop Higher Level Thinking

One of the commonly used questioning techniques is to employ the 5W and 1H questions: Who, What, Where, When, Why and How. While this questioning technique is useful to some extent, most of the 5W questions tend to be close ended and elicit factual responses. Although factual

responses are necessary, as good teachers we need to promote higher level thinking skills as well. One way to address this would be to use Bloom's taxonomy of thinking skills as a guideline to ask questions. The following table gives some examples. For instance, to test if a student is able to evaluate what has been learned, the teacher could ask the student to critique a hypothetical problematic situation. Here table 1 shows the level of thinking that consider on Bloom's taxonomy.

Table 1 shows that higher level thinking is related with creating, evaluating and analyzing skills but lower level thinking connected with applying, understanding and remembering skills.

Table 1. Level Thinking Consider on Bloom's Taxonomy [6]

| Skill         | Sample Prompts                                         | Purpose                                        | Level  |
|---------------|--------------------------------------------------------|------------------------------------------------|--------|
| Creating      | design, construct, plan, produce                       | combine elements into a new pattern or product | Higher |
| Evaluating    | check, critique, judge, hypothesize, conclude, explain | judge or decide according to a set of criteria | Higher |
| Analyzing     | compare, organize, cite differences, deconstruct       | break down or examine information              | Higher |
| Applying      | implement, carry out, use, apply, show, solve          | apply knowledge to new situations              | Lower  |
| Understanding | describe, explain, estimate, predict                   | understand and interpret meaning               | Lower  |
| Remembering   | recognize, list, describe, identify, retrieve, name    | memorize and recall facts                      | Lower  |

### 3. Questioning Skills of PGSD Students

The Cambridge Dictionary defines question as “a sentence or phrase used to find out information and to test a person’s knowledge of ability.” This definition might work well in out of class settings among people since they usually exchange questions to get factual information. However, classroom teachers have a great number of reasons to pose questions to the students. A variety of possible reasons for teacher pose question, as follow: to check or test understanding knowledge or skill, to get students to be active in their learning, to direct attention to the topic being learned, to provide a model for language or thinking, to find out something from students (facts, ideas, opinions), to provide weaker students with an opportunity to participate[5]. This various kinds of questions entail teacher to formulate different types of questions.

The observation have been done to nine PGSD students in the teaching practise program. The results are as follows: the description of questioning skills of PGSD students is first about basic skills of questioning skills and second is about advance skills of questioning skills are in table 2 and 3.

Table 2. The Components of Basic Skills of Questioning Skills

| No. | Components of basic skills                | lesson 1 | lesson 2 |
|-----|-------------------------------------------|----------|----------|
| 1   | Disclosure question clearly and concisely | 8        | 9        |
| 2   | Giving reference                          | 7        | 7        |
| 3   | Concentration to the requested answer     | 6        | 7        |
| 4   | Turns of answering                        | 8        | 8        |
| 5   | Spreading question                        | 7        | 8        |
| 6   | Giving time to think                      | 8        | 7        |
| 7   | Giving guidance                           | 7        | 7        |

Table 3. The Components of Advance Skills of Questioning Skills

| No. | Components of advance skills                     | lesson 1 | lesson 2 |
|-----|--------------------------------------------------|----------|----------|
| 1   | Changing the level of cognitive demand questions | 5        | 6        |
| 2   | The order of questions                           | 6        | 6        |
| 3   | Keep track of the answer                         | 7        | 5        |
| 4   | Encourage student-student interaction            | 6        | 6        |

From table 2, almost all of the questions that had been delivering by nine PGSD students stated clearly and concisely. Only two people that did not give references before posed questions. References sometimes are needed to give clue before students answer the question. The difference between giving reference and giving guidance is if students had difficulty to answer a question, teacher can guide student by deliver question in simpler sentence or give another simpler question. Focus on the open-ended question, students can produce many right answers, but if the teacher wants to border the answer so teacher need to concentration to the requested answer. Turns of answering is related with spreading question. Teacher turns from one student to another to answer the same question. But spreading question it also mean teacher can deliver question for whole students or one student. Teacher had give time to think for students before ask one student to give answer.

From table 2 and table 3, that almost all of the nine PGSD students had been exhibiting seven components of basic skills in questioning skills, but more than half of it had been exhibiting four components of advance skills of questioning skills. From this data, the acquisition of questioning skills of PGSD students is fine. Although they still need to practice their questioning skills especially in advance skills.

One of the goals of teaching is not only to evaluate learning outcomes but also to guide students on their learning process. Hence it is important that teacher questions student’s thinking and learning process. To this end, teacher could ask students to explain how they arrived at their conclusion answer and in doing so, what sort of resources they had used and whether the resources had provided sufficient evidence etc.

There are two types of questions: open and closed. Open questions are those that require more extensive responses from students. For instance, what did you do last night? On the other hand, closed questions demand limited amount of response from the respondents, and normally only one answer is required. To illustrate, where are you

from? However, yes-no questions frequently posed in classrooms have not taken much attention[5].

Going one step further it would be really engaging and motivating for the students (as well as the teacher) to have the whole class participate in a discussion, which would allow cross fertilization of ideas. This is in contrast to having a one- to- one, teacher to student question-answer session in the class. To initiate a class discussion, a good starting point would be to pose a question or make a statement that would elicit divergent responses, which could then be used to build further lines of discussions. In this case, planning the type of questions ahead of class would help to ensure that discussion is managed well within the allotted time.[6]

To plan the questions, it is not just the type of questions that is important, but also the timing, sequence and clarity of questions. Answering takes time to think and it is therefore necessary to give students sufficient waiting time before going on to modify the question or asking other students to respond. If a student is not able to answer, then it is necessary to understand if the issue is with the clarity of the question. In that case, one could rephrase the question or try to understand which aspect of the question is difficult for the student and why. If the question is too difficult for the student due to lack of prior knowledge, it may be useful to ask a more factual question to bridge the gap and help lead the student toward the solution.

In the learning process of 2013 curriculum, there are five stages: observe, questioning, gathering information, associate and communicate. Focus on questioning, in this stage students ask questions about Pinformation that they didn't understand from what they have observed. The aim of asking question is to get more information about what they have observed. It begins from factual to hypothetic question. The competences that can be developed from questioning stage are develop creativity, curousity, and critical thinking [3].

From this statement there is a relationship between questioning skills and the questioning stage of learning process in 2013 curriculum. It is

clearly stated that students will not produce factual into hypothetical questions if they never hear these questions from their teacher. Thus, teacher that can deliver good question with good questioning skills could help students in questioning stage of the learning process.

### **Conclusion**

Almost all of the nine PGSD students had been exhibiting seven components of basic skills in questioning skills, but more than half of it had been exhibiting four components of advance skills of questioning skills. From this data, the acquisition of questioning skills of PGSD students is fine. Although they still need to practice their questioning skills especially in advance skills. Teachers not only need to have a clear intent for questioning, but also learn to ask the right questions. To guide students on the learning process, it is essential to question on learning outcome (content) as well as student's thinking and learning processes.

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## DEVELOPING INTEGRATED ASSESSMENT OF ATTITUDE, SKILLS, AND COGNITIVE IN PHYSICS SENIOR HIGH SCHOOL

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### Abstract

This research was aimed to develop an integrated assessment of attitude, skills, and cognitive competency in physics objects of senior high school. The research method was research and development by Borg and Gall. The developed assessment constituted a literature review about attitude, skills and cognitive competencies. The result of interim report from this research was an integrated assessment of attitude, skills and cognitive physics competencies draft. In the next period there will be the expert judgement and assessment trial to senior high school students in South Kalimantan.

**Keywords:** *integrated assessment, attitude, skills, cognitive*

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### Introduction

Science, including physics, is a process of inquiry, research, exploration, and overall discovery. But, in the present school environment, we often heard students say that they're hated in science. The conventional lecture are felt something that was bored by students (Sutman, FX. 2008).

In order to teaching and learning physics, it can't be spared to talk about knowledge transfer, scientific attitude acceptance and skill training. The instructional of lecture that usually describe on lesson plan, can't be separated with the evaluation. We need to evaluate the process of knowledge transfer from teacher to students, or by students to another one. We need also to evaluate if the student have reached the goal of learning.

Incompliance with 2013 curriculum implemented in Indonesia, the integrated assessment of attitude, skills and cognitive competency absolutely required. Physics isn't just talking about theory and equation memorizing. It's all about how we can prove the theory or how we can get that theory. It also about how students acceptance to valuing their knowledge, and of

course that about how students skills to adopted the theory in the real world problems.

This research aim is to develop an integrated assessment of attitude, skills, and cognitive competency in physics objects of senior high school. The focus is Metric and Units Topic formative assessment for 10<sup>th</sup> grade of senior high school. This topic is the first object on physics senior high school.

### Study of Literature

From the objective view, physics is the study of light and matter. On the other hand, from the instructional view, physics is the use of the scientific method to find out the basic principles governing light and matter, and to discover the implications of those laws (Crowell, B., 2002).

Many students approach a science course with the idea that they can succeed by memorizing the formulas, so that, when a problem is assigned on the homework or an exam, they will be able to plug numbers in to the formula and get a numerical result on their calculator. That's not what learning science is about. Science is not about plugging into formulas (Crowell, B., 2002).

The process of collecting, observing, and summarizing information especially numerical data, is effective in stimulating lesson discussions and for developing the desired critical thinking skills. Students need to experience scientific conclusions based on precise observations and collected data, and that these conclusions can have greater accuracy and validity than those based on other types of evidence (Sutman, F.X., 2008).

Attitudes are characteristics of persons that describe their positive and negative feelings toward particular objects, situations, institutions, persons, or ideas. When discussing attitudes and using the results of attitude inventories, you should keep in mind the following points (mehrens& Lehmann in Nitco A.J., 2001):

- (1) A student learns attitudes, and once learn their direct or guide the students' actions.
- (2) We cannot observe a student's attitudes directly; we must infer them from the student's actions or from responses to an attitude questionnaire.
- (3) Different ways of constructing attitude scale include Thurstone, Guttman, Likert, Semantic Differential, and Item Response Theory. These methods are not interchangeable.
- (4) Because it is difficult to construct an attitude scale, we may need to look seriously into the validity and reliability of the results before we use one.
- (5) Because students can fake their responses to attitude questionnaires, we should interpret the results very cautiously.
- (6) When interpreting student's attitudes, keep in mind that they differ in both direction and intensity. Two students may hold the same positive attitude (direction), but the students may differ greatly regarding the strength of feeling (intensity) they attach to that attitude.
- (7) Students will also differ in the affective saliency or emotionality with which they hold particular attitudes. Two students may have the same positive attitude, but one may become much more emotional than the other regarding it.

The attitudes of older students and adults are changeable, but it is much easier to change the attitudes of younger students.

### **Method**

The research method is research and development by Borg and Gall. The assessment that develop are constitute of recite on literacy about attitude, skills and cognitive competencies. The steps on Borg and Gall R and D models are: (1) introduction studies (literacy studies and early survey), (2) planning the research, (3) early product developing, (4) preliminary field test, (5) revision of preliminary field test result, (6) main field test, (7) revision of main field test, (8) operational field test, (9) revision of operational field test, (10) dissemination an socialization the product result.

### **Result and Discussion**

The result of interim report from this research is an integrated assessment of attitude, skills and cognitive physics competencies draft. In the steps of Borg and Gall models, it has passing the third steps.

Introduction studies (literacy studies and early survey), it has been studied about theory of cognitive, attitude and skills in science. It also has studied about assessment and relevance researches. Early survey of research location to know the profile and possibilities if the instrument as the result of developing is applied. Research plan including formulate of research aims, estimate of funds, power and duration of research; arrange positions that have match qualification and the participation in the research. Design developing include product design determination that will developed (hypothetical design), determination of facilities and infrastructures that will required on during R and D process going on. Determine the steps of preliminary field test result and description of personal duties that involved.

Figure 1, is shown the identifying appropriate assessment task that will be developed. This not completed phase, there still a few phase in the future works.

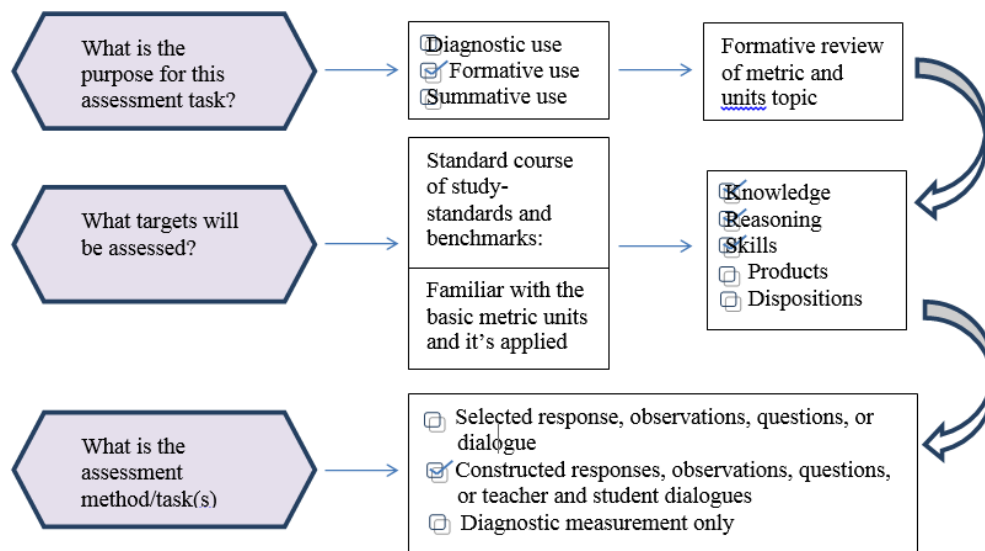


Figure 1. Identifying Appropriate Assessment Task (Butler and McMunn in Sutman, F.X., et al, 2008)

On the next periods will be conduct the experts judgement and assessment trial to senior high school students on Kalimantan Selatan. This R and D research still leaves phases are: preliminary field test, revision of preliminary field test result, main field test, revision of main field test, operational field test, revision of operational field test, dissemination an socialization the product result; that will conduct as soon as possible.

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## IMPLEMENTATION OF COLLABORATIVE LEARNING PROJECT – WORK FOR MANUFACTURE VOCATIONAL STUDENTS

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### ABSTRACT

This research has succeeded to (1) find out the required academic culture of the workforce for manufacturing vocational students, and (2) explore the learning strategies applied for institutions of vocational education-related to manufacturing development of the required academic world culture. The purpose of this study was to produce a learning model suitable for the soft skills of vocational students of manufacturing in order to build an academic culture. The research used a survey method. In the early stages, the research was conducted to find the required academic culture of the workforce for manufacturing vocational students. In the next stage, the research was aimed at exploring suitable learning strategies applied to vocational education students in manufacturing-related development of the academic culture of the world of work required. The results showed that the academic culture that needs for graduate diploma's program employees includes four issues such as discussion, reading, researching, and writing. However, the academic culture of reading and discussion was important, while researching and writing did not really matter. In this context reading SOP (Standard Operating Procedure) is closely related to the job, whereas the discussions were about discussing the efficiency of the work, discussing the work, discussing work steps/products, and discussing the case of faulty work. To develop the academic culture of learning strategies applied to vocational education students is more suitable using manufacturing strategy than Collaborative Learning Cooperative Learning.

**Keywords:** cooperative learning, academic culture, vocation, manufacturing, collaborative learning

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### Introduction

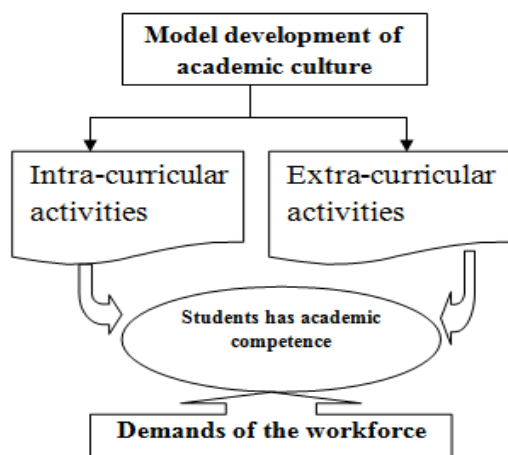
#### Background

Changing world characterized by globalization requires a competent workforce. They must have the ability to work in the field (hard skills) or technical skills and able to think logically and systematically (academic ability) to deal with change. Especially for the graduate diploma program that will plunge in the workforce. Manktelow (2009) showed not only hard skills or technical skills, academic abilities a person has a strategic role in determining a person's success in the work place. Development of technical skills aspect needs to be balanced with academic skills such as the habit of thinking rationally, do not accentuate the emotional attitude, arguing based on data and facts, respect differences of opinion, and others.

However, in fact there are many educational institutions or vocational diploma programs are not aware of its importance. Therefore, it becomes a challenge to integrate vocational education competencies both kinds of components in an integrated and balanced to be able to set up a complete human resources that have the ability to work and thrive in the future.

Academic ability will flourish when familiarized in academic culture. Many models of developing students' academic culture that can be broadly through intra- and extra-curricular activities, in example: student leadership training, outbound, seminar, etc. In addition, many ways for students to familiarize academic culture through intra-curriculum, for examples the relevant research subjects, discussion, problem solving, CLoP-Work, etc.

Understanding academic culture in this study include at least five things, namely: always think logically, reading habits, accustomed discussion, the spirit of research, and used to write. Therefore, the framework constructed in this study as shown in figure.



Frame of the development of the academic culture

Institutions of higher education, especially vocational education, which is the last formal educational institutions before individuals enter the workforce need to anticipate this. The application needs to reorient the learning set learning strategies that students can develop academic culture. The strategy should be implemented directly in the learning process in the classroom or in the lab. It is expected the vocational education institutions can develop the academic aspects of student competence. Therefore, vocational education institutions as providers of the diploma program needs to create policies that lead to habituation academic culture directly implemented in the course of practice.

From the table above it is clear that the academic culture in vocational education is an important aspect in producing graduates who have adequate academic abilities. Therefore, it is necessary to study, formulation, and implementation of integration patterns in the development of the academic culture of learning practices with a variety of strategies.

## Problems

The problems are: (1) how the formulation of the academic culture of the workforce needed for manufacturing a vocational student? and (2) how relevant learning strategies to build students' academic culture manufacturing vocation?

## Theory

### 1. Cooperative learning

In the book cooperative learning structures for teambuilding (Miguel & Kagan, (2006) cooperative learning is an approach to organizing classroom activities into academic and social learning experiences. Students must work in groups to complete the two sets of tasks collectively. Everyone succeeds when the group succeeds. Cooperative learning is an approach to organizing classroom activities into academic and social learning experiences. Learners must work in groups to complete tasks collectively. Here each person is successful if the group successfully.

Cooperative learning is dependent on small groups of learners. Although the content and the instructions given by the characterizing part of the teaching faculty, but cooperative learning carefully combining small groups so that the members can work together. Each group member is responsible to learn what is being served and helping friends' members to learn. When this cooperation takes place, the team created an atmosphere of achievement, and subsequent enhanced learning (Medsker and Holdsworth, 2001).

Cooperative learning refers to the method of teaching in which students work together in small groups to help each other in learning. Most in this case involve the learners were divided into groups of 4 (four) people who have different abilities.

The distinctive feature cooperative learning is students placed in cooperative groups and stays together in a group for some period of time. Previously these students were briefed or trained on how to work together, be a good listener, gives a good description, and how to ask questions correctly.

Cooperative learning activities can play many roles in the lesson. In particular lesson of cooperative learning can be used three (3) different purposes. For example, a group of students attempting to find something, then after a time -out college students can work as discussion groups. After that the students will have the opportunity to work together to ensure that all members of the group have mastered everything he had learned.

According to Slavin (2005) cooperative learning is learning that is done in groups. Students in the class used small groups consisting of 4 to 5 people to understand the concept facilitated by lecturers. Cooperative learning is learning by setting small groups by taking into account the diversity of the student members of the group as a forum for collaboration and problem solving through social interaction with their peers. They give each other a chance to learn something well at the same time and be a resource for other friends. So cooperative learning is a learning model that promotes collaboration among students to achieve learning goals. Cooperative learning has the following characteristics: (1) to complete the learning materials, students learn cooperatively in groups, (2) a group formed of students who have the capability of high, medium and low, (3) if the class contained students which consists of several races, tribes, cultures of different genders, it is necessary that in each group consisted of race, ethnicity, culture, different genders, and (4) the award is preferred to work on a group of individuals.

The purpose of cooperative learning are: (1) results-oriented academic learning, which is to improve student performance academic tasks. This model of learning is considered superior in helping students understand difficult concepts; (2) acceptance of diversity, namely that students receive their friends who have a variety of backgrounds; and (3) the development of social skills, which is to develop the social skills of students include: sharing tasks, actively inquire, respect other people's opinions, fishing friend to ask, want to express their ideas, and work in groups.

## 2. Collaborative learning

Cooperative and collaborative by several researchers in the field of education often means almost the same collaboration. Cooperative means involving the joint activity of two or more; done with or working with others for a common purpose or benefit. While collaborative means accomplished by collaboration, while the definition of collaboration is defined act of working jointly: "they worked either in collaboration or Independently". Therefore, collaborative learning is learning meaningful cooperation. As a collaborative learning process to realize course this is done is to familiarize students with cooperative learning.

Scharge in Herlanti (2011) says that exceed collaborative learning cooperative activity, since the collaborative partnership is not end, but a means to achieve the learning objectives. The result of the collaborative is a new discovery.

Such as cooperative learning, in Ruhcitra Jonassen (2008) states that collaborative learning can also assist students in developing the knowledge that is more meaningful when compared to individual learning. Activity in this collaborative learning indirectly conditioned the way students learn. The other thing is that the class managed collaboratively students are more motivated, have a curious nature; there is a feeling of helping others, and work more focused.

The basic concept of collaborative learning departed from the philosophy that a person needs to learn to have a partner. John Dewey in his monumental "democracy and education" illustrates that the class is an actual picture of society. Therefore, the class can serve as a laboratory for learning about real life. Principles of Dewey's thinking about education, among others, (1) in the study students should be active, learning by doing; (2) learning should be based on the motivation of the students themselves (intrinsic); (3) knowledge is something that is dynamic, not static; (4) the learning activities should be tailored to the needs and interests of the students themselves; (5) the study carried out by the principle of mutual understanding and mutual respect for one another;

and (6) learning activities should be linked to the real world.

### 3. Academic culture students

Increased academic culture among students can be done by getting a student to be creative and innovative in accordance with the character of an intellectual, for examples of students' academic culture is a culture of reading, writing, and researching, as well as various forms of other activities related to the improvement of science. In determining the merits of academic culture can be based on a system of learning in the classroom. If the learning system can spur students to work, it will create a conducive academic culture. To improve the academic culture that is conducive to familiarize the student was done with as much as possible to read and write.

Building the academic culture has become the foundation for the advancement of the campus. Due to good academic culture awakening, will impact on a variety of things. Therefore, the education system should be changed, especially in class learning to build towards a more academic culture.

Academic culture essentially covers the three things, namely:

Efforts to develop new knowledge in continual (the continuous search for new knowledge).

The effort to seek the truth continuously (continuous for the truth); and

Efforts to maintain the wealth of knowledge that has been there from the various types of fraud (the continuous defense of the body of knowledge against falsification). (Kompas, 21 April 2004).

### Five Pillars of Academic Culture

Academic culture must constantly reflect and evaluated in order to find the conducive growth. At least there are five pillars of the development of academic culture that should be reflected together. First, the culture of thinking. Think it has become part of human life. Culture think that question is to build the habit of mental and critical, reason,

reflection, and intellectual attitude of the symptom that develop in society. People who have a culture of thinking will be responsive to what he found in everyday life. He is not lazy to think. He will be very innovative and creative in his entire life. This is a kind of culture, builds demand for each student.

Second, the culture of reading. Greatest effort in the development of higher education in the future is to build a culture of reading, especially among college students. Reading should be a culture. Reading crisis is still a major problem in our society. Even for people who are often grouped as members of the academic community to live in, reading is still unfinished business. That is, interest in reading as things that should not need to be busy again when someone is at the college level even still jammed developmental studies.

Third, culture discussion. Enthusiasm seek the truth, listen to the other person's attitude, and willingness to be criticized is the basic attitude to culture discussion. Never wait until there is a large on-campus seminar to train new self expression. Seminars, symposia, and discussions are obviously only going to happen on special occasions. Cultural discussion needs to be intensive built in mini groups, either formally or informally. Discussion, questions and answers, exchange of ideas, mutual affirmation, and raw criticism in principle should be eating-drinking intellectual potential. Only then the expected growth in academic culture really materialized.

Fourth research, it is one of *tridarma perguruan tinggi*. The development of science will occur if given research attention, both field research and literature. Research is a form of social and moral responsibility towards the public intellectuals. College academic culture was just going to wake up and thrive when given a place of research.

Fifth, publications. Publication aspects also be come very significant for academics. At least the publication reflects the poor academic atmosphere in an academic institution. In contrast, the proliferation of publications showed enthusiasm for an institution to cultivate academic life.

These five points listed above form the basis of academic cultural development. Academic culture is maintained at each university institution undoubtedly become the basis of the formation of new generations of critical intellectual, creative, initiative, innovative, able to compete on a global stage.

## Methods

This study is a survey, which aims to identify the academic culture demands DUDI. The consequences of these demands will lead to the academic culture essential for the manufacturing of vocational education students.

The survey conducted on manufacturing industries located in the region of Yogyakarta, central java, and west java representative as a potential representative are a of the city/ county. Data source is the manager/leader of the company.

Data collection is divided into two parts. Quantitative data was collected using a questionnaire, containing open and closed questions. Data qualitative data were collected by using observation and interviews with managers/leaders of their respective companies.

## Results and Discussion

### 1. Data research

#### a. Academic culture of the workforce needed for manufacturing vocational students

Needs assessment done to see what are the aspects of academic culture are important manufacturing industries owned by employees graduate diploma program. Respondents were involved in needs assessment consists of 14 managers/corporate leaders from 10 companies in Yogyakarta, central java, and west java. Table 1. List of companies' research sites

| No. | Companies' Name                     |
|-----|-------------------------------------|
| 1   | Industri Karoseri Agustus, Magelang |
| 2   | Industri Karoseri Avena, Magelang   |
| 3   | PT Tjokro Bersaudara, Solo          |
| 4   | Koperasi Batur Jaya, Klaten         |
| 5   | PT Mekar Armada Jaya, Magelang      |
| 6   | KING Manufacture, Solo              |
| 7   | PT Indonesia Power UBP, Cilacap     |
| 8   | CV KHS Yogyakarta                   |
| 9   | PT Tripatra Yogyakarta              |
| 10  | PT Bukaka Teknik Utama Bogor        |

The survey results obtained will be categorized into 3 categories namely essential if score  $\geq 3.50$ ; less important category of  $\geq 3.003.49$ ; and the categories are not important  $< 3.0$ . After the data is analyzed by giving a weighting to the point answers, can be obtained scores on each aspect and facet indicators shown in the table below:

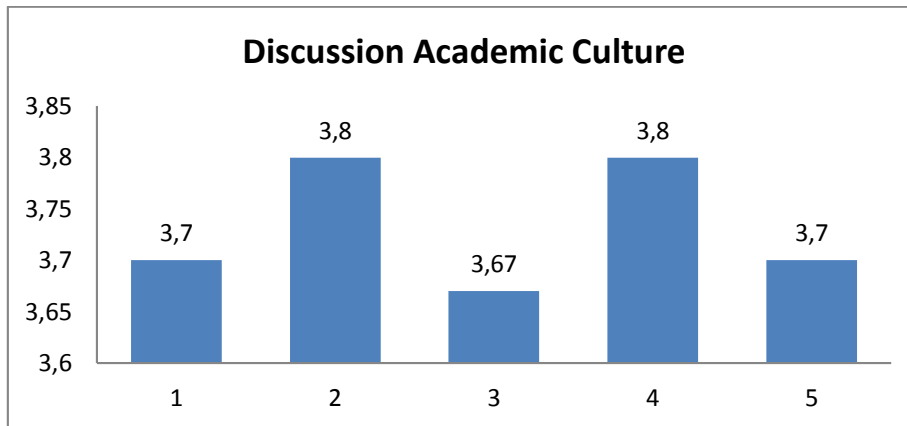
Table 2. Mean score category ranking academic culture is important for graduates of the diploma programmed

| No. | Academic Culture | Score |
|-----|------------------|-------|
| 1   | Discussion       | 3,73  |
| 2   | Research         | 3,45  |
| 3   | Read             | 3,36  |
| 4   | Publication      | 3,04  |

From the table above it can be seen that the average discussion to be one of the importance academic culture applied in industry and publications become less important applied. To see a more detailed level of importance of each aspect of academic culture, the following are the explanations.



## Discussion

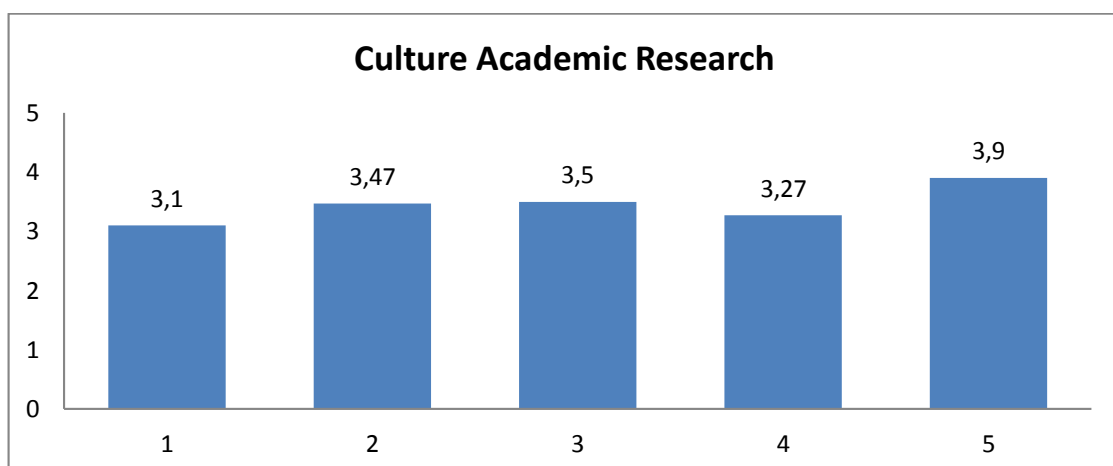


Information:

1. Step Work/WorkPreparation
2. Work Efficiency
3. Effectiveness of The Work
4. Product
5. The Case offaulty Work

In a discussion of academic culture, all aspects tend to have similar levels of interest. This fact suggests that the discussion is that culture is important applied for diploma graduates in the industry.

## Research



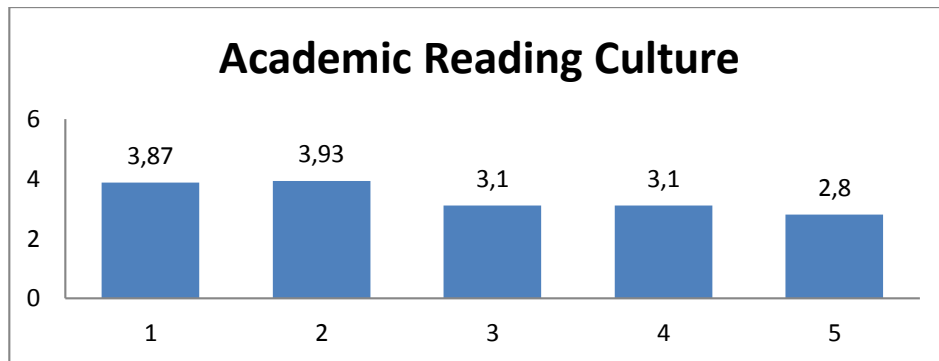
Information:

1. Analysis offuturemarket needs
2. Trial ofthe effectivenessandefficiency of work
3. The calculation ofthe effectiveness ofthe use oftools
4. Trialresultsproduct

## 5. Evaluate the work

From the academic research culture there are two aspects that are considered important in the

calculation of the effectiveness of the use of the tool and evaluation work.

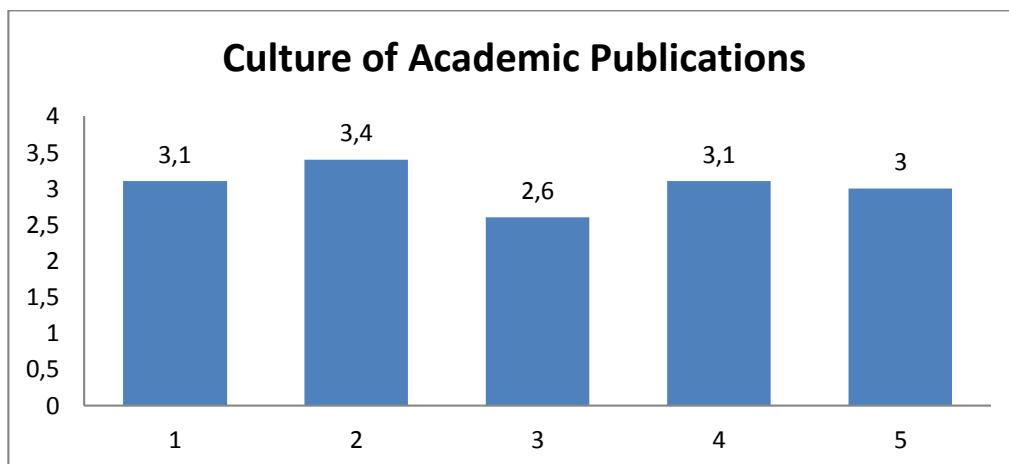


Information:

1. SOP(Standard Operating Procedure)
2. Work instructions/job sheet
3. Law/Regulation labor/workplace
4. The development of science and technology
5. Issue world of work today

It can be seen that in the academic culture of reading instruction reading put the work/ job sheets and sops be the most important aspect of the issue while reading today's world to be the lowest.

### 1) Publication



Information:

1. Writing manual work
2. Create reports written employment
3. Creating a website
4. Arrange the results of the product catalog
5. Perform in working seminars/workshops

From the data obtained virtually all aspects of the publications in the category of less important and unimportant applied in the industrial world.

b. Advice and opinions manager / head of the company

To complement the information obtained through questionnaires, researchers conducted interviews with respondents to see the extent to which the importance of the application of the academic culture in graduate diploma program. Here are the results:

Table3. The level of importance of the academic culture in the workplace

| Academic Culture Type | Score |
|-----------------------|-------|
| Reading               | 3,20  |
| Publication           | 3,13  |
| Discussion            | 3,06  |
| Research              | 2,33  |

C

The significance of the above data, the company's leaders argue that the diploma programs graduates are still working in the industry were asked to continue reading activities, publications, and discussions. While researching activities are not so necessary in the industrialized world. In addition, the leadership of the company to provide input learning activities on campus that are assignment review or update the latest information needs to be propagated.

In addition, from interviews with industry leaders agree that learning strategies should be applied to the manufacturing of vocational education institutions related to the development of the academic culture that takes the world of work more appropriate to use the collaborative learning strategy, not cooperative learning.

These similarities and differences between the collaborative learning cooperative learning can be shown in tables below.

Table4. Similarities and differences between the cooperative learning with collaborative learning

|              | Cooperative Learning                                                      | Collaborative Learning                                             |
|--------------|---------------------------------------------------------------------------|--------------------------------------------------------------------|
| Similarities | Group Work                                                                | Group Work                                                         |
|              | Discussion                                                                | Discussion                                                         |
| Differences  | Group Leader                                                              | No Group Leader                                                    |
|              | Ranking members of group                                                  | No ranking members of group                                        |
|              | Looking for a deal                                                        | Not looking for a deal                                             |
|              | Groups' result                                                            | Individual result                                                  |
|              | For those who already understand, explain to those who do not understand. | For those who do not understand, ask those who already understand. |
|              | Cooperation into learning objectives.                                     | Cooperation becomes a means of learning                            |

## Discussion

Based on the above data it can be seen that the academic culture is still required in the workplace. Workforce applying academic culture in the work environment looks better quality of work. The habit of reading, publication, discussion, and research that characterize an academic-including students-diploma program, became concerned in the capital for the potential increase in personal on the job.

Reading that is a positive culture that can directly improve the experience, understanding, knowledge and understanding the instructions that are important to workers as same as discussions of culture. This culture is a practical attempt to solve the existing problems together in order to look for the best solution. While researching culture is an activity that can be done to solve a problem that is not known or the innovative efforts that can be done through scientific principles.

The tip of it is the publication of academic culture. General publication is an attempt to show something to others. Form of publication in the workplace can be a report, catalog, website or performed directly in the forum to explain something to someone else. Fourth academic culture at the top in the world of work is very important to be applied in the production process. It is given that labor orientation focused on the production of goods or services.

The results showed that the culture aspects of academic reading puts two important aspects applied to the graduate diploma program that is read work instructions and read the SOP (Standard Operating Procedure). When viewed from the goal, the two aspects of the same which has a goal to read a step or work procedures, so that workers can perform the work in accordance with appropriate procedures. Read work instructions and SOPs are considered most important for a worker graduate Diploma Program, because the reading aspect is directly related to the work process to be performed. Read work an instruction is very important because there are clearly written in a coherent step work to be done, the equipment should be used, as well as the calculation of the estimated time in progress. While SOP here, contains standard of work to be done or complied with at work, such as the standard operation of the machine, safety and health standards.

Discussions as almost all of them fall into the category of important applied to graduates of the Diploma Program, for example, discusses the work efficiency, discuss the effectiveness of work discussing the work, discussion of work steps, as well as discuss the cases faulty work. Discussing the work efficiency, for example, discuss the workers to get maximum results with the use of the least possible cost and effort. While, discussing the effectiveness of the work is discussing work together to accomplish goals in a way appropriate. Another aspect of the discussion is to discuss the work we usually know or work evaluation. This is very important because with the evaluation of this work will be known shortcomings and work to do the next step.

Discussing job step is also important that should be familiarized by the workers. Discussion unusual step of this work can be done before starting work each day. The workers work today knowing the target, the appropriate action steps, team coordination, and can be a medium to provide important information by the leadership. The last important aspect of the discussion is applied to discuss the case of faulty work or case studies. By discussing this sort of thing can be a reference if no errors are present, which in turn immediately acquired the right solution. When viewed from above aspects can be concluded that the discussion is a means of communication and consultation with employees or leaders to reach consensus or find solutions together.

In the aspect of researching the academic culture, there are two important things that is applied to evaluate the effectiveness of the work and calculate the use of tools. Evaluation of the work in question here is do some research to see the product or performance of a worker that can be mapped in detail the work that has been done. The effectiveness of the use of an important tool applied to ensure optimal use of the tool. Tools to support production activities should be planned effectively as possible with the aim to adapt the work targets and increase the lifespan of the tool.

Looking at the above explanation, writing or publication of academic culture is considered not important by DUDI. This has become our thinking along considering the actual publication of an important culture that can be applied. Publication may be the most appropriate medium for promotion of products such as via the website or product catalog. Publications as well as a means to deliver work reports the results through seminars and workshops as well as a written report. Steps that could be done was to get publicity activities to work activities such as workshops, requiring a report of work, an active website as a means of providing information or discussions and conducted seminars on a regular basis.

Further results of the survey conducted by the opinion of the leadership DUDI accommodate three academic cultures that should be applied is critical

reading, discussion and publication. Researching used as academic culture is considered not important by labor diploma. This is different from the results of a survey that has been done previously that puts research on an important position but here will be detailed explanations.

Aspects of academic culture are considered less important than twice the survey results is the research and publications. Research and publication is very rarely done by a workforce in the field. This is because these two activities is not directly related to their work activities. We know diploma usually plays as operator, foreman or leader is automatically time and their activities devoted to the work done.

Sometimes certain companies do not allow a worker to explore fields other than field work. So the land for labor diploma in this aspect is very narrow. Efforts should be made to familiarize the research and publication of this culture is getting used to the narrow realm of field work ie research work done, daily reports, monthly reports or statements of work each finished product manufacturing and others and reported in such a small group workshops to colleagues each other can share. Further processes that can be done is to implement and participate in the company's internal seminars both a participant and presenter. It is expected that with a lot of activities concerned with the academic culture may evolve slowly and can become work habits.

### **Conclusion and Recommendations**

Based on the research and analysis conducted can be concluded: (1) an important aspect of academic culture applied to the Graduate Diploma Program who works in DUDI sequence is read SOP (Standard Operating Procedure) and work instructions, evaluate the work, discusses the efficiency of work, discuss work, discussion of work steps / products, discusses the case of faulty work, calculate the effectiveness of the work, and to calculate the effectiveness of the use of tools. (2) learning strategies should be applied to the manufacturing of vocational education institutions related to the development of the academic culture

of the working world needs is more suitable than the Collaborative Learning Cooperative Learning.

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## IMPLEMENTATION OF DEMONSTRATION METHOD OF IMPROVING SKILLS OF BATIK IN CLASS VII JUNIOR HIGH SCHOOL STATE 2 GEDANGSARI GUNUNGKIDUL

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### Abstract

The purpose of this research was to improve the students' skills in making batik and achievement in the arts subject in SMP Negeri 2 Gedang Sari, Gunung Kidul by using demonstration method. This is a Classroom Action Research using Kemis & Taggart model. This research was conducted in the 2nd semester in class 7C. In the first cycle, the students looked confused with the method. However, their skills improved based on the qualitative analysis. Besides, the achievement also increased (70.8%, previously 42.4%, students could pass the passing grade). Then, in the 2nd cycle, the students looked familiar with the demonstration method, and the skills increased. In this cycle, all students could pass the passing grade. It means the teacher did not conduct the 3rd cycle. The result showed that the demonstration method could increase the skills in making batik and the achievement in the arts subject.

**Keywords:** *demonstration, skills of making batik, achievement*

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### Preliminary

The quality of human development efforts that are ready to face the challenges of life through education begins as early as possible. Given, among other educational activities through a number of subjects which are intended to provide meaningful and varies learning experiences for students and, therefore, subject skills should be given to the students at the junior high school level.

The quality of education, as one of the pillars of human resource development is meaningful, it is essential for national development. It can even be said to be the future of the nation depends on the existence of a quality education that takes place in the present. The quality education will only emerge from a quality of the school. Therefore, the efforts to improve the quality of the school are the central point of the effort to create a quality education for the creation of qualified labor as well. In other words, improving the quality of schools is an act that never stopped, anytime, anywhere and in any condition.

"The subjects were directed skills so that learners can develop life skills (life skills) that

include personal social skills and academic prafocasional. Emphasis is adjusted by considering the types of skills and interests of learners and potential talents of local, cultural environment, economy conditions and the local needs. (Permendiknas NO 41 2007)"

Professional Orientation skill learning is facilitated intellectual emotional experience, perception, social, aesthetic, artistic, and creative learners to enter into the appreciation and creation activities of the air like the product. This activity starts from identifying potential around the students to be converted into useful products for human life. Lessons are designed systematic through stages imitate, modify, and change the functionality of existing products towards more useful product.

Subjects aimed prevocational skills so that learners would have the following capabilities:

1). Able to develop the knowledge and skills to make a variety of craft products and product of technology that are useful for human life. 2). Having a sense of aesthetics, appreciation of craft products, technology products, in various parts of the

archipelago and in the world. 3). Able to identify potential local area that can be developed through the use of technology and a simple craft. 4). Having a professional and entrepreneurial nature

## Method

This research was conducted in class VII C Junior High School 2 Gedangsari Gunungkidul. The majority of students (75%) came from underprivileged families. Each class is populated by an average of 35 students. All students are admitted without selection. Generally, they come from a mountainous area with an average distance of 6 km from the school. The trip to school; they usually travel by foot.

This study uses a model of Classroom Action Research (CAR). The study took place in two cycles, and each cycle performed at three meetings and in these three meetings are to be used for evaluation. Each cycle consists of the following steps: (1) planning, (2) implementation, (3) observation of learning and its impact, and (4) reflection on the learning that has been done.

In the first cycle, the steps performed learning researchers are as follows: (1) The teacher gives a picture of batik work, (2) teachers with students observing the work of translating the batik, (3) the teachers with students making batik models, (4) students were given a worksheet form of practical assignments, (5) together with the group, students create works of batik, (6) each group is to demonstrate and present their work in front of the class and responded too by other groups, (7) the students' work displayed in the classroom as a learning resource.

The steps in the second cycle broadly the same as the steps in the cycle one. It distinguishes only in step 4, where if in the worksheet on the cycle I was not given the work of batik; then in the second cycle

Table 1. Value Test on Cycle One

| Meeting to | The number of students who answered correctly at least | The number of students Correct answer is at least 80% of the given problem | Criteria Success Indicator                                                                          | Conclusion               |
|------------|--------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------|
| 1          | 12                                                     | 29%                                                                        | 70% of students were able to make it right at least 70% of the batik skill practice questions given | Have not been successful |
| 2          | 9                                                      | 22%                                                                        |                                                                                                     | Successful               |

was given the works and techniques of making batik. In addition, the worksheets in the first cycle does not require the students to describe the skills of batik, while in the second cycle students are required to describe and to write it.

In this study, indicators of success guiding action are the skill of the students of making batik. Follow-learning is considered to have succeeded if "at least 80% of students were able to perform correctly at least 60% of the work of batik practices implemented at each meeting". If not, learning is considered failed, and needs to be fixed in the next cycle. In connection with such success indicators, the data collected in this study is the data about students' skills in making batik works.

Archives were collected by means of worksheets giving practice tests ordered students making batik with the new models. This study aimed to describe the learning that can improve the skills of batik, then, in addition to the value of the skill as a new model of batik, other values collected are: (1) the value of the learning that teachers implemented, and (2) the value of the response of students towards learning. Value of follow-learning teacher collected through observation by members of the researcher, values obtained from the responses of students writing student reflection, as well as interviews with the student researchers. All values are considered for analysis and reflection are used to determine the changes necessary action learning.

## Results and Discussion

Here are presented the data from each cycle and discussion.

### Cycle I

Value of the test results can be presented at a meeting in the table 1 below:



Based on Table 1 it appears that in general students have not been able to make batik. This means follow-learning in the first cycle needs to be addressed.

Researchers further analysis and reflection

In the meeting I identified that during the first cycle pelaksanaan a few things: (1) the teacher does not give instruction to students who are less obvious and difficult for students to understand, (2) less teacher guidance given in stages, which is individually optimal, (3) the teacher talks too fast, (4) Worksheet not given any examples or information, and (5) the legibility of command are not clear.

Based on the analysis results of the first cycle, it was decided that the second cycle of researchers

Table 2. Value Test on Cycle Two

| Meeting to | The number of students who answered correctly at least | The number of students Correct answer is at least 80% of the given problem | Criteria Success Indicator                                                                          | Conclusion |
|------------|--------------------------------------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------|
| 1          | 30                                                     | 90%                                                                        | 85% of students were able to make it right at least 70% of the batik skill practice questions given | Successful |
| 2          | 0                                                      | 100%                                                                       |                                                                                                     | Successful |

Based on the above, it appears that the second cycle test results, obtained 90% of students were able to perform the skills of batik practices. This study shows that indicators of success have been achieved, but the researchers did not take hasty conclusions.

Researchers wanted to know whether these results are quite consistent. Accordingly, the researchers went a second meeting. Here the researchers decided that the act of learning has worked well, and the next cycle is not needed anymore because it reaches 100%. This study suggests that giving students the chance to translate images that help them to have the ability to practice their batik skills well. Ravianto (1985:30), that the work is satisfactory depends on the abilities and skills as well as mastery of work, knowledge, and skills of carrying out the work.

doing improvements include: (1) students are required to make an explanation in the Worksheet, (2) a teacher to observe the process of making batik and wait for students to complete, (3) Worksheet informed or guided examples, (4) the teacher guiding the way to visit all the groups and provide referral question, (5) if the student makes the first cycle in groups, on the second cycle repaired so students made individually in advance, then the results are discussed with the group, and (6) if the previous work was presented in front of the class, then at this meeting made visits to other groups and each comment.

#### Cycle II

Value of the test results can be presented at the meeting of the two in table 2 below:

Another important point that emerges from this research is "he wrote in the work sheet contains some information and a complete sample turned out to help to improve students' skills in making batik." This is in line with the opinion Supriyanto (2006) which states that the "Worksheet equipped with information", and can improve student comprehension by 30%.

Associated with requesting students to the first observe an individual basis, according to the opinion of this researcher, it will provide the opportunity for students to try to understand. This experiment can succeed but can also fail. However, the experiment itself has provided the opportunity for students to cultivate its cognitive structure. Scheme in the cognitive structure may be richer and more connected. By doing so, students are prepared to discuss with the group friends, and gain a better understanding.

If noted, the increase in the percentage of students who practice correctly at least 60% of a given task really is not too high. One factor that may occur is the amount of duty on 2 more meetings while the same allocated time.

In addition, there are other factors to consider. Lester & Kehle (2003) stated that "a good problem solvers, in order to transform one representation to another representation, always coordinate the experience and knowledge they have, which are well known representation, inference patterns, and their intuition". It seems that the patterns of inference and the use of intuition student still need to be improved. This is in line with the findings Romadhina (2007), which states that, the ability to reason and communicate students is 'ability to contribute to the students' problem-solving abilities.

#### Conclusions and Recommendations

Syntax Demonstration of learning in order to help students to be able to increase the learning skills of batik practices are as follows: (1) teacher gives examples of batik, (2) teachers with the students' examples of batik translate into practice, (3) teachers with the students making batik models, (4) students were given a worksheet in the form of jobs done, (5) together with the group, students are practicing to make batik, (6) demonstrate each group to present their work in front of the class and responded too, by other groups, (7) the students' work displayed in the classroom as a learning resource. Based on the analysis and discussion, so that the learning is successful, then in step (4), Worksheet in the student also must be available on making batik examples. Before the students in groups starting to practice individually, they have to make batik patterns, and discussed it in the group.

Results conclusions that we can take, if the teacher found the students who have difficulty in their skill abilities of batik practices, researchers suggested that the learning model that has been tried out is doing research.

In order to obtain the results that are more established, given in this study, which covered only the basic competency skills related to the practice of batik; researchers suggested that other co-

investigators examined the application of this learning design to another basic competence.

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## IMPLEMENTATION OF GROUP INVESTIGATION METHOD TO INCREASE 7TH GRADE STUDENTS' ACHIEVEMENT AND LIVELINESS IN THE SOCIAL SUBJECTS IN SMP NEGERI 2 GEDANG SARI GUNUNG KIDUL

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### Abstract

This research was aimed at increasing the 7th grade students' achievement and liveliness in SMP Negeri 2 Gedang Sari, Gunung Kidul by using group investigation method. This research was a classroom action research (Kemmis & McTaggart model). The research was conducted in the 2nd semester of 2013/2014. Each cycle consisted of 3 meetings (2 meetings for teaching and learning, and 1 meeting for evaluating). The result of this research showed that in the end of the 1st cycle, the students' achievement increased. The scores of 58.8% students were above the passing grade. This improvement got higher at the end of 2nd cycle (the scores of 100% students were above the passing grade). Besides, the students' liveliness also increased cycle by cycle at the qualitative reflection. Based on this finding, the group Investigation method could improve the student's achievement in the social subjects and their liveliness.

**Key words:** *Group Investigation, Achievement, Liveliness*

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### Introduction

The problem faced by a teacher is "What is the acceptable and correct way of teaching that answers to students in their learning?" Teaching is a craft with an artist element. The way to practice and motivate students in learning social sciences that comprise geography, sociology, history and economics is a question of which the answer lies within a research seen from teacher-students interaction.

Teacher as an educator is under a complex obligation that extends beyond mere teaching. There are other duties and responsibilities immediately attached to teaching profession. One of those is establishing learning or teaching-learning process. Learning is oftentimes differentiated from teaching.

According to Article 1 point 20 of Act Number 20 Year 2003 on national education system, learning is defined as an interaction process between student and educator and educating sources within an educative environment. The definition clearly requests interactive (reciprocal) element between

student and educator. Thus the exact learning method is innovative learning method.

There are various learning method proposed by different thinkers, so it is becoming of a teacher to delve into those methods. The appropriate selection of a learning method absolutely affects the outcome of social sciences learning.

Even though the learning directives are already outlined in a syllabus and teachers may have already prepared their teaching materials, students are still likely to fail understanding the materials. The possible causes are lack in enthusiasm, disorientation to the purposes of learning, and passivity and indifference to the learning materials. The answers for students under those conditions are varying learning strategy and reward model to revive students' motivation. In teaching social sciences using intuition, experience and evaluation are guidance in choosing teaching method and learning each student's character or the class.

The use of the common speech method in learning goes against students' potential development and may result in students' responsiveness/proactivity in the learning process.

The negative impacts of the speech method applied by teachers in SMP N 2 Gedangsari can be summed up as follows:

1. Process impact

Teaching-learning process is not proceeding in the desired course as there are students that drowse, talking between themselves, drawing or fiddling with their pen.

2. Result impact

Most students do not understand the learning materials resulting in unsatisfactory grades.

As we can see from the above, it is obvious that problems-loaded commonly used speech method is in need for a change. A change that needs to be based on students' characteristics and heavily-loaded social sciences subjects (comprising geography, history, economics and sociology). It is Group Investigation that is found appropriate based on analysis from available methods.

Based on the problems explicated above, this research tried to implement cooperative learning strategy of Group Investigation type on class VII E of SMP Negeri 2 Gedangsari to improve students' achievement.

## **Method**

This research is conducted in class VII E SMP Negeri 2 Gedangsari Gunungkidul involving nine male students and eleven female students, totaling in twenty students. The consented subject in this research is social science of basic material Economic Activity in Indonesia and Its Agents in Indonesian Economic System.

The activities involved within planning stage are: preparing learning plan comprising scenario, allocation, and problems for quizzes; preparing observation sheet to assess teaching-learning during class with Group Investigation model.

This research employs cycles, with each cycle comprising planning, action, observation and reflection stages. Whenever cycle I ends, it was followed by cycle II. Cycle II is the perfection of cycle

I where shortcomings of cycle I are fixed. The advantages of cycle I are retained. The stages involved in cycle II are also planning, action, observation and reflection. The method for data collection in this research are: documentation, observation, test and poll. The pre-research instruments are syllabus, RPP, observation sheet, and quizz sheet.

The activities involved within planning stage are: preparing learning plan comprising scenario, allocation, and problems for quizzes; preparing observation sheet to assess teaching-learning during class with Group Investigation model.

During class activity, the researcher and teacher collaborate to observe classroom action. The objects of observation are as follows: implementation of the already planned learning strategy, agreement between time of presentation and the implemented learning method, proactivity and earnestness of students during class, students achievement as represented by grades of cycle I and II.

Data are collected by tests. As this research is considered to describe learning action that may improve batik skills, thus besides skills in creating new batik models, other data collected within this research are: (1) data on teacher's learning action, and (2) students' responsiveness to learning materials. Data on teacher's learning action are collected through observation by the researcher's supportive members, whereas data on students' responsiveness are collected through students' reflective writings and interviews. All of this data are considered for analysis and reflection, and define the necessary changes in learning activities.

The data analysis are as follows: 1) Quantitative data analysis to assess success score in improving students' learning activity using Group Investigation. 2) Qualitative data analysis to learn students' activities towards economics subject with market as its basic material, after the implementation of Group Investigation. The teacher's and students' observation sheet in this research are used to monitor activities during class. The scores in this research range from 1 to 4. Therefore, if there are

ten aspects to be covered, then the maximum score is 40 and the minimum is 10.

### Results and discussion

The observation result for students' activities of cycle I from the six observable indicators shows that the indicator is not yet reached because the average is below 70%. This observation also shows that several students become proactive in discussion and shows willingness to collaborate. Observation from cycle II shows improvement in students' activity achievement compared to cycle I. The average for cycle II is 70%. Students that lack in activity and depend on their more able friends become more active in cycle II. The more able students can tap into this learning through discussion with their teammates.

The frequency distribution of students' activity in cycle I on frequency indicator of average 18.5 is 47.04%; meanwhile on cycle II the frequency indicator of average 26.2 is 74.7%. It means that the distribution of frequency of students' activity has improved 7.7 or 27.66%.

Observation on teacher's activity on cycle I still shows some aspects that need to be fixed: (1) the disability of the teacher to relate between the past and at hand learning activities that result in students' inability to answer questions during a perception; (2) this disability results in students' difficulties in understanding learning materials; (3) teacher's disability to correlate the materials to reality; (4) the unattractiveness of learning activity resulting in students' lack of enthusiasm in learning process. As the teacher's performance has improved in cycle II and shows no shortcomings, so the research is ended by cycle II.

The distribution for teacher's performance on samples of cycle I and II is 10. The highest score in cycle I and II is 3 respectively, and the lowest score for cycle I is 2 and cycle II is 3. The average for cycle I is 1.6 and cycle II is 3; the range for cycle I is 1 and cycle II is 0; standard deviation for cycle I is 0.51 and cycle II is 0; the median for cycle I is 2 and cycle II is 3; meanwhile the modus for cycle I is 2 and cycle II is 3.

The data for each cycle are presented below.

#### Cycle I

The data for tests of first and second meetings are presented in Table 1 as follows:

Table 1. First Cycle Score

| NO | PASS | COMPLETION | NUM  | %   |
|----|------|------------|------|-----|
| 1  | >70  | Complete   | 15   | 47% |
| 2  | <70  | Incomplete | 18   | 53% |
|    |      | Average    | 64,6 |     |
|    |      | Max        | 85   |     |
|    |      | Min        | 55   |     |

From the individual final score for cycle I of thirty three students, we found that there are 18 or 53%, that have not yet reached completion with average score 74.6. The KKM applied in SMP N 2 Gedangsari Gunungkidul is 70, so the classical completion is not yet reached.

The analysis of cycle I based on learning completion data shows percentage below 70%; the average for learning completion for social sciences of class VII E is 47%, meanwhile the improvement from pre-cycle to cycle I is 19.99%. The analysis of cycle I suggests reexplaining of students' proactivity in learning. The learning completion on cycle II is 75%. The average for learning completion is 83.58%, meanwhile the improvement for social sciences learning from cycle I to cycle II is 38.84%.

#### Cycle II

The data for tests of first and second meetings are presented in Table 2 as follows:

Tabel 2. Second Cycle Score

| NO | PASS | COMPLETION | NUM   | %    |
|----|------|------------|-------|------|
| 1  | >70  | Complete   | 33    | 100% |
| 2  | <70  | Incomplete | 0     | 0%   |
|    |      | Average    | 83.18 |      |
|    |      | Max        | 95    |      |
|    |      | Min        | 70    |      |

We can see from Table 2 on learning result of cycle II, the number of students that complete their learning activity is 33 students out of 33 students

with average score 83.18 and 100% percentage. This result shows improvement from cycle I of 47.8%, that means the learning outcome of social sciences learning has reached the applied success criteria.

### **Discussion**

The observation from the researcher shows that the implementation of cooperative learning model of Group Investigation type in learning activity may give a better result even though there are activity units that have not improved significantly and remains in sufficient category such as students' initiative to ask for help from their teacher in solving problems from assignment sheet, but there is initiative to help out their classmates in solving the problems.

According to data on cycle II actions, material completion and observations, this research is ended on cycle II action. The success indicator has been reached at minimum 80% that means actions have agreed to learning scenario.

Descriptive analysis on students' activities in each cycle shows that implementation of Group Investigation may improve students' learning activity that means the learning method in this research is student-centred learning, where teacher's role within this kind of learning is merely mediator.

Descriptive analysis on average students' activities and students' achievements on cycle II shows high activity in students' activity in learning and shows significant improvement from cycle I to cycle II, and high students learning achievement that fulfills minimum learning completion standard individually and classically as requested by curriculum. Classroom action research on class VII E of SMP Negeri 2 Gedangsari Gunungkidul is considered completed on cycle II.

The results of this research are supported by Winkel (1996:162) that states "learning achievement is a proof of a student's success or ability in his learning activities according to his

acquired capacity." As shown by KKM-fulfilled score of 75 in this research.

### **Conclusion and suggestion**

We can draw conclusion from the above results: implementation of Group Investigation in social sciences learning may improve students learning activity as represented by students of class VII E SMP Negeri 2 Gedangsari Gunungkidul. The students show earnestness and proactivity in learning activity. Students' activity pre-implementation is 30% or 15 students, and shows gradual improvement through post-implementation of cycle I to 70% or 18 students and post-implementation of cycle II to 65% or 15 students.

The implementation of Group Investigation on economics subject of class VII E SMP Negeri 2 Gedangsari Gunungkidul may improve results in social sciences learning, as shown by completion percentage of KKM during pre-implementation of cycle I 70% or 13 students, improving within post-implementation of cycle I 47% or 15 students, and 33 students or 100% after cycle II and evaluation.

From the above conclusion, I propose some suggestions as follows: the improvement in students learning activity after the implementation of Group Investigation expects the students to be more responsible with the presented materials of social sciences subjects either individually or mutually. The improvement in learning activities after implementation of cooperative learning model also requires teachers, especially social sciences teachers, to sustainably develop and implement learning models that answer to students' characteristics and school environment to ensure maximum desirable outcome. The improvement shown in this research expects the school stakeholders especially school principals to support and facilitate future classroom action researches conducted by teachers, that may result in teachers' improved performance.

Furthermore, teachers may study, develop and implement various strategies, methods and learning models if undesirable outcome in social sciences learning may exist.

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## IMPROVING 7TH GRADE STUDENTS' LEARNING OUTCOMES OF SOCIAL SUBJECTS AND SPEAKING SKILLS BY USING JIGSAW IN SMP NEGERI 2 GEDANG SARI, GUNUNG KIDUL

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### Abstract

The purpose of this research was to improve 7th grade students' learning outcomes of social subjects and speaking skills by using jigsaw in SMP Negeri 2 Gedang Sari, Gunung Kidul. The research was conducted based on the bad learning outcomes of students (only 20% of students with the scores above the passing grade) and their weak skills of speaking. This research was Classroom Action Research using Kemis & Taggart Model (consisting of planning, actuating and observing, evaluating, and reflecting), and was conducted in the 2nd semester of 2013/2014. In the 1st meeting of the 1st cycle, the students look confused with jigsaw, but in the 2nd meeting and the next, they became more familiar with jigsaw. At the end of the 1st cycle, 50% of students could pass the passing grade. Finally, 100% students could pass the passing grade at the end of the 2nd cycle. Besides, based on the qualitative observation and analysis in this research the students' speaking skill always improved. According to the findings, it can be concluded that jigsaw improved the 7th grade students' learning outcomes of social subjects and speaking skills in SMP Negeri 2 Gedang Sari, Gunung Kidul.

**Keywords:** *jigsaw, learning outcomes, speaking skills, social subjects*

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### Preliminary

The delivery of the material that teachers submitted with the conventional methods is making students less active in the learning activities. This type of learning makes students become passive because most of the activity is dominated by conventional teacher. To that issue, it is needed to solve to improve the learning activity of the students. In fact, many are still learning to use the lecture method. With the lecture method usually arises as a problem: students crowded, lack of concentration, drowsiness, excited not to follow the lessons. Apparently, it is needed a paradigm shift in student learning and interaction between the students and the teachers. Supposed, the teaching and the learning activities should also be considered the students.

Activity is very important in the learning process and it is a measure of the success of the learning process. This concurs with Sardiman (2010:96), which states "principle or the principle activity is very important in the teaching-learning interaction because there is no learning if there is no activity, because the principle of learning is done or doing

something". Therefore, the student is required to perform the activity because it will be a learning experience that the students gained through the learning activities.

Similarly, the study of Social Studies, the student is required to perform the activities of both physical activity, mental and emotional because the Social Studies is a lesson that examines a set of events, facts, concepts and generalizations related to social issues (National Education Standards Agency 2006: 575). However, in the Social Studies learning activity is not enough, the students are expected to enhance the learning activity.

In fact, it is often found in learning of Social Studies, teachers are using the method where the teacher talks as the central role and the source of information that caused the students' learning activity does not appear. Students just sit down, on silent, and listen to what the teacher presented. This leads to a boring learning atmosphere. While learning, the activity of students is very important. Without the activity, the students have no interest in learning to learn the material and eventually can

not understand, and student learning goals will not be achieved.

Based on the observations by researchers on Thursday in January 2014 against class VII A SMP N 2 Gedangsari Gunugkidul, obtained the following information: (1) Students who perform physical activity by 60.72%. (2) Students who do the mental activity of 26.67%. (3) Students who perform emotional activity of 53.97%. From the observations made by the researchers, it is found that in the Social Studies subject, the students are less active in the learning: while the study is very necessary to make the students active. This marked disparity. To address disparities researchers used a model of the Jigsaw cooperative learning activities for Social Studies. Jigsaw cooperative models provide many opportunities for students to process information, gain knowledge, and enhance communication skills. From the above descriptions, the researcher intends to conduct research on "Improving the Social Studies Learning Activity Using Type of Jigsaw Cooperative Model In the Seventh Grade Students of SMP Negeri 2 Gedangsari Gunugkidul". The use of Jigsaw cooperative models are expected to provide the solutions to overcome the low activity of the Social Studies learning in class VII A SMPN 2 Gedangsari Gunugkidul.

The purpose of this study is (1) To increase the physical activity of students in their learning by using the Social Studies Jigsaw cooperative models in class VII A SMP Negeri 2 Gedangsari Gunugkidul. (2) To improve the students' mental activity in the teaching of Social Studies using the Jigsaw cooperative model in class VII A SMPN 2 Gedangsari Gunugkidul. (3) To increase the emotional activity of the students in their learning by using the Social Studies Jigsaw cooperative models in a class VII A SMP Negeri 2 Gedangsari Gunugkidul.

In the learning process, the activity has an important role. With the students who are active in the learning, it will lead to a high interaction between teachers and students and between students and other students. In the absence of activity, learning becomes boring. Students will be interested even less like a lesson learned. This of course affects the learning objectives to be

achieved. By performing various activities in the learning activities students are expected to build their own knowledge with the help of a teacher.

The participation of the student in the learning activities will determine whether students will be actively involved in the learning process or to be passive and not caring. Of course the two different conditions will produce different learning objectives. Action is the subject of the performance indicators that can not be separated in the data collection or data collection process because of the performance indicators are used as a presentation series from any action or activity in the classroom for the learning in several meetings. Therefore, it will obtain some results that are needed.

Performance indicators to measure students' learning activities using the Jigsaw cooperative models, namely physical activity (composed of students who actively read the subject matter, noting the important things, listening to the teacher's explanation seriously and follow the instructions of teachers), mental activity (consisting of students who answered the questions correctly, respond to his answer or explanation, issued his opinion, ask who did not already know and remember the material that has been given by the teacher), and emotional activity (students who are not afraid of learning activities, happy to respond and eager to follow the instructional activities). These three activities are divided into several sections that is the observation of the researcher during the study. Learning model can be as a conceptual framework for organizing systematic learning experience to achieve specific learning objectives and serves as a guideline for designers of teaching and teachers in planning and implementing the learning activities.

Jigsaw Cooperative Model is one of the many models of cooperative learning. This model provides the opportunity for students to collect and organize information experiences, develop independence and cooperate with others. Jigsaw cooperative model also provides flexibility to students in issuing an opinion on the information obtained so that the activity will be more pronounced due to the multi-way interaction in the

learning process. Social Studies studying, analyzing and reviewing the system of human life on the earth's surface in the context of social or human beings as members of society. Based on the problems experienced during the teaching, the educators conduct research as a form of class action to improve student learning activities in Social Studies subjects by applying Jigsaw Cooperative Model. The objective is to describe the application of the model to improve the Jigsaw cooperative learning activity of the Social Studies in Class VII A SMPN 2 Gedangsari Gunugkidul.

### Method

The method used in this research is descriptive method. According to Hadari Nawawi (2012:67), descriptive method can be interpreted as a problem-solving procedure, investigated by describing / depicting the state of the subject/object of research (a person, institution, community, etc.) At the present time based on the facts that appear or as should. This type of research is a Classroom Action Research (CAR), where this study is a look at the components of the activity or object that is in a class by using the specified action

to enhance or improve learning conditions in the classroom.

In this research, the subjects were the teachers of Social Studies and the students of class VII A SMP Negeri 2 Gedangsari Gunugkidul of the totaling 42 students, consisting of 21 male students and 21 female students. The procedure of the study is included the stages of the cycle, so that the process of planning, implementation, and evaluation can be performed. Phases of the cycle in question, illustrated by the sequence of learning implementation. Stages of the cycle are used to analyze the advantages and disadvantages of planning, implementation, and the evaluation that Observations were made directly to the learning activities students of class VII A 2 SMP Gedangsari Gunugkidul well when the observation before the study or during the learning activities take place using the Jigsaw cooperative models. Indirect communication techniques in this research are to look at the development of the students' responses before and after the action using the action learner satisfaction questionnaire that is made by the researcher. Based on the data collection techniques used, the data collection tool in this study is the observation sheet/observation.

Tabel 1. Description of The Cycle one Analysis Results

| MEETING                   | INDICATORS                                       | VALUE  | DESCRIPTION |
|---------------------------|--------------------------------------------------|--------|-------------|
| <b>Physical Activity</b>  |                                                  |        |             |
| 1                         | The average number of students were shown        | 29     |             |
| 2                         | The percentage of the students are shown         | 68,45% |             |
| 3                         | Average student who is not shown                 | 13     |             |
| 4                         | The percentage of the students who are not shown | 31,55% |             |
| <b>Mental Activity</b>    |                                                  |        |             |
| 1                         | The average number of students were shown        | 20     |             |
| 2                         | The percentage of the students are shown         | 48,57% |             |
| 3                         | Average student who is not shown                 | 22     |             |
| 4                         | The percentage of the students who are not shown | 51,17% |             |
| <b>Emotional Activity</b> |                                                  |        |             |
| 1                         | The average number of students were shown        | 22     |             |
| 2                         | The percentage of the students are shown         | 53,17% |             |
| 3                         | Average student who is not shown                 | 20     |             |
| 4                         | The percentage of the students who are not shown | 46,83% |             |

has been designed. The research is about the application of the Jigsaw cooperative learning activities to enhance the Social Studies in class VII A SMPN 2 Gedangsari Gunugkidul is designed for two cycles: each cycle includes: plan of action, action, observation, and reflection with a range from 4 to 1. Thus, if there are 10 research aspects that have to be observed, the maximum score is 40, and the minimum score is 10.

The data collection technique used is the technique of the direct observation and indirect communication techniques. The technique of direct observation in this research was the observation and recording of symptoms that appeared when the object of study is using the observation sheets. The Observations were made directly to the learning activities students of class VII A 2 SMP Gedangsari Gunugkidul well when the observation before the study or during the learning activities take place using the Jigsaw cooperative models. Indirect communication techniques in this research are to look at the development of the students' responses

before and after the action using the action learner satisfaction questionnaire that is made by the researcher. Based on the data collection techniques used, the data collection tool in this study is the observation sheet/observation.

### Results and Discussion

The results were obtained observation data. In the first cycle can be presented in table 1.

It can be seen that the average percentage of students' physical activity levels seen in the first cycle was 68.45%, mental activity was 48.57% and emotional activity was 46.83%, while students who have not been active (not shown) on physical activity was 31.55%, mental activity was 51.43% and emotional activity as much as 46.83%. Thus the average percentage of student activity shown in the first cycle was 56.73%, while that is not shown was 43.27%.

In the second cycle can be presented in table 2.

Table 2. Description of the Cycle Two Analysis Results

| MEETING                   | INDICATORS                                       | VALUE  | DESCRIPTION |
|---------------------------|--------------------------------------------------|--------|-------------|
| <b>Physical Activity</b>  |                                                  |        |             |
| 1                         | The average number of students were shown        | 40     |             |
| 2                         | The percentage of the students are shown         | 95,84% |             |
| 3                         | Average student who is not shown                 | 2      |             |
| 4                         | The percentage of the students who are not shown | 4,16%  |             |
| <b>Mental Activity</b>    |                                                  |        |             |
| 1                         | The average number of students were shown        | 37     |             |
| 2                         | The percentage of the students are shown         | 87,62% |             |
| 3                         | Average student who is not shown                 | 5      |             |
| 4                         | The percentage of the students who are not shown | 12,38% |             |
| <b>Emotional Activity</b> |                                                  |        |             |
| 1                         | The average number of students were shown        | 35     |             |
| 2                         | The percentage of the students are shown         | 84,13% |             |
| 3                         | Average student who is not shown                 | 7      |             |
| 4                         | The percentage of the students who are not shown | 15,87% |             |

Based on Table 2, the average percentage of the students' physical activity on the second cycle was 95.84%, mental activity was 87.62% and emotional activity was 84.13%, while students who have not been active (not shown) on physical activity was 4.16%, mental activity was 12.38% and emotional activity was 15.87%. Thus the average percentage of student activity that is shown in the second cycle was 89.20%, while the average activity is not shown was 10.80%.

Activities performed after the second cycle of reflection and follow-up of the cycle I. The weakness that occurs in the first cycle referenced to do repairs on the second cycle. From the result of reflection, researchers halted the research in the second cycle. This is because the data obtained has reached the saturation point.

### **Discussion**

In the physical activity indicators, it is divided into four performance indicators that the students who read the subject matter, noting the important things, listening to the teacher's explanation seriously and follow the instructions of teachers. The results obtained in the first cycle increased, from an average percentage of 60.72% increased to 68.45% in cycle I. The percentage difference more clearly as follows: 1). Students who read the course materials for 71.43%, whereas in the first cycle increased to 83.33%, there is a difference of 11.90%; 2). Students who noted the importance of 47.62%, while in the first cycle decreased to 45.24%, a decrease in activity amounted to 2.38%; 3). Teacher Students who listened to intently by 59.52%, while in the first cycle increased to 83.33%, there is a difference of 23.81%; 4). Students who follow the teacher's instructions was 64.29%, while in the first cycle decreased to 61.90%, it is decreased of 2.39% of the activity.

On the indicators of mental activity, it is divided into 5 performance indicators, namely the students who answered the questions correctly, respond to his answer or explanation, issued his opinion, ask who did not already know and remember the material that has been given by the teacher. Research results have been obtained which increased from 26.67% to 48.57% in cycle I. The

percentage comparison of student activity after administration of the first cycle of treatment on the basis of indicators of mental activity is as follows: 1). Students who answered questions correctly amounted to 23.81%, while in the first cycle increased to 66.67%, there is a difference of 42.86%; 2). The students, who respond to his answer or explanation of 23.81%, while in the first cycle decreased to 19.05%, a decrease of 4.76%; 3). Students who issued his opinion was 30.95%, while in the first cycle decreased to 26.19%, a decrease of 4.76%; 4). Ask students who are not yet known by 21.43%, while in the first cycle increased to 54.76%, there is a difference of 33.33%; and 5). The students who remembered the material that has been given by the teacher was 33.33%, while in the first cycle increased to 76.19%, there is a difference of 42.85%.

In an emotional activity indicators, divided into three performance indicators, those are: the students who are not afraid of learning activities, happy to respond and eager to follow the instructional activities. The results obtained have not increased, it was from 53.97% to 53.17%. The percentage difference in detail, namely: 1) Students who are not afraid to do a learning activity by 66.67%, while in the first cycle increased to 73.81%, there is a difference of 7.14%; 2). Students are happy to respond to a baseline of 35.71%, while in the first cycle decreased to 28.57%, a decrease of 7.14%; and 3). The eager students participating in learning activities amounted to 59.52%, while in the first cycle decreased to 57.14%, a decrease of 2.38%. Based on these explanations, it is seen that the average Social Studies learning activity has increased, from 47.12% to 56.73% in the first cycle, there is a difference of 9.61%. Increased physical activity are the students who read the subject matter and the student who listened to the teacher intently, increasing in mental activity is the students who answered the questions correctly, students were asked the students who have not known and remembered the material that has been given by the teacher, it was increased as well in the emotional activity; the student was not afraid of learning activities. This indicates an increase in the activity of learning.

## Conclusions and Recommendations

Based on the discussion of the action itself, it can be concluded as follows: An increase in the Social Studies Learning Activity Using Cooperative Model Type Jigsaw In A Seventh Grade Students of SMP Negeri 2 Gedangsari Gunugkidul, it concluded several things: 1). That activity in the Social Studies learning using cooperative model type of Jigsaw is increased. Cycle I experienced an improvement of 9.61%, from cycle I to cycle II as much as 11.21%. Overall, the increased activity of prasiklus learning to cycle II is 42.08%. Based on available data, it is categorized as "intermediate ". 2). Learning activity That Social Studies in the physical activity using the cooperative model of Jigsaw type of prasiklus increased to 7.73% as big as I cycle from cycle I to cycle II as much as 5.36%. As increasing amount of physical activity that occurred from prasiklus to cycle II is 35.12%. Thus, the increase in the physical activity can be classified as " low ". 3) That the Social Studies learning activity on mental activities using cooperative model Jigsaw type of Prasiklus increased to 21.90% as big as I cycle, the cycle I cycle II as much as 21.90%. As for the total increase occurring from prasiklus to cycle II is 60.95%. With that increase mental activity could be classified "high". 4). Learning activity That Social Studies at the emotional event using the cooperative model type of Jigsaw has decreased from baseline to cycle as much as 0.8% I, from cycle to cycle I experienced an increase as large as 6.35% II. As for the total increase occurring from prasiklus to cycle II is 30.16%. With that increase mental activity can be categorized "low".

## Suggestion

Based on the findings and conclusions in this research, can be suggested with respect to the following: 1). Included in the result of the use of cooperative learning model type Jigsaw, maximize teacher is required to make Learning Implementation Plan (LIP) to be more directed learning and provide media attract and capture learning model that will be used. 2). Teachers should frequently assess their own performance. 3). Learning process should be able to actively engage learners, not only physically but also mentally and emotionally.

4). Teachers should always be varied learning model in the learning process of Social Studies to encourage the learners to commit to learn more meaningful activity and increasing students' learning activities that that students can participate directly in the learning process.

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## IMPROVING STUDENTS' MOTIVATION OF LEARNING USING BLENDED LEARNING STRATEGY AND VARK LEARNING STYLE: A CASE STUDY OF SMKN 1 BANTUL

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### Abstract

The purpose of this study was to improve students' Motivation of Learning through the use of Blended Learning Strategy. The subject of this research were the students of X-Ak 1 class of Accounting Program at SMKN 1 Bantul. The research was implemented in the first semester of Academic Year of 2013/2014. This is a Classroom Action Research study which was conducted in two cycles using Dave and Ebutt model. Two kinds of data collection techniques, i.e. observation and questionnaire, were used to capture students' learning motivation. A descriptive analysis was employed afterward to calculate the students' score of learning motivation in the Accounting subject. Based on the research result, the implementation of Blended Learning Strategy facilitated with VARK Learning Style Model was able to improve the learning motivation of the students of X-Ak1 class of Accounting Program at SMK Negeri 1 Bantul in the academic year of 2013/2014. It is shown by the improvements of X-Ak1 class's average score of learning motivation from 76.71% in the first cycle to 84.18% in the second cycle.

**Keywords:** *blended learning, VARK learning style model, motivation of learning, accounting subject*

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### INTRODUCTION

Education is a systematic process for children or adult to acquire knowledge, experience, skill and shape attitudes. It makes an individual be more civilized, refined, cultured and educated. For a civilized and socialized society, education is the only means to produce human resources. Its goal is to shape a qualified and competent citizen. By possessing knowledge, creativity and autonomy, Indonesian citizens will be able to actively involved in the society to develop its country. This is consistent with the meaning of education which stated in *UU No. 20 Tahun 2003* about the National Education System, in 1<sup>st</sup> section:

"Pendidikan adalah usaha sadar yang terencana untuk mewujudkan suasana belajardan proses pembelajaran agar peserta didik secara aktif mengembangkan potensidirinya untuk memiliki kekuatan spiritual keagamaan, pengendalian diri, kepribadian, kecerdasan, akhlak mulia, sertaketerampilan yang diperlukandirinya, masyarakat, bangsadan Negara".

And also align with the purpose of National Education in Indonesia as also stated in *UU No. 20 Tahun 2003*:

"berkembangnya potensipeserta didik agar menjadi manusia yang beriman dan bertakwa kepada Tuhan Yang Maha Esa, berakhlak mulia, sehat, berilmu, cakap, kreatif, mandiri, dan menjadi warga negara yang demokratis serta bertanggung jawab".

The development of information and communication technology offers flexibility for education. Blended learning, for example, is a learning strategy that integrates technology and information-based learning with classroom-based learning/face to face. Young (2002) stated that Blended Learning has several advantages, such as have the various learning approaches, easier to access the knowledge, social interaction, save costs, and easier to make a revision. In addition, Young (2002) also stated that Blended Learning allows the students to convergence the different methods, learning resources media, and other relevant learning environments based on their own learning style and their own desire.



For accounting subject which is not only dealing with theory but also the ability to count and calculate, students should learn the subject by their own desire to learn and by understanding their own learning style. It means, students' motivation should emerge first, before learning taking place. Hence, the concept of accounting can be well understood.

During their study, students usually have a specific learning style and this will affect how they learn. Miller (2001) identified the meaning of learning style as a term used to refer to the methods of gathering, processing, interpreting, organizing, and thinking about information. He added that students have different learning styles, which show up in the classroom in the different ways that students acquire information.

There are numerous learning style inventories available, but this research specifically examines an intervention using the VARK inventory. The VARK inventory gathers information according to an instructional preferences model that includes Visual, Aural, Read, and Kinesthetic (Fleming, 1998).

Based on the observations in the grade X-Ak1 of SMKN 1 Bantul, there is an indication that the students' learning motivation is still low. This problem is identified from the students' activities that reflect the low Motivation of Learning during an Accounting class. While doing the exercise from the teacher, 37.88% students did not finish it at all. If they met difficulties, 36.33% students did not ask what they did not understand either to the teacher or a friend. During class, only 36.36% students who pay attention to the teacher's explanation and while the others were chatting about non-subject material. Then, there are 36.36% students who were cheating or waiting for their friends' answer in doing the examination. Additionally, when they have to do the routine tasks, 33.48% students procrastinate in doing that task and even were not did the task. When students are receive questions from the teacher, about 32.58% students cannot give any answer. During the discussion method, 35.61% of students were not sure and could not defend their opinion. Finally, in their spare time, 36.36% students were not try to exercises and solve

accounting problems, instead they prefer to play with their cellphone.

The high intensity of lecturing and drill practicing (give a lot of exercise) were found in the teaching method in Grade X-Ak1 SMKN 1 Bantul. The use of monotonous teaching method made the students feel bored with the daily class routine easily. The structure of Accounting learning material that tend to be more calculating makes the narrow point of teacher that explaining Accounting is will be suitable with the lecturing and drilling method. But this method made the students just kept silent and only listens to the teacher's explanation. This condition makes the Accounting learning process less interesting, less challenging, and meaningless for the students. As a consequence, the learning process cannot wake the students' motivation of learning up yet.

Based on the background of the study above, the researcher proposed a research entitled "The Implementation of Blended Learning Strategy Facilitated With VARK Learning Styles Model To Improve Students' Motivation of Learning: Case Study Of Grade X-Ak1 SMK N 1 Bantul Academic Year Of 2013/2014".

## **OBJECTIVE OF THE RESEARCH**

The research aims to improve Students' Motivation of Learning of Grade X-Ak1 SMKN 1 Bantul Academic Year of 2013/2014 by using blended learning strategies facilitated with learning styles of Visual, Aural, Read, and Kinesthetic (VARK). The research will be done in the basic competence of arranging adjusting journal entries and preparing the balance sheet.

## **RESEARCH METHOD**

### **Research Type**

The type of this research is Classroom Action Research (CAR). Aqib Zainal, et al (2009: 3) stated that classroom action research is a research done by the teacher in his/her class through self-reflection with the aim to improve the class performance. This CAR research will be conducted collaboratively between the researcher and the accounting teacher. This CAR research is a participatory which means

the researchers directly involved in the implementation of research step by step. The research was conducted in Grade X-Ak1 SMKN 1 Bantul, in order to improve or increase students' Motivation of Learning motivation in an accounting subject.

### Research Design

This Classroom Action Research Model is developed using Dave Ebbutt model. Wiriattmaja (2009) states that the model started by formulating the general idea of research, reconnaissance, developing overall plan, conducting first action, monitoring and reconnaissance. Depend on the monitoring and reconnaissance's result, then researcher can continue either proceed to second action, revising overall plan, or amend general ideas.

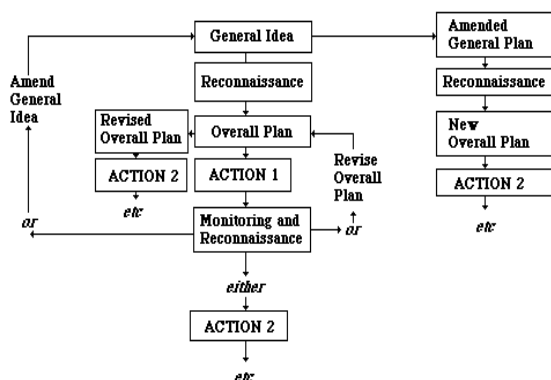


Figure 1. Classroom Action Research using Dave Ebbutt Model

#### 1. Research Subject and Object

The subject of this research is 33 students of Grade X-Ak1 at SMKN 1 Bantul, while the object of the research is students' Motivation of Learning using Blended Learning strategy facilitated with VARK learning styles.

#### 2. Research Instruments

According to Suharsimi Arikunto (2006:160), "The research instrument is a tool or facility that is used by researchers in collecting data in order to work more easily and better results, in terms of more accurate, complete and systematic, so it will easy to be processed". The instrument used in this study is in the form of observation sheets, questionnaires sheet and field notes. The questionnaire is designed using Likert Scale with two alternative statements, i.e. positive and negative statements. The field note is used to

take notes about the entire process of Blended Learning Strategy implementation.

Table 1. The Framework of Learning Motivation Instruments

| Variables  | Indicators                                  | Item         | Total |
|------------|---------------------------------------------|--------------|-------|
| Motivation | 1. Diligent in doing the tasks              | 1, 2*, 3     | 3     |
|            | 2. Not easily discouraged                   | 4*, 5, 6, 7* | 4     |
|            | 3. Showed enthusiasm in enrolling the class | 8, 9, 10     | 4     |
|            | 4. Prefer to work independently             | 11, 12*, 13  | 3     |
|            | 5. Easily bored with routine tasks          | 14*, 15, 16  | 3     |
|            | 6. Able to defend his opinion               | 17, 18*      | 2     |
|            | 7. Strongly keep his belief                 | 19*          | 1     |
|            | 8. Likes problem solving                    | 20           | 1     |
| Total      |                                             |              | 24    |

\*) Negative Statements

Table 2. Scoring Rubric

| Positive Statement    |       | Negative Statement    |       |
|-----------------------|-------|-----------------------|-------|
| Alternative Statement | Score | Alternative Statement | Score |
| Always                | 4     | Always                | 1     |
| Often                 | 3     | Often                 | 2     |
| Seldom                | 2     | Seldom                | 3     |
| Never                 | 1     | Never                 | 4     |

### 3. Data Analysis Technique

The research uses Qualitative Research Techniques to analyze the data collected from field note in form of description. The researcher uses Qualitative Research Technique developed by Miles Huberman which consists of three techniques; they are (Sugiyono, 2009:246-253):

#### a. Data Reduction

The reduction is done by selecting, focusing and abstracting raw data into the simpler and more meaningful data. The data which is relevant each others are reduced to the more focus and meaningful data to earn beneficial information.

#### b. Data Presentation

After being reduced, the data is organized and described in a form of descriptions, tables, graphics, matrix, etc.

#### c. Conclusion Formulation

Conclusion formulation is the last step of data analysis. Formulating conclusion aims to earn the main point of the data in a form of explicit sentences.

For the data collected by observation and questionnaire, researcher is going to use Descriptive Analysis which means simple mathematical function to manage the data by converting data into numerical and simple data (Metler, 2011:261). The data collected from

observation and questionnaire is analyzed by giving learning motivation score from 1 to 4. According to the score, researcher calculates the percentage of students' learning motivation and interprets the percentage in a form of description. The analysis involves three steps, they are:

- 1) Determine the procedures in giving score for each indicator of learning motivation.
- 2) Calculate the score for each indicator.
- 3) Calculate the Learning Motivation score by the formulas:

.....(1)

$$\% = \frac{\text{Score of Learning Motivation} \times 100\%}{\text{Maximum Score}}$$

(Sugiyono, 2009:137)

## RESEARCH RESULT AND DISCUSSION

From the research conducted which includes initial thoughts, reconnaissance, overall plan, action, as well as monitoring and reconnaissance; some data have been obtained the data and analyzed. In the implementation of Blended Learning strategy facilitated with VARK learning style, both in cycle 1 and cycle 2, the students have shown the an increase in the score of Motivation of Learning. Here below in table 3 is the detail presentation data of students' Motivation of Learning before the implementation of Blended Learning Strategy (pre) and after the implementation of Blended Learning Strategy (cycle 1 and cycle 2):

Table 3. Comparison of Students' Motivation of Learning on Pre Research, Cycle 1 And Cycle 2 Score

| Indicators                               | Score (%) |         |         | Improvement (%) |
|------------------------------------------|-----------|---------|---------|-----------------|
|                                          | Pre*      | Cycle 1 | Cycle 2 |                 |
| Diligent in doing the tasks              | 62,12     | 76,52   | 84,09   | 7,57            |
| Not easily discouraged                   | 66,67     | 75,76   | 86,36   | 10,6            |
| Showed enthusiasm in enrolling the class | 63,64     | 78,03   | 81,06   | 3,03            |
| Prefer to work independently             | 63,64     | 78,03   | 80,30   | 2,27            |
| Easily bored with routine tasks          | 76,52     | 87,12   | 92,42   | 5,3             |
| Able to defend his opinion               | 67,42     | 71,97   | 83,33   | 11,36           |
| Strongly keep his belief                 | 64,39     | 68,94   | 84,09   | 15,15           |
| Likes problem solving                    | 63,64     | 77,27   | 81,82   | 4,55            |
| Average Score                            | 66,01     | 76,71   | 84,18   | 7,47            |

Source : Primary Data Processed

Notes: \* Pre Research Data

indicator increases from cycle 1 to cycle 2 for about

7.57%. In a study using this strategy, the class becomes more conditioned for students to have a willingness to work on the exercise from the teacher completely. The improvement score of this indicator are also supported by the data collected via questionnaire. Based on the questionnaire, the improvement of this indicator's score from the first cycle to the second cycle reaches 10.09% from 75.51% to 85.60%.

Blended Learning strategy provides the material students going to learn, so that the students are able to read first before enrolling the class. When the teacher asks them questions during explaining the material, students are able to give responses because they have been read the material teacher talks about. Moreover, when the teacher asks them to do the exercise, they show their enthusiasm because they have read the material and do the exercise online using facebook. The material and exercise uploaded on the e-learning also helpful for student to optimize the time allocation for assignment. They are able to finish the assignment easier when they have been attempted to finish the similar exercise on thee-learning. If the students face any difficulties in doing assignment, they are able to re-read the material on the supporting module of review the demonstration of cases on the module. The phenomenon explained by the findings of Faculty at Mercy College that "Blended learning is able to increase sense of community and collaboration because of the pedagogical strategy addressed to the high variety learning styles, increase interactivity, promote community, and meet the special needs of online students" (Dziuban, Moskal, & Hartman, 2004:5).

### Not Easily Discouraged

With the implementation of Blended Learning Strategy facilitated with VARK learning style model known that the score of this indicator is 75.76% in cycle 1 and increased in the second cycle of 10.6% to 86.36%. This increase occurs because students whose fell into the category of Auditory learning style questionnaire was administered and then the results of their new questionnaire result, they fell into the category of Multimodal, the exercises which is used in cycle 2 also gives the effect that a

more applicable form of exercises turns out to have an impact on students' beliefs, they believe that they have to be able to finish it. Based on the questionnaire, the improvement of this indicator's score from the first cycle to the second cycle reaches 10.60% from 73.11% to 83.71%.

Blended learning strategy encourages the students to ask question about the material that the teacher forget to explain, ask for deeper explanation and give notice to the teacher if there is any mistake in explaining the material because they have read the interesting kinds of learning material. The learning material will stimulate the students to finish the assignment by their own effort. This can be done through reading the material, looking for further explanation on book or module and comparing the assignment given by the teacher to the exercise or example on the supporting material on e-learning. The varieties of materials formulated and provided online stimulate the students to be enthusiastic to look for explanation and case demonstration in order to finish their assignment, as what Syaiful (2006:164) states that the varieties in the way to teach, interaction in learning and media causes the desire to learn.

### 3. Shows Enthusiasm in Enrolling the Class

There is an increase in the score of this indicator which starts with a score of 3.03% from cycle 1 to cycle 2. It is also known that based on the questionnaire, the score of cycle 1 to cycle 2 is increase by 4.03% from 75.76% to 79.79%.

The implementation of Blended Learning strategy facilitates with VARK learning style model is able to provide a positive impact on classroom atmosphere. Students not only learn in the classroom, but can also learn at home according to each learning styles. As Bersin (2004) explained, Blended Learning strategy is a combination of various different learning media (technologies, activities, and various types of events) to create an ideal learning scenario for the audience (students). His explanation means that Blended Learning is supported by other electronic format and may be combined with instructor-centered training and other direct format.

### 4. Prefer to Work Independently

On this indicator, there is an increase of 2.27% from cycle 1 to cycle 2. There is also an increase 2.28% from the data collected by questionnaire from 78.78% in cycle 1 to 81.06% in cycle 2.

Basically, students have the responsibility to do the task given to him. It is showed by their strong desire to resolve the question individually as well as when working on the exercises in the class. They are trying their best in submitting the answers to the questions given by the teacher than their friends. Sardiman (2009:40) states that to know what to learn is the good beginning to learn. By accessing the material first, students will know what they are going to learn, thus they will be more ready to learn. Blended Learning facilitates the student to access the material they are going to discuss. As a consequence, while the teacher explains the material in front of the class, the students have already read the material and become easier to digest the knowledge that the teacher wants to deliver. In addition, students are able to give responses to teacher's questions, ask for further explanation or material that the teacher forgets to explain, and do the exercise or the task independently.

### 5. Easily Bored with Routine Tasks

An increase of 5.3% obtained from cycle 1 to cycle 2. Based on questionnaire, there is an increase too of 7.83 from 78.78% on cycle 1 to 86.61% on cycle 2. These conditions give effect to increase the spirit and enthusiasm of the students to learn and not stuck with the monotonous and mechanical activities in learning. Thus, students will not easily get bored with their daily routine task of learning and always eager to learn more.

Blended Learning allows the teacher to give various kinds of tasks. It is strengthened by the VARK learning style. The students can learn based on their own preference of learning style and do the various kind of tasks provided in Blended Learning strategy. This finding is in line with what Murphy et al. (2004) have stated that learning based on VARK learning style provides a medium for self-knowledge and exploring opportunities in classrooms, thus, making

a more productive learning experience and enjoyment among students.

#### Able to Defend His/Her Opinion

The average score of this indicator increase from cycle 1 to cycle 2 by 11.36%. The increase also occur when we see on the data collected via questionnaire. There is an increase of 2.6% from 78.78% on cycle 1 to 81.44% on cycle 2.

Learning using this strategy in class can make the individuals has a deeper understanding because besides the oral explanations and online learning at home, students can also conduct discussions with their friends who were into the same category of learning style with themselves. Not only discussion, but the students may also confirm the results of the discussion at the end of learning, so the students can answer the questions and have the proper argument. Thomas et al. (2002) stated that providing various learning materials to serve various learning style is important in increasing the understanding and achievement of each subject. Thus, students will be able to defend his/her opinions.

#### Strongly Keep His/Her Beliefs

Obtained increased score of 15.15% from the cycle 1 to cycle 2. Based on the questionnaire, there is an increase to of 6.06% from 76.52% on cycle 1 to 82.58% on cycle 2.

This Blended Learning strategy stimulate students to develop their ability to test their ideas and understanding of Accounting subject. A higher confidence of students in doing the exercises will influence the ability of students in articulating their opinions; because basically students understand have understood the concept of Accounting. This will make them able to strongly keep his/her belief. This statement aligned with what Wilson & Smilanich (2005) have stated that Blended learning is the usage of the most effective training solution, implemented in a coordinated way to achieve the desired learning objectives. Hence, the students are ready to enroll the class, do the assignment, and have the strong reason to keep the things that they already believed.

#### Likes Problem Solving

The average score of this indicator increases in score of 4.55% from cycle 1 to cycle 2. From the questionnaire, there is also an increase of 7.57% from 75.76% on cycle 1 to 83.33% on cycle 2.

The students' ability to collaborate with either through materials or facebook quizzes delivers a positive impact for them. The effective learning interactions able to give effect to improve the students' ability in using the information and abstract to make learning become real. The more problem or exercise the students do, the more understanding they will get. As this understanding level increase they will gain an engagement in learning. Hence, this engagement will affect their preference in find and solve problems.

Whichever method is chosen, differences in learning styles shows the fastest and best way for each individual to absorb information from outside. If students and teacher can understand the differences about the various difference of learning style, it will make them easier if one day, for example, they must guide other person to get the right learning style and provide maximum experience of learning (Hamzah Uno, et al: 2004:212).

From the research result and discussion on eighth indicators of Motivation of Learning above, there are an increase in the score of each indicator. Hence, it has been proven that by the implementation of Blended Learning strategy facilitated with VARK learning style is able to improve the students' Motivation of Learning in the basic competence of arranging adjusting journal entries and preparing the balance sheet of the student of Grade X AK1 SMK Negeri 1 Bantul Academic Year of 2013 / 2014.

#### CONCLUSION AND SUGGESTIONS

Based on the research result and discussion, the implementation of Blended Learning Strategy facilitated with VARK Learning Style is able to improve students' Motivation of Learning. This judgment is proved by the increase of the percentage score of Motivation of Learning taken

from observation. The observation score of students' Motivation of Learning before the implementation of Blended Learning Strategy facilitated with VARK Learning Style is 66.01%. Once the teacher uses Blended Learning Strategy, the score rose to 76.71% in cycle 1, and 84.18% in cycle 2. This result indicates that if teacher able to design learning correctly, it will subsequently build/improve students' motivation and responsibility to learn. The VARK learning style facilitates students' various style of learning by encouraging teachers to provide more learning materials to choose from various ways and sources.

Some suggestions are proposed based on the research findings:

for Teacher

Teachers are encouraged to use Blended Learning Strategy facilitated with VARK learning style to set up a good learning conditions loaded with the interaction between teachers and students. Thus, they will not get caught up with monotonous and mechanical activities.

Teacher should allow students to get various sources of knowledge especially from internet to increase students' choices and decrease students' dependency to the teacher.

for Future Research

For the better research result, the researcher needs to be more consistent in using kinds of instrument that is suitable to each learning style of the students.

The researcher needs to be more careful in observing the students for more detail individual analysis of students' Motivation of Learning score.

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## PAWANG (PUZZLE WAYANG) INSTRUCTIONAL MEDIA DEVELOPMENT BASED ON MACROMEDIA FLASH IN THE JAVANESE LANGUAGE LEARNING IN GRADE V OF ELEMENTARY SCHOOLS

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### Abstract

The aim of this study was to develop PAWANG (Puzzle Wayang) media based on Macromedia Flash as an alternative medium of learning the Javanese language in grade V of elementary school. This study used Research and Development (R & D) model of Lee Owen. Research Model Lee Owen has 4 phases, namely analysis, design, development, and evaluation. Based on the test results of the two media and expert lecturers indicated the percentage of 74.7 % on the media testing and 94.7 % on the material testing. The test results showed that PAWANG (Puzzle Wayang) deserved to be media in learning the Javanese language for grade 5 elementary school students. The results of the questionnaires of the respondents indicated that they were interested in learning by using PAWANG (Puzzle Wayang).

**Keywords:** *Javanese language learning, instructional media, macromedia flash, pawang (puzzle wayang)*

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### Introduction

Indonesia is an archipelago country which has many ethnics and cultural diversity. Culture of every region is different from each other and have the characteristic of each region. Regional culture that characterizes the plurality of national culture should be preserved existence by all levels of society. Many local culture of learning that can be used for humans to cultivate noble character according to the personality of the nation.

The one that can support the arts as a medium to instill moral lessons as a form of character building is a puppet. Puppet is a traditional Javanese arts-rich education messages, moral and spiritual values in life.

The use of puppets as a medium of learning has several advantages. First, the puppet is acceptable by all people, including the teachers and students. Second, the puppet is timeless which can be used for generations in the next generation of students. Third, the puppet media is more costless, practical, and efficient than other media.

Along with the development of science and technology which are developing rapidly, the local wisdom began to disappear from the lifestyle of society. This happens because the tradition of this region has been regarded as ancient and old-fashioned. The advance of technology brought a great influence for the children, especially in the field of education. Among beside its positive effects, there are an negative impacts include children who are not interesting in the arts traditions and customs that exist in its region. According to the Chairman of Komunitas Wayang Universitas Indonesia, Sarlito W Sarwono (2012), music performance is more interesting from its commercial side.

In addition, according to the observations in several schools in Yogyakarta, there are SD Percobaan 3 Pakem and SD N Sleman 5, shows that the Javanese teachers do not have any attractive medium in teaching puppet. Whereas the puppet media is necessarily given the conditions previously described.

Therefore, it requires an innovative learning media that can attract the students to study puppet.



Researchers propose PAWANG (Puzzle Wayang) Instructional Media Development Based Macromedia Flash In the Java Language Learning in Elementary School Class V, so that it is expected that the students would learn puppet with pleasure.

## Discussion

### 1.1. Methods of Implementation

#### 1.1.1. Research approach

The research approach in this study is the Research and Development (R & D) by using the model of development of Lee and Owens consisting of four stages, namely the analysis phase, design phase, stage of development, and the assessment phase.

##### a. Stage of analysis

This stage consists of two steps: analysis of needs, and analysis of front end. Needs analysis is a systematic process of goal setting goals, problem identification, and determination of priorities for action.

##### b. Stage of design

This phase will result in the product design specifications. The design phase consists of five main activities, namely: Making the schedule, the project team Determination, Determination media specifications, making the structure of matter (content), Planning and configuration control review

##### c. Stage of development

This stage is the process of translating specification products that have resulted from the design stage to the media in the form of software, this is PAWANG "Puzzle Wayang".

##### d. Stage of evaluation

This stage is the process of expert assessment of media content and media experts later with the approval of both experts, the media can be tested on students / small groups.

### 1.1.2. Data Collection and Analysis Techniques

Collection techniques in this study through two stages. First, using the measurement of program functions in accordance with a predetermined plan. Second, the questionnaire based media expert accuration benefit of software for students or questionnaire to assess the feasibility of the software PAWANG "Puzzle Wayang" and also what students say about the making of this game.

Data analysis techniques for the first stage which exposes information systems engineered products once implemented in software, and test the validation and reliability of the program. The second phase, also uses descriptive qualitative, which describes the feasibility of the product to be implemented. Furthermore, the data that is processed communicative with the expected number and percentage obtained. The feasibility of measurement for matter experts and the media are as follows.

### 1.2. How to Make this Puzzle

Wayang puzzle was made using *Macromedia Flash*. An interactive opening part started this puzzle appearance. There is a part which shows how to play this puzzle. So the students can read the instructions. The excess from this puzzle is makes the students like to study about *Iwayang* or puppet.

### 1.3. The Trial Steps

The trial of this research was judged by media and material expert judgement. Media trial is a process of examination and revision when the software was made. This process consist of the aspect of contains, appearance, and the benefits. So we need an media examiner to examine our media objectively. Material examination is evaluated based the content of PAWANG that contained materials and some quiz about Javanese language subject. Then the second examination is the elementary students 5<sup>th</sup> grade as the examiner. That is the point of this research.

#### 1.4. Design of PAWANG

There are description of slide's function in PAWANG:

##### 1.4.1. Slide Opening

This part was made interactive by using Javanese language and interesting layout.



Figure 1. Slide Opening

##### 1.4.2. Slide Home

This part contained a general page of PAWANG



Figure 2. Slide home

##### 1.4.3. "Aturan main" Slide

This part is contained about game's rules. So the students can be easier to understand how to play PAWANG.



Figure 3. Slide Aturan main

##### 1.4.4. Slide Wayang

There are many puppets captured in this part, the student can choose which puppet will be finished first.



Figure 4. Puzzle Slide

##### 1.4.5. Slide Puzzle

This puzzle is contained the pictures of puppet which must be finished by the students. The puzzle consist of 15 piece of puzzle which must be arranged to form the real puppet picture. The students is given 60 seconds to finish their puzzle. If the student can finish it, the biography of the puppet is shown. If the student failed to finish, the poin is shown and they must replay the puzzle.



Figure 5. Slide Puzzle



Figure 6. Biography Slide

## 1.4.6. Final Slide

This slide show the score which the student get, with minimum score is 0 (null) and maximum score is 100.



Figure 6. Final Slide

## 1.5. The Result of Expert Judgement Test

[33] Data of Media Expert Judgement

Table 4. Data of media expert judgement

| No | Name                 | NIP                   | Bidang Keahlian    |
|----|----------------------|-----------------------|--------------------|
| 1. | Unik Ambarwati, M.Pd | 19791014 200501 2 001 | Learning Strategic |

Conclusion of media expert judgement test:

- a. Feasibility Percentage Media Examination part 1:

$$b. \text{ Feasibility Percentage (\%)} = \frac{X_t}{X_y} \times 100\%$$

$$c. \text{ Feasibility Percentage} = \frac{71}{95} \times 100\% = 74,7 \%$$

(proper to examined by revision) data is enclosed.

- d. The picture is appropriated with Java culture.
- e. Media interactivity need to be increased.
- f. Revise the part of appearance with interactivity advice so the media more interest the students.
- g. Persuasive playing is needed to make this game is used by more students

Data of material examiner

Table 5. Data of material expert judgment

| No | Name              | NIP                 | Bidang Keahlian    |
|----|-------------------|---------------------|--------------------|
| 1. | Supartinah, M.Hum | 19800312 200501 002 | Scientific Writing |

Conclusion of material expert judgement test:

- a. Feasibility Percentage Media Examination part 1:

$$b. \text{ Feasibility Percentage (\%)} = \frac{X_t}{X_y} \times 100\%$$

$$c. \text{ Feasibility Percentage} = \frac{90}{95} \times 100\% = 94,7 \%$$

(proper to examined by revision) data is enclosed.

- d. Some words in menu and biography need to be changed.

- e. Background is replaced by Java culture theme.

The examination consist of media examination and material examination. Each examination was done once times. First, media examiner asked the researcher to revise the appearance, interactivity, and persuasion to play. The result was scored 74,7% that shown the media is proper to examine by revision.

Then material examiner asked us to change the language from Indonesian to Javanese, also the picture of the screen. The

result was scored 94,7% that shown the media is very proper to examine by revision.

After doing the examination, the researchers do the revision and it was examined by small group of elementary student 5<sup>th</sup> grade.

Based data analysis, PAWANG game is proper to be implemented but the needed to add the content

of materials, appearance, etc so the benefit to develop students motivation can be reached.

### Conclusion

Based on the research results and discussion description above, researchers can infer a few things as follows.

1. manufacture of PAWANG through 4 stages, the first stage of requirements analysis, design, development, and evaluation.
2. media and material test results of two expert Professor shows percentage of 74,7 % on test media while 94,7 % of the test material. Test results show that media expert media worthy tested without revision.
3. Puzzle Wayang (PAWANG) in the media as a viable language learning Java for grade 5 elementary school, judging from the results of the now respondent who indicated that they were very happy to learn by UUM

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## UUM (UTHAK-UTHIK MATHUK) MEDIA DEVELOPMENT BASED MACROMEDIA FLASH IN THE JAVANESE LANGUAGE LEARNING IN GRADE V OF ELEMENTARY SCHOOLS

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### Abstract

The purpose of this study was to develop the media of UUM (*Uthak-Uthik Mathuk*) based on Macromedia Flash as an alternative medium of learning the Javanese language in Grade V of elementary school. This study used Research and Development (R & D) model of Lee Owen. The research model of Lee Owen has 4 phases, namely analysis, design, development, and evaluation. Based on the test results of the two media and expert lecturers indicated a percentage of 77.1% and 84.23% to 62.85% for the media testing and 90% on the material testing. The test results showed that *Uthak-Uthik Mathuk* (UUM) deserved to be media in learning the Javanese language for grade 5 students of elementary schools. The results of the questionnaire of the respondents indicated that they were very happy to learn with UUM.

**Keywords:** *Javanese language, instructional media, macromedia flash, uthak-uthik mathuk*

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### Introduction

Java language is one of traditional language of Indonesia which have high state and price. Because of that, Government must be kept and preservthe Java language. One form of reverence and maintenance over language is by inserting theJava language as a subject in schools (formal) whose territory includes speakers of Javanese. Although the Java language has been included/put in curriculum but siswa kurang begitu menguasai sebagian besar materi yang disampaikan oleh guru. It was caused the matter is very much but the time is limited. Moreover javalanguage is rarely used by the children as their communication language day. So many teachers have problem and find difficulty when conveying the Java language lesson to student.

Keep in mind, currently javalanguage is developed and preserved by another country. In Holand and America many children very excited to learn Java language. So poor us, because in own country the Java language isless noted. Many children can't speaking in Java languagebecause their parents are less introduce children to the Java

language. During this time the Java language is also considered less old and classy. As a result the Java language does not recognize anymore the longer even vanish by itself with proven less tert. A strategy is needed to cultivate children's interest to the Java language. The children's interest is a initial capital for them to learn the Java language.

Sri Sultan Hamengku Buwono X said, "Don't let the elementary school 's student is prefer to learn foreign language than Java language. The teacher is needed to make how to learn the Java language more fun." (Source: tribunjogja.com Monday edition (01/08).

Therefore need to be developed media that can make easier and fun to learn Java language. This research will be develop UUM (*Uthak-Uthik Mathuk*) based Macromedia Flash as alternative media to teach Java language for fifth grade of elementary school.

## Discussion

### 1.1. The steps for make UUM

UUM has made using *Macromedia Flash*. Interactive opening part become first wallpaper of UUM. There are rules games of UUM to student can operation easier than other program. The benefit from this software is Student in 5 th class is interesting to learn Javanese language.

### 1.2. The steps of testing

The testing of this research through product trial with media expert and material expert. Trial to media expert judgement is testing proses and revision. This proses includes an assesment for content, appeareance and benefits. So, its required media experts who can assess objectively the software that has been created. The test material is based on material content in UUM and question that correspond to the Java language material Class VSD. While these second test is a test of the fifth grade students of elementary. It became the main target of this research object.

### 1.3. The Design and Manufacture

Description of the functions of an existing slide in UUM include:

#### a. Opening Slide

This part is made interactively by using the Java language and an interesting layout.



Figure 1. Opening Slide

#### b. Rules Slide

This part describes the rules in order to facilitate students in UUM play.



Figure 2. Rules Slide

#### c. Puzzle Slide

Puzzles cross word using the Java language which we must fill the empty boxes (white boxes) with characters that form a word based instruction.



Figure 3. Puzzles Slide

#### d. Question Slide

Using the Java language question that are divided into horizontal and vertical categories.



Figure 4. Horizontal Question Slide



Figure 5. Vertical Question Slide

#### e. Result Slide

Appearance count of score of students answers, with minimum score 0 and maximum score 100.



Figure 6. Result Slide

#### 1.4. The Test Result

##### a. Data of expert judgement (media expert)

Table 4. Data of media expert

| No | Name                 | NIP                 | Membership Area |
|----|----------------------|---------------------|-----------------|
| 1. | Unik Ambarwati, M.Pd | 19791014 200501 001 | Study strategy  |

##### a. Conclusion of media expert

##### 1) Percentage of eligibility media expert data test part I:

$$\text{Percentage of eligibility (\%)} = \frac{X_t}{X_y} \times 100\%$$

$$\text{Percentage of eligibility} = \frac{54}{70} \times 100\% = 77,1\%$$

(Deserve field test with revision) data enclosed.

Percentage of eligibility media expert data test part II:

$$\text{Percentage of eligibility (\%)} = \frac{X_t}{X_y} \times 100\%$$

$$\text{Percentage of eligibility} = \frac{59}{70} \times 100\% = 84,28\%$$

(Deserve field test with revision) data enclosed.

##### b. Data of expert judgement (items expert)

Table 5. Data of items expert

| No | Name              | NIP                 | Membership Area     |
|----|-------------------|---------------------|---------------------|
| 1. | Supartinah, M.Hum | 19800312 200501 002 | Java Language Study |

##### c. Conclusion of items expert

##### 2) Percentage of eligibility items expert data test part I:

$$\text{Percentage of eligibility (\%)} = \frac{X_t}{X_y} \times 100\%$$

$$\text{Percentage of eligibility} = \frac{44}{70} \times 100\% = 62,85\%$$

(Deserve field test with revision) data enclosed.

Percentage of eligibility items expert data test part II:

$$\text{Percentage of eligibility (\%)} = \frac{X_t}{X_y} \times 100\%$$

$$\text{Percentage of eligibility} = \frac{63}{70} \times 100\% = 90,00\%$$

(Deserve field test with revision) data enclosed.

2) Some word in menu changed, example "menurun" (vertical) be "medhun", "mendatar" (horizontal) be "nengen" and background changed to become background with cultural nuance of Java.

##### d. Individual test

This test (extern test) taking 10 sampel by random from students grade 5 of elementary school coming from different school. Extern test done by consumer candidate cover function, usefulness,



content, and game appearance. Correspondents in this test shall be as follow:

Table 6. list of correspondents

| No  | Name              | School        |
|-----|-------------------|---------------|
| 1.  | Tri Irwansyah     | SD N Beteng I |
| 2.  | David Ardi Satrio | SD N Beteng I |
| 3.  | Lintang Kusuma R  | SD N Beteng I |
| 4.  | Qurrota a'yun     | SD N Beteng I |
| 5.  | Ela Emi Lia       | SD N Beteng I |
| 6.  | Akhmad Abdussalam | SD N Sleman 5 |
| 7.  | Abdur Rosyid Rida | SD N Sleman 5 |
| 8.  | Herlambang Aji ST | SD N Sleman 4 |
| 9.  | Erlangga Aji ST   | SD N Sleman 4 |
| 10. | Ambar S           | SD N Sleman 3 |

Enquette items of user:

1. The useful of UUM
2. The content of UUM
3. The appearance of UUM
4. The function of UUM

Conclusion the result of the individual test as well as feedback from correspondents:

1. UUM is useful for students.
2. UUM help students to learn the Java language.
3. UUM can increase the motivation of students in learning the Java language.
4. The materials are presented in according with the subject matter of the Java language that they receive.
5. The rule of UUM game generally easy to understood.
6. UUM game is easy to played.
7. Questions are in compliance but rather difficult.
8. Students are very happy to learn the Java language with UUM.

9. Picture and colour used to attract students.

10. Suggestion: question made more easy.

11. Suggestion: Picture on the screen should increase Javascript or Java picture.

Testing includes test media to media expert and expert material. Each expert test done twice. On the test of the first media expert researchers do revision on images, interactivity, and the affective aspect should be developed. The test results of this media expert get score eligibility of 77.1% indicating that the media made these viable for the revision. In the second test to the media expert, suggested that the use of the media need to be varied, and it is recommended for further observation/test done to students. As for the eligibility test score of 84,28% media expert with the criteria is very worthy of being tested and done without revision.

The first testing on a matter, we revise the words that speak Indonesia replaced with Java language, and the image on the screen. As for the eligibility test score proficient this material of 62,85% with pretty decent criteria for these with the revision. On the second matter expert testing, all the aspects assessed were already very good, and not done the revision. As for the score's eligibility on the second matter expert test by 90% with a very decent for these criteria without revision. Based on the results of the test material and media experts then conducted field testing in small groups of 10 respondents.

In the step of a small group of 10 people respondents known that UUM indeed provide benefits for the respondent. Not only that, the look of UUM provide attraction to students so as to provide the motivation for students to learn the Java language. The material provided in this game also is in compliance with the Java language material in General as well as with problems such as crossword puzzles, but need to be made to make it easier to attract more students. With this game, UUM students become interested in Java language and delighted in learning the Java language.

Based on the data analysis, game "Uthak Uthik Mathuk" deserves to be implemented but still need



developments in terms of the material, content, appearance, and others that are beneficial in improving students' motivation could be achieved.

### Conclusion

Based on the research results and discussion description above, researchers can infer a few things as follows.

1. manufacture of UUM through 4 stages, the first stage of requirements analysis, design, development, and evaluation.
2. media and material test results of two expert Professors show percentages of 77.1% and 84.23% on test media while 62.85% and 90% of the test material. Test results show that media expert media worthy tested without revision.
3. *Uthak-Uthik Mathuk* (UUM) in the media as a viable language learning Java for grade 5 elementary school, judging from the results of the now respondent who indicated that they were very happy to learn by UUM.

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## DEVELOPING “MAJEDA” BASED ON *DOLANAN ANAK* TO OPTIMIZE THE GROWTH AND DEVELOPMENT OF KINDERGARTENERS

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### Abstract

This research was aimed at developing “a model of educative and attractive physical activity” based on *DolanAn Anak* as media to optimize the growth and development of kindergarteners. This research and development was divided into three stages: Model Development, Model Trial, and Model Dissemination. The first stage is model developing which was aimed to develop a prototype of ‘Majeda’ based on *DolanAn Anak* which had been validated by experts and practitioners. This study used the research and development approach of BorgandGall. The research began with developing ‘MAJEDA’ prototype based on the theoretical review, and then exploring *DolanAn Anak* existing in Yogyakarta, and observing the characteristic of the children’s growth and the teaching learning process in kindergartens. Then, the stage continued with examining the material aspect taught in kindergartens and analyzing the value and elements of movement contained in the *DolanAn Anak* is being adapted to the physical task and material themes taught to the students, and also considering the kindergarteners’ growth and development aspects and the learning characteristic implemented. Based on the result of analysis on the value contained in *DolanAn Anak* and the aspect of growth and development of the kindergarteners, *DolanAn Anak* was classified into six groups of game, and after being adapted with themes taught in the learning process, the prototype of majeda based on *DolanAn Anak* was produced and validated by experts and practitioners.

**Keywords:** *DolanAn Anak*, **educational and physical activities, attractive, kindergarteners**

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### Introduction

The placement of basic for the development of children thinking and personality will be greatly determined by the learning experience, which is experienced by the children since they were in pre-school age. Experience received by the children through the process of learning in a family environment, in the community, as well as in educational institutions is an important learning process and shape the development of children in the next. The growth of the knowledge, skills, and attitudes and the nature of children will depend on what is seen, acquired, and is taught by others to the children, when they are young.

To optimize the golden period of growth and development of children, the Government continues to improve the provision of education, and education of children since early age through early childhood development (ECD). One type is the

early childhood kindergarten (TK). Mansur (2009: 127-128) stated that TK is a form of early childhood education units in the formal education that organizes educational programs for children aged four to six years old.

Learners in kindergarten have characteristics (1) children aged 4 to 6 years old, and in learning in kindergarten are grouped into (a) group A, for age 4 to 5 years old, and (b) group B, for age 5 to 6 years old of age (Government Regulation No. 27 of 1990 on Preschool), (2) children who are in a period of growth and development. Growth means change of the quantity experienced by children, such as increased height, weight, and body size. Payne & Isaacs (1995: 15-17), stated that there are two terms of physical growth and motoric development of children, that is hard and soft motoric movements. The development means that children experience a qualitative expansion in various ability, namely: hard and soft motoric ability, cognitive

ability, language skills, domain Psychosocial and socio-emotional, moral and religious values, and art and creativity, (3) of learning group: the regulation number 58 of 2009 on the Standard early childhood, organize group study in Kindergarten, that is the maximum number of learners per group of learning in the early childhood education type of formal or TK / RA by 20 of the students with one teacher TK / RA and one assisting teacher.

That job growth and development of children can be done and achieved, a kindergarten teacher should utilize appropriate learning method in the learning process. Selection of learning methods should pay attention to the learning content that will be delivered, children characteristics, and the ability of teachers themselves. Moeslichatoen (2004: 24-29) suggested that kindergarten teachers to use teaching methods that appropriate to the characteristics and development of kindergarten children. Ministry of Education (2008: 19) stated that some of the learning model implemented in kindergarten, including the model of classical learning, group learning model with safety activities, learning model based on the point of activity, area learning model and learning model based on the current center and circle.

Learning in kindergarten is strongly related with games because games is the main learning vehicle in kindergarten. It is like what stated by morrison ( 1988:260) that the values in games are regarded as an appropriate learning media for children in kindergarten. Willis andHymon-Parker (2010) stated that playing is how young children learn and assimilate new things into what they already know. Saskatchewan Education (1994) it is through playing that children's early learning is achieved. The physical, socio-emotional and intellectual development of children is dependent upon activity. Therefore, opportunity for play is a key aspect of the kindergarten program. Moeslichatoen (2004: 24-25) added that playing has an important meaning for the growth and development of children. Frank and Caplan noted that playing has 16 meanings for the kids. As a result, playing, has a very important meaning for the lives of the children, the utilization of playing activities is a must for Kindergarten and

can not be ignored in all the way. For kindergarten students learn is playing and playing is learning.

B.E.F. Montolalu, et al. (2007 : 6:19 to 6:21 ) stated that for the sake of learning, games can be classified into six groups based on ability and skill developed by children , namely (1) games for the development of cognitive abilities , (2) games for the coordination of motoric movement exercise (physical) , (3) constructive games for the development of cognitive skills and motoric softskills , (4) role play games to language development practice, (5) games for artistic skill development, and (6) games for moral aspects growth and life values . Hadi Sukatno (in Ariani, et al. (1997/1998 : 164-165) classified traditional children's games based on the objectives contained, namely (1) games that immitate an action, (2) games for strength and skills, (3) games that is solely aimed at train the five senses, (4) games with language training, and (5) games with songs motion and rhythms.

A wide variety of games to choose from and performed by the children as they play. One type of game is *Dolanan anak*. Ki Hadjar Dewantara (2009: 147-148) stated that ... Some Javanese children games, such as: *sumbar, gateng, and unclang*, which educate children to be carefully (*titis pratitis*), agile, clear vision, and others. Then it also games such as: *dakon, cublak-cublak suweng, and kubuk* that educate children about the meaning of the calculations and estimates (assessment).... moreover games like *gobak, trembung, raton, cu, geritan, obrog, panahan, si, moldy, jelungan*, and others which are sports that will certainly educate children on issues of: health and body strength, dexterity and courage, visual acuity, and others.

Learning in Kindergarten has uniqueness, namely, assistance and development process, based on the interests and stages of child development, so learning in kindergarten should be an attractive and educative. Learning that is attractive and educative is a learning process that organized in an interactive, fun, encouraging, challenging, motivating children to actively participate, and provide an opportunity for initiative,

creativity, and independence of children in line with the talents, interests and stages of development.

Mansur (2009: 128-129) stated that learning in Kindergarten is based on child development tasks that are consistent with the stage of development. Learning programs in Kindergarten is an integrated program learning activities, which are intact. The contents of the program learning activities is learning materials as a means to achieve the ability to be expanded. This content is formulated in a wide range of themes to suit children and other activities. Paying attention to the values contained in the *Dolanan anak*, Classification of *Dolanan anak*, sub-themes and themes that should be presented to the learners, then the process of learning in kindergarten can utilize *Dolanan anak* as a vehicle for learning materials

### Research Method

This study will develop a model of learning in kindergarten, which utilizes *Dolanan anak* as its base. Therefore, this study uses research and development approach. Borg and Gall (1983: 771-772) stated that research and development in education is a process used to develop and validate educational products.

For the purposes of development of *Dolanan Anak* based Majeda, this research will be done in three stages, namely: (1) Preliminary Studies, and Design Model, (2) Model Trial, and (3) Operational testing, revision and preparation of modules, and Model Dissemination. Stages of research being undertaken at this time is the preliminary study and the development of a model that aims to produce Majeda format based on *Dolanan Anak*, which has been validated by an expert.

### Research Result and Discussion

After performing preliminary studies by (1) defining the model to be produced, (2) conducting library studies, and (3) performing field studies to acquire theoretical basis, and *Dolanan anak* that is potential to be used in learning, and research and development activities extended by performing the early stages of model development, in the form of activities (1) analyzing the learning materials, (2)

determining the format of Majeda based on *Dolanan anak*, and (3) validation by experts. The three activities are described as follows.

### Analizing Learning Material

Model development is started by an analysis of the skill or learning material that will be presented to the kindergarten students. The analysis shows that kindergarten education has a duty to facilitate the growth and development of the six aspects of kindergarten children, namely: (1) cognitive, (2) physical-motoric, (3) language, (4) social emotional, (5) the arts and creativity, and (6) the moral and religious values. The six aspects of growth and development, which is the task of development is then used as the basis of grouping *Dolanan anak*, so *Dolanan anak* grouped into 6 groups, namely:

- 1) Games to improve the children's cognitive aspect: (1) Ambah-ambah lemah, (2) Bethet Thing Thong, (3) Bitingan, (4) Cacah Bencah, (5) Cublak-cublak suweng, (6) Dakon, (7) Dam-daman, (8) Dhelikan/Jethungan, (9) Dhukther, (10) Dhul-dhulan, (11) Gobak sodor, (12) Gatheng, (13) Jamuran, (14) Jeg-jegan, (15) Jlong-jling kitiran, (16) Koko-koko, (17) Kubuk, (18) Sobyung, dan (19) Unclang.
- 2) Games to improve physic-motoric aspect: (1) Ambah-ambah lemah, (2) Benthik, (3) Bethet Thing Thong, (4) Blarak-blarak sempal, (5) Boy-boynan, (6) Dhul-dhulan, (7) Engklek/Sunda Manda, (8) Gamparan; (9) Gatheng. (10) Gobak sodor, (11) Ingkling Gunungan, (12) Jamuran, (13) Jeg-jegan, (14) Jethungan/Dhelikan, (15) Jlong-jling kitiran, (16) Kasti, (17) Kotak Pos, (18) Kucing-kucingan; (19) Lurah-lurahan, (20) Sekong, (21) Sobyung, (22) Tawon-tawonan, dan (22) Ular Naga.
- 3) Games to improve language skill: (1) Ancak-ancak alis, (2) Blarak-blarak sempal, (3) Bethet Thing Thong, (4) Cacah Bencah, (5) Cublak-cublak Suweng, (6) Dhoktri/Gotri, (8) Dhingklik Oglak-Aglik, (9) Gundhul-gundhul Pacul, (10) Jamuran. (11) Jaranan, (14) Lepetan, (15) Kotak Pos, (16) Man dhoblang, dan (17) Wulungan.

- 4) Games to improve social-emotional aspect:  
(1) Ancak-ancak alis, (2) Cublak-cublak Suweng, (3) Dhingklik Oglak-aglik, (4) Endhog-endhogan, (5) Gotri Legendari, (6) Jamuran, (7) Jaranan, (8) Lepetan, (9) Man dhoblang, (10) Menthog-menthog, (11) Pak Tani, (12) Polisi-polisinan, dan (13) Sluku-sluku Bathok.
- 5) Games to improve art and creativity aspects:  
(1) Ancak-ancak alis, (2) Bedhekan; (3) Bethet thing thong; (4) Blarak-blarak sempal; (5) Cublak-cublak suweng; (6) Dhempo; (7) Gotri Legendari; (8) Jamuran; (9) Jo pra kanca; (10) Kenthongan; (11) Kitiran; (12) Kotak Pos; (13) Lepetan; (14) Man Dhoblang; (15) mengutas bunga (meronce), (16) menyulam daun pisang atau janur, dan (17) membuat tikar; (18) Sepuran.
- 6) Games to improve moral and religious aspect:  
(1) Ambah-ambah lemah, (2) Bethet Thing Thong, (3) Cacah Bencah, (4) Cublak-cublak Suweng, (5) Dhuk Ther, (6) Gatheng, (7) Jamuran, (8) Jeg-jegan, (9) Koko-koko, (10) Man dhoblang, (11) Nini thowong, (12) Tumbaran, (13) Usreke, (14) Wulungan.

The results are in the form of a six-classification of dolanan anak, then, the study was continued by examining the characteristics of kindergarten students by focusing attention on growth and development task that should be undertaken by the kindergarten students during the process of education in kindergarten. The result of analysis of the characteristics kindergarten students is as follows. In general, the characteristics of kindergarten students is divided into three groups of characteristics, namely (1) age, (2) growth and development, and (3) study groups.

Results of the classification of 6 Dolanan anak and the review of the characteristics of child development, then paired with the theme and sub-theme network. Pairing is done based on the correspondence between types and values in Dolanan anak, child growth characteristics of the network themes and sub-themes that will be presented. In addition, the pairing also consider indicators that will be achieved. Note that needs to

be conveyed that the pairing does not impose all Dolanan anak must enter into themes and subthemes. Thus not all the themes and sub-themes to be filled by Dolanan anak. Harmonization between the theme and sub-theme and with Dolanan anak is using the following format.

Table 1. Harmonization format between theme/subtheme and Dolanan anak

| No    | Theme/Subtheme                                            | Dolanan Anak |
|-------|-----------------------------------------------------------|--------------|
| 1.    | SELF                                                      |              |
| 1.1   | Self identity                                             |              |
| 1.1.1 | Name and Home Address (Name, age, sex, home address, etc) |              |
| 1.1.2 | My Favourites (food, color, games, activity, etc)         |              |

#### Establishing the Format of Majeda based on Dolanan Anak

After analyzing the learning materials, activities continued with, establish the format of Majeda Based on Dolanan anak as the development of a draft model that will be generated. Analysis of learning material generates list of unification between the Theme and Subtheme and Dolanan children which have been classified based on the value and function for the growth and development of kindergarten children. These results are used as a basis to set the learning model that utilizes physical activity as a medium and its main vehicle. Type of physical activity that is used is a game that is already known by children and is already in the environment around the school, which is Dolanan anak. Dolanan anak as one of games that have attractive properties which attract the attention of children because of they play in accordance with their world. In addition, Dolanan anak also have an educative nature because Dolanan anak capable of being a vehicle for the development of educational values.

Based on the study, Learning Model Format is established. Since this learning model uses dolanan anak as the basic material and expected to be able to attract students attention and considered to

have educational values that is needed by kindergarten students, the final format is called Physiscal Activity Model which is Educative and Atractive based on Dolanan Anak or abbreviate as Majeda based on Dolanan Anak.

#### Learning Material (1)

##### 1. Theme/subtheme:

###### 1.1. Animal

###### 1.1.1. Animals around the house

- Farm Animal (Chicken, Cows, Goats, etc)
- Pets (Cats, Rabbits, Dogs, Ets).

##### 2. Indicators:

###### 2.1.

###### 2.2.

##### 3. Learning Objectives:

###### 3.1.

###### 3.2.

##### 4. Learning Activity

###### a. Teacher Activity

.....  
 .....  
 .....

###### b. Students Activity

.....  
 .....  
 .....

##### 5. Activity Scenario

| No | Steps of Activity | Description of Activities                                                                    |
|----|-------------------|----------------------------------------------------------------------------------------------|
| 1. | Opening           |                                                                                              |
| 2. | Main Activity     |                                                                                              |
|    | Break             |                                                                                              |
| 3. | Closing           | Afternoon Meeting<br>Todays conclusion, and evaluation<br>Closing: Closing prayer, greeting) |

#### Experts Validation

The third process in developing model is expert validation. To get a model that is appropriate with field need, expert validation is done in the form of Focus Group Discussion. Experts invited are (1) Nelva Rolina, M.Si. Kindergarten Learning Expert from PGPAUD FIP UNY, (2) Dapan, M,Kes. Traditional Games expert from FIK UNY, (3) Sundarti, M.Pd. Teacher in TK Model Sleman. FGD is also attended by 27 kindergarten teacher representatives from DIY

Experts and participants of the discussion deliver some suggestion to fix the model draft. They suggest that the pairing between dolanan anak and theme-subtheme should be re-examined by considering values in dolanan anak, students possibility to play, student level, introducing the games to the teacher. It also suggested not to push all theme-subtheme to be filled with dolanan anak available. Moreover, to prevent the boredom in the learning process the variation and interlude in using dolanan anak is needed, because it is imposible to use dolanan anak everyday.

Considering the input and suggestion from experts and participants of FGD toward the set of dolanan anak and theme-subtheme and majeda based on dolanan anak teaching material draft model, some changes are done to fix the harmonization between dolanan anak and theme-subtheme, and also format of majeda based on dolanan anak teaching material. The example of revision result is as follows:

Table 4. The contents of Theme/Subtheme and Dolanan Anak

| No    | Theme/subtheme                                           | Dolanan Anak                                                  |
|-------|----------------------------------------------------------|---------------------------------------------------------------|
| 1.    | SELF                                                     |                                                               |
| 1.1   | Self Identity                                            |                                                               |
| 1.1.1 | Name and Home Address<br>(Name,age,sex,home address,etc) | Soyang,<br>Gundul-gundul Pacul, Koko-koko, Lepetan, Ular Naga |
| 1.1.2 | My Favourites<br>(food,color,games,activity,etc)         | Sobyung,<br>Dhempo                                            |

#### Learning Material (1)

Theme/subtheme:

Animal/ Flying Animal

- Birds (Pigeons, finches, cockatoo)
- Insect (butterfly, dragonfly, grasshopper)

Indicators:

- 1) Introduction to vowels and consonants (K.40/ creative/ joy of reading)
- 2) Imitating the various symbols, vowel and consonant (K.42 /Creative/ joy of reading)
- 3) Make a students activity plan (K.5/ Hard Work))
- 4) Make various shapes of leaves, paper, and fabric scraps, cardboard, etc. (F.34 / Creative)
- 5) Able to do group task (S.1 / Democratic)
- 6) Painting with a variety of media (brushes, feathers, leaves, banana, etc.) (F.54 / Creative)

Learning Objectives:

- 1) Students are able to recognize a wide variety of symbols, vowel and consonant.
- 2) Students are able to imitate a wide variety of symbols, vowel and consonant.
- 3) Students are able to arrange an activity plan that will be used.
- 4) Students are able to build shapes from various material.
- 5) Students are able to work cooperatively with their friend.
- 6) Students are able to express themselves through drawing movements in detail

Learning Activity

a. Teachers Activity

In the opening / beginning activity, Teacher standing in front of the school to greet students,. Lined up students and ask students to pray "go to school". Teachers encourage children to pray and

memorize a short prayer and hadith. Teacher sings the song "Bird Parrot" and write the song lyric on the board. Teacher gives examples of how to imitate the letters correctly. The teacher gave praise to children who can mention vowel and consonant. Teachers guide children who can not mention vowel, consonant and imitate letters.

In the main activity, the teacher invites children to plan activities in making bird cages of cardboard, in groups. The teacher demonstrates how to make a bird cage out of cardboard. The teacher gives praise to children who can carry out the task group well, teachers guide the children who have not been able to make a bird cage out of cardboard.

Next, the teacher gives an example of how to paint a bird or insect, with a brush. The teacher assists children to paint with their paintbrush. The teacher give rewards to the child who is able to paint with their paintbrush without help, and the teacher also gives guidance to children who have not been able to paint with their paintbrush.

In the activities of the break, the teacher supervises activities carried out by the children, and asks the children to wash their hands.

**In the final activity**, the teacher conveys the message to the students to be diligent, obedient to parents, inviting pray, say hello and asked to shake hands.

b. Students Activity

In the preliminary/beginning activity, students shake hands with their teachers, and lined up in front of the classroom, and pray "go to school". Students go to class and sit down, then pray and recite a short prayer, Hadith, Toyyibah sentence, and Asma'ul Husna. Students are looking for vowels and consonants of the words mentioned by the teacher. Students observe and imitate the teacher writing the appropriate commands, and collecting the completed task. Furthermore, students restate the plan of activities to be carried out. Students work together to make a bird cage with their group. Students diligently working on a task while watching the teacher. Students pay attention to the teacher's explanation about how to paint with their

paintbrush. Students try to paint with a brush without help.

At break activities, children playing in the yard, utilize existing toys in the yard.

At the end of the activity, children pay attention to the teacher's explanation, get ready to go home, pray and say hello, then shake hands with their the teacher.

#### Learning Scenario

| No | Steps of Activity             | Description of Activities                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Opening Activity              | Opening:<br>Line-up and pray "go to school<br>Study Pray, syahadat<br>Short Prays Memorizing<br>Hafalan Hadist (Hadizt memorizing)<br>- Toyibah Sentences<br>- Asma'ul Husna<br>Circle Time:<br>Sharing with students, syiar and habituation, singing a song of "Kupu Kuwi" and "Burung kakatua".<br>Today's Review<br>Question and Answer:<br>Mentioning vowel and consonant letter in the song sung by the teacher then repeating the letter |
| 2  | Main Activity                 | Family Corner<br>Assignments:<br>Preparing a plan, make a bird or insects cage shape from cardboard in 1 group<br>Family Corner<br>Assignments::<br><i>Painting with brush, bird or insect</i>                                                                                                                                                                                                                                                 |
| 3  | Break, (30 Minutes)           | <i>Prayer for Rest &amp; prayer for go to bathroom</i><br><i>Playing the Game "Bethet thong thing", Imitating the movement of birds and insects)</i><br>Prayer for out of bathroom<br>Prayer for before and after eating and drinking                                                                                                                                                                                                          |
| 4  | Closing Activity, 30 Minutes) | Evaluation<br>Reflection<br>Prayer for Going Home<br>Greeting                                                                                                                                                                                                                                                                                                                                                                                  |

Taking into account the above examples of learning materials, suggests that the process of learning that utilizes Majeda *Dolanan Anak* based,

always utilizing *Dolanan Anak* on each episode of learning, ie learning by playing *Dolanan Anak* opened, which are in accordance with the theme-subthemes which are will be studied, and then the episode of main activity students will play some *Dolanan Anak* which are matches the theme-subtheme, but with a note that if there is no matching themes *Dolanan Anak*-subthemes which are will be taught, it is not used in the learning episode. In the closing episode, the teacher can add with sing traditional *Dolanan*, which has a lyric related to the theme and sub-themes being taught.

#### Conclusion

Answering the research question based on the description and analysis of data, and using the discussion result, the conclusion that can be stated is as follows.

1. Based on the results of the preliminary study through library and field studies can be identified 87 types / forms of *Dolanan Anak*, which is potential to be used as a medium, and a learning tool in kindergarten. *Dolanan Anak* can develop various aspects of the growth and development of children. Based on the values contained in the *Dolanan Anak*, and aspects of growth and development of children in kindergarten, *Dolanan Anak* grouped into 6 groups, namely (1) Games to develop the cognitive aspects of the child, (2) Games to develop physical-motoric aspects, (3) games to develop language skills, (4) games to develop social emotional aspects, (5) Games to develop aspects of art and creativity, and (6) Games to develop aspects of moral and religious values.
2. Results *Dolanan Anak* classification is a classification of six *Dolanan Anak*, then paired with the theme and sub-themes that will taught to the kindergarten children. Pairing is done based on the correspondence between types and values *Dolanan Anak*, with theme-subthemes that will be delivered. The result will put *Dolanan Anak* as a means learning materials, to deliver the theme and sub-theme. The learning process that utilizes *Dolanan Anak* is called, Physical Activity Model, that Educational and Attractive (Majeda), based on *Dolanan*



children. In other words, Majeda *Dolanan Anak* based on learning is a process that utilizes an attractive physical activity for children (attractive) and has the values of education (educational) as a means learning materials. Physical activity that used, are various types of *Dolanan Anak* that have been and in accordance with the characteristics of the learning material, so it is expected that the physical activity is educative and attractive.

3. It has been validated a model of learning formats, named Majeda based on *Dolanan anak* with the format: (1) Theme-subthemes, (2) indicators, (3) learning objectives, (4) Activity teacher and student activities, and (5) learning scenario.

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## COMICS MEDIA TO REDUCE *BULLYING* AMONG ELEMENTARY SCHOOL STUDENT

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### Abstract

Bullying is a verbal or physical forced act which is now happening in educational environment. If this isn't taken seriously, both for victim and bullies has a chance to lead to mental disturbance, drugs using, depression, even suicidal. Based on this case, this scientific paper aims to contribute ideas to reduce bullying behaviors among elementary school students through comic media. Comics were chosen as the media because 1) comics are practical and flexible, 2) comics are popular media and students are more interested in visual media, 3) attention to reading reaches the top, 4) student learn by imitation. The steps for this scientific paper are early detection by observing the students' behaviors and interviewing the school's administrator about bullying and then producing comics based on the real story that happened. The next step is testing the content and readability by an instructional media expert, and then testing, and the last is evaluating the effectiveness of the comic media and then reflecting and revising based on the result of the evaluation.

**Keyword:** *Bullying, Comics, Elementary School Students*

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### Background

Bullying is a violent act, whether in physical, verbal, or non-verbal act (psychological). Bullying caused some bad influences, such as mentally health disturbance, psychological depression, drug usage, even suicide act. Recently, bullying also happened in schools. Not only in Indonesia, bullying also happen in many other countries. Many researches showed that bullying in schools happen in many countries including Norway, Sweden, Denmark, Finland, Germany, Spain, Italy, England, Scotland, Ireland, Australia, Japan, Canada, and United States.

In United States, the bullying victims in elementary schools are predicted to come up at 19%. Most of bullying victim are still in elementary school, then decreased on high school students. While in Australia, 25-30% of the students had become bullying victims every day. Besides, in 2001, data from American Judgemental Department

showed that 77% of the American student had been bullied verbally, physically, and psychologically. (Sari, 2010:75).

In *Journal of School Health* (2003), Dake and friends found out the data of bullying victims in elementary school (grade one to five) ranges from lowest data that is 11.3% FROM 5,813 samples of Finland students to highest data that is 49.8% from 7,290 samples of Ireland students.

In Indonesia, there are 30 suicide cases in 6 to 15 years old kids and teenagers, which was reported in mass media between 2002-2005 (Yayasan Sejiwa Research: 2006). Based on SEJIWA survey on anti bullying workshop in 28 April 2006, obtained data that 94.9% of 250s participants stated that bullying happen in Indonesian schools. While the data from official page of Children protection national commission (<http://komnasp.wordpress.com>) in the last of 2011, there were many bullying acts revealed on students, especially

happens in schools. Refers to social complaint services data, the hotline services got 2.386 complaints through hotline services by phone calls, mails or e-mails. That means the children protection national commission got 200 complaints every month, more or less. This number increases 98% compared to the one in 2010, which were 1,234 complaints. All of the complaints sent to children protection national commission was bullying acts happens on student, verbally, physically, and psychologically one.

Research in England showed that most of bullying acts happen around schools, or in the way between schools and homes. When the bullying acts happen in schools, it usually take places in bathroom, canteen, schoolyard, or in the hall. Some of the students become the victim in the class. Bullying happens when the teachers or the adults are not around, that is why they thought there are not any bullying acts in their schools.

Based on those facts, we know that bullying happened in many places, and school, as a place to study, is one of it. Schools should be place for students to get educated from the teachers. Schools prepared the students to get knowledge, skills, kindness, increases the obedient to god, which meant to prepare them to get higher education level to live in society.

To those many bullying acts, needs some efforts to reduce or handle the bullying acts especially in schools environment. The efforts need some teamwork from related parties, such as the elementary students itself, schools staff including the teachers and the parents. But the real happened is bullying acts always happens in schools because of the unawareness of the parents and teachers about bullying act phenomenon in their schools. To reduce the bullying case, need many specific efforts. The realization needs help from the related parties. The existence of other media is really needed. Media that has literal purpose as mediator is needed to transfer or deliver the message.

To reduce the bullying acts in elementary schools, it needs a media that can attract students attention in order to deliver the message

successfully. Comics as a media to attract the students attention is one of the useful media to reduce the bullying acts in elementary schools, based on some things here: 1) COMICS IS FLEXIBLE AND PRACTICE 2) elementary schools students favorite media is tend to visual media. 3) READERS attention is on the peak, 4) CHILDREN studied by imitation.

This paper is purposed to study the bullying phenomenon happens in elementary schools environment and the effort to reduce it through comics media. Through this paper, hope it can help to give one of the alternative way or an idea to reduce the bullying acts. Teachers and parents is hoped to give more attention about this phenomenon.

## Discussion

### Bullying

Duane Alexander, M.D. (in Sejiwa. 2007:9), *National Institute for children and Human Development* (NICHD) in America explain, "Bullying is public health problems that needs special attention. The victim of bullying when childhood, likely to suffer depression and lack of confidence in adulthood. While bullies are likely to be involved in criminal activity in the future".

While Riauskina et al (2005) define school bullying as aggressive behavior toward authority that students performed repeatedly by a/ the group of students who have "power" to other students who are weaker with the aim of hurting the person. From that definition, Riauskina et al, then classify bullying behavior into 5 categories.

Categories are described in detail as follows.

- a. Physical bullying: hitting, pushing, pinching, scratching, also including squeeze and damage the goods that have by others.
- b. Verbal bullying (direct verbal contact): threatening, humiliating, degrading, disrupting, give a call name (name-calling), sarcasm, demeaning (put- down), denounced/mock, intimidating, taunting, (spreading rumors).

- c. Non Verbal bullying : see sarcastically, sticking out her tongue to show their expressions that degrades, insults, or threatens, usually accompanied by physical or verbal bullying.
- d. Indirect non-verbal: shush someone, manipulating friendships to be cracked, deliberately isolate or ignore, and send anonymous letters.
- e. Social Alienation: exclude someone from a group, such as by spreading rumors, and ridicule.
- f. Cyber bullying (electronics bullying): a form of bullying that use electronic device such as computers, mobile phones, internet, website, chat room, e-mail, SMS and so on. The goal is terrorized victims by using writing, animation, images and video recordings or films that are intimidated, hurt or cornering. This type of bullying is usually done by a group of teenagers who have a good ability about electronic device, information technology and other electronic media.

Most bullying act develops from some environment factor that so complex. There is no single factor that caused bullying. The factors that caused bullying are (Ariesto, 2009): a) Family. Bullies often come from troubled family: parents that often punish their children excessively or a house situations that full of stressful, aggression, and hostility.

Children will learn bullying behavior when observing the conflicts that occur in their parents, and then imitate it to his friends. If there is no explicit consequence of the environment on that behavior, he will learn that "those who have the power are allowed to behave aggressively, and his aggressive behavior can increase a person's status and power". From here children will develop his bullying behavior, b) School. Because the schools often ignore the existence of this bullying, children as bullies will get a reinforcement of their behavior to intimidate other children.

Bullying can growth rapidly in school environment that often give negative feedback to

their students, for example, a sentence that does not build up so it does not develop a sense of respect and honor among fellow members of the school; c) Peer Factor. Children when interacting with their friends in school and around the house, sometimes compelled to do bullying. Some children do bullying in effort to prove that they can fit in a particular group, even though they themselves are not comfortable with the behavior.

Bullying is growing rapidly in school and often give the negative impact for the students, such as form of punishment that unestablish so that can not develop the sense of respect between the school member.

### **Impact of Bullying**

There are a number of impacts caused by the action of bullying. For victims of bullying, the impact are not only physical but also psychological effects. In extreme cases, the physical effects can even lead to death. According to Hilda et al (in Anesty, 2011), bullying does not just affect the victim, but also the bullies, individuals who witnessed and social climate that will ultimately have an impact on the reputation of a community.

One of the effects of bullying that most obvious is the physical health problems. Some of the physical effects of bullying are usually caused headache, sore throat, flu, and chest pain. Even in extreme cases, such as beatings and torture that occurred in some government school, the impact of this extreme physical bullying lead to death.

Another impact is less visible, but the long-term effect is a decrease in psychological well-being and bad social adjustment. From research by Riauskina et al (2005), when the subjected get bullying, victims feel a lot of negative emotions (anger, resentment, upset, depressed, scared, embarrassed, sad, uncomfortable, threatened) but cannot face it. In the long time, these emotions can lead to the emergence of inferiority feelings that he is worthless.

Difficulty adjusting to the social environment also appears on the victims. Then they wanted to transfer to another school or out of school, and if

they are still in school, usually their academic achievements are interrupted or often deliberately not attending school.

According to Baumeister & Kessler, (in Sari, 2010: 75) bullying act placed first rank in the list of things that cause fear in school. Results of research conducted by the National Association of School Psychologist showed that more than 160,000 teens in the United States skipped their school each day because fear of bullying.

The most extreme of the psychological impact is the possibility for the emergence of psychological disorders in the victims of bullying, such as excessive anxiety, always feel scared, depressed, suicidal, and symptoms of post-traumatic stress disorder.

In Japan, according to the writings of Richard Werly "Persecuted Even on the Playground" in the Liberation magazine of 2001, 10% of students are stressed because of bullying, they have ever attempt suicide at least once. Japan's Ministry of Education estimates that 26,000 elementary and junior high school students skipped school because they face discriminatory behavior at school.

Bullying is an act which seems trivial but it gives such great impact on a child. The level of impact experienced by child victims of bullying can vary depending on the psychological and mental condition of the child.

Another impact of the long-term effect of bullying on the victim of bullying are bad social adaptation, want to move in or out of school, difficulty concentrating in class because just thinking about how to avoid the bullies. According that fact, efforts to reduce bullying acts is important thing to do in order to create independent youth and can achieve the developmental tasks optimally.

### **Comics Media**

According Heinich, Molenda, and Russell (1990) in Wina Sanjaya (2008: 204) revealed that media is a channel of communication. Derived from the Latin word for "between", the term referse "to anything that carries information between a source and a

receiver ". Association of Education and Communication Technology (AECT : 1977) defines as all forms of media and channels are used to convey the message or information (Azhar Arsyad, 2013:3).

According to Rossi and Breidle (in Wina Sanjaya, 2008:204) learning media are a number of tools and materials that can be used for educational purposes such as radio, television, books, newspapers, magazines, and so on. The media must be used in the learning process to facilitate the delivery of the messages to be conveyed to the students.

The use of media was seen as important in a learning process. It raises the better interpretations of verbal and comprehension. So the media is very helpful in delivering messages to students. In addition, the media also add student's excitement and motivation to study. Implementation of the learning process can be more interesting and interactive. In addition there are many more benefits of the use of instructional media in the learning process every day.

Media by Anderson (Wina Sanjaya, 2008:213) were divided into 8 groups: audio, print, audio-print, visual projects silent, silent visual project with audio, visual motion, visual motion with audio, objects, and computers. And from 8 types of media, comics including in print media.

Comics is very potential learning media. The visual aspect can optimize the eye to observe the flow of images and text that are included. Most people are visual learners who associate the information into the image. So, comicss can be used by students to identify concepts, learn to count, recognize and surrounding natural environment, and to encourage interest in reading.

Comics is an instructional media for effective and efficient learning. Comics also including fun media in the learning process. If students find a pleasant atmosphere in the learning process, they will be totally involved in the learning process. This total involvement is important to deliver a successful result. Moral message conveyed is expected to be able to understand, be understood, and applied properly by elementary school students.

Of the exposure can be concluded that the comicss as the visual medium can be used as an alternative efforts to reduce bullying in elementary school students. Comics featuring illustrated stories that contain anti-bullying moral values are expected to be instructional media that appropriate with the development stage of elementary school students.

The results study by Hadi, S. (2005) with the title "Addition and subtraction Smithers Learning Using Comicss Media In Fourth Grade Students of SD Muhammadiyah 08 Dau Malang", UM Graduate Program, shows that by using comics make students feel happy, relaxed, and did not feel strained in the following study. Learning that use comicss media can motivate students to understand the problems presented better.

Muttaqin (2009) in his thesis "Development Learning Comicss as Alternative Learning Media Science at 3<sup>th</sup> Grade in SDN 2 Gladag District Banyuwangi" told his research results that the material presented in comics form preferred by children of 3<sup>th</sup> grade. This may be one reason for the use of comics in an effort to reduce bullying that occurs in the environment of elementary school students.

### **Elementary School Students**

Based on an analysis of existing conditions, primary school students is one of the best levels in the personal formation of a quality human being. These periods is a golden age in which the personality of students so easy to be formed from the existing environment. Rousseau in William Crain (2007:18) classifies human development entered the age of 2 to 12 years are included in Childhood. At this time the children already have a certain kind of ratios that are directly related to the movement of the body and the five senses and the things that are concrete.

Based on cognitive development according to Piaget in Eka Izzaty Rita et al, (2008:35) the average elementary school student- average between the ages of 7-11 years are included in the end of childhood that are in the concrete operational stage of thinking. Concepts that exist in the child has begun to clear and concrete.

Piaget noted that children in the concrete operational stage is now no longer have a high self-absorbed in his thoughts. He had begun to think of other people in his life, so elementary school children can already invited to work well together with other friends or with their teachers. This golden age should be optimized to the maximum in order to establish good personal on every person.

This primary school age are important development steps and fundamental to the success of student progress to the next phase. Primary school age children experiencing physical, cognitive, language, moral, emotional, and social. Here is the explanation. is as follows:

### **Physical development**

In this age the physical development of children tend to be more stable. Physical changes, both in height and weight can vary. However, these changes will evolve faster when it began to enter puberty. Primary school age children need a lot of skill activities related to physical activity. Because at this time the child's motor skills progress rapidly, more smoothly, and more coordinated than ever before. The physical activity is needed to help develop the body stability and stability of motion and coordination training to enhance various skills.

### **Cognitive development**

At this stage, the child is in the stage of concrete operations in thinking, where there is the concept of childhood is a vague concept and it is not clear, has become more concrete. At primary school age, the child's intellectual development is very substantial, because of the nature egocentric, children become more able to react logically. Child had intellectual stimulation, or carry out learning tasks that require intellectual ability or cognitive abilities (such as reading, writing and counting).

### **Language development**

The development of children's language is much better mostly their ability to understand and interpret spoken and written communication. Elementary School age was a period of rapid growth ability to recognize master vocabulary. In this first period, the child has mastered about 2,500 words

and at the end of the period (age 11-12 years) has been able to control about 50,000 words, which will be used by the student to interact with their environment. Children also have been increasingly using the verb appropriate to explain a thing.

#### **Moral Development**

At primary school age, children are able to obey the regulation or guidance from their parents or social environment. Their thinking about the concept of justice has changed no longer rigid matching what they hear, but it can be adjusted with the condition. Children at this age will apply their understanding in his life everyday that will be the norm, values, rules, and manners in society.

#### **Emotional development**

Emotional development of a child is influenced by various factors such as gender, age, environment, relationships and parental guidance. In addition, factors of race, culture, ethnicity, and nation were also influenced. Elementary school age students have started learning to control their expression of emotions. Child's ability to control emotions acquired through imitation and practice (habituation) of the daily lives of students. According to Eka Izzaty Rita (2008 : 112) there are 8 characteristics of emotion in primary school age children, namely : 1) relatively short lasting emotional, 2) strong or severe, 3) easy change, 4) appears repeatedly, 5) different, 6) can be detected from the behavior symptom, 7) changes in the strength, and 8) changes in emotional expressions.

#### **Social development**

Social development in children is strongly influenced by its immediate environment, especially their family and surrounding community. The role of parents take a very important role especially in developing children's skills associate and socialize with their environment. The social development of elementary school age children characterized by the expansion of the relationship, in addition to their family also began to forge new bonds with peers (peer group) or classmates, so the space for developing student's social relationships will expand, which they will use to society even up to the state.

The social development of elementary school-age children characterized by the expansion of relation. Relationship with the family have also begun to forge new bonds to peer group of the classmates so that space for social relations will expand and then they can use to wider society.

At primary school age (6-12 years) children are able to react intellectual stimulation, or carry out learning tasks that require intellectual ability or cognitive abilities (such as: reading, writing, interacting and counting). Robert J. Havighurst in Sumantri Mulyani (2007 : 1.16) divides the developmental tasks of childhood as follows.

- a. Learning physical skills necessary for a particular game.
- b. Form a certain attitude toward oneself as a growing organism.
- c. Learning to associate in harmony with peers.
- d. Learn the role that corresponds to their gender.
- e. Foster basic skills in reading, writing, and arithmetic.
- f. Learning to develop concepts that are needed in daily activity.
- g. Forming conscience, morality, and values.
- h. Obtain the freedom of self.
- i. Developing attitudes toward groups and social institutions.

Each individual stage of development should be in line with the development of other aspects of physical, psychological, emotional, moral, and social. So its need for an adjustment of each aspects to the individual stages of development.

#### **Conclusion**

Bullying is a violent act, whether in physical, verbal, or non-verbal act (psychological). Bullying caused some bad influences both for the subject and the victim. Some bad influences is such as depression, inferior, anger, even suicide, which is need special attention from the parents and the

teachers. Some efforts to reduce the bullying acts is needed where bullying is not just involving the adult but also the children in elementary school age.

Bullying acts is not just happens in sosial place place where the children is usually to play, but also happen in schools. This needs teachers' attention to set up a strategy to reduce the bullying acts.

Comics media is chosen as one of the stratergy to reduce the bullying acts especially in elementary schools. Comics is a potential media. Visual aspect optimalsed the eyes to precise the inserted text and pictures.

Most of student with visual learners which asosiated information to pictures. So comics can be used by student to recognized the concept, learn to count, recognized the surrounding envirotnment, and boost the read interest. Teachers can be teamworked with experts to arrange the comics which contained of moral messages about bullying acts and proper for student age. So the bullying acts could be reduced.

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## REINFORCEMENT OF SOCIETY BASED EDUCATION CONCEPT ON ENGLISH LEARNING TEACHING IN PRAWIROTAMAN ELEMENTARY SCHOOL IN KAMPUNG TURIS PRAWIROTAMAN, YOGYAKARTA

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### Abstract

Government of Indonesia has set new concept of education through its Curriculum named Kurikulum 2013 (Curriculum 2013). It is corrective and complementary to the previous curriculum, the KTSP (Kurikulum Tingkat Satuan Pendidikan) which was established in 2006. Its main goals are developing moral value and mastering the global sciences and technology based on local wisdom. The local wisdom fosters the education based on society concepts. Prawirotaman Elementary School (SD Prawirotaman) is located in Prawirotaman kampung turis (tourist inn area), Yogyakarta. This given name has cohered since 1970 as so many cottages and inns are available for the foreign tourists. Kampung turis has human resources potential for the effective learning for the students especially in the global foreign language enrichment for having supplies to ease the global connection and to open the access the global society. Besides, this becomes a local wisdom that could raise the special characteristic of education in this area. Prawirotaman Elementary School integrates this potential in English Learning Teaching within the curriculum but the implementation has not totally engaged the society. Deeply, the reinforcement of social based education that involves the society in school as a unity is important. Not only does it include the potential of local wisdom into the curriculum but also cooperates with the society to make meaningful education for the students.

**Keyword:** *Society Based Education Concept, Kampung Turis, SD Prawirotaman, English Teaching Learning.*

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### Introduction

#### Education Roles in Globalization Era

One important role of education is carrying on the maturity and readiness of people in their life. These potencies which will be developed are mentioned in the Law of National Education System Number 20/2003, in term of education as:

“A deliberate and conscious effort to create the learning atmosphere and learning process in order to develop the student potencies actively, to have spiritual strength of religious, self control, personality, intelligence, noble character and all skills which are needed by them, society, the nation, and state”.

Educational range that is the educational activities and all condition relate to the learning and

teaching is the venue and situation which the student are having interactions. They are family (informal), school (formal), and society (nonformal). According to the Decree of Indonesian Ministry of Education and Culture in 1984, these three ranges named institutions of education or units of education [1]. Individual involvement in society will get along the interactions between students, student and teacher, or student and range of educations. The society will always expect to the useful interactions that could help them in fulfilling the needs. In the other side, the potencies that are available within the society could become a supply of knowledges, values and skills for the people especially the students in the future. This is the society function as social institutions to prepare them through nonformal education.

The society in globalization era is not only a group of people who are having direct but also indirect interactions. They are facilitated by the information and technology which are compulse the progressive human resources and encourage the opened acces and wider competitions in global community. Kir Haryana said that globalization era drive powerful competitions in technology, management, and human resources [2]. In the other words, it will provide the fields of rivalry that open interactions between individual, individual and group, or groups without any government borders. It could open wide chances and gives big impact in the whole life aspects, economy, social, politic, cultures, and education.

#### **Hirst & Peters delivered,**

“Here globalization is viewed ‘as simply another adjective to describe cross-border relations between countries’. It describes the growth in international exchange and interdependence. With growing flows of trade and capital investment there is the possibility of moving beyond inter-national economy, (where ‘the principle entitites are national economies’) to a ‘stronger’ version, a globalized economy in which distinct national economies are subsumed and rearticulated into the system by international processes and transactions”[3].

Hence, this offered advantages notably in economy will prompt the government to stimulate mastering basic competencies of communication, language. Language is a form of communication whether oral, written or marks, which is based on symbols system [4]. English developed as a global language since the countries that use it as mother language become more powerful in economy and politics. English now has official status in sixty countries and a prominent position in twenty more countries [5]. Nowadays, English is one of the most used language in many countries that supports the international exchange especially for the developing country, including Indonesia.

Therefore, education as a deliberate and systematic effort to make better life [6] should succeed the global competition by educating the learners with knowledges, values, and skills. Then,

educating them in the intenational relations is important [7]. Ali bin Abi Thalib also said, “Educate and get your children ready for an era that is not yours”[8]. School as a formal institution of education tries to establish systematic associations for the student in order to assist and encounter them in this dynamic life. Prof. Langeveld emphasized that interaction is “*paedagogische gepreformeerd veld*”, which means interaction was the preliminary field of education [9]. Thus, the government has been drawing up the strategy in primary education that is mentioned in The National Law of Education System Number 2/1989 about Curriculum,

The curriculum of primary education at least consist of these subjects: 1) Education of Pancasila, 2) Religious Education, 3) Civic Education, 4) Bahasa, 5) Reading and Writting, 6) Mathematics (calculating is included), 7) the Introduction of Science and technology, 8) Earth Science, 9) National and General history, 10) Handicraft and Arts 11) Physical Education and Health, 12) Picturing, and 13) English.

The number of subjects are parts of curriculum which is whole programs, facilities, and activities of certain educational or training institutions to realize its vision and mission [10]. Along with the developing era, this purposes are developed and engaged the curriculum which showed the awareness of globalization. So, the education system of Indonesia has been revised for ten times since its independence, that are in 1947, 1952, 1964, 1968, 1975, 1984, 1994, 2004, 2006), dan 2013.

The policy of English learning and teaching as description of curriculum will help the student in preparing the next level of education and the global community. Its position is in the main subject since mentioned in The National Law Number 2/1898 until 2013. In the implementation phase of Kurikulum 2013 in Elementary School, some determined subjects are Religious and Moral Education, Education of Pancasila and Civilization, Bahasa, Mathematics, Natural and Social Sciences, Physical Education and Health [11]. It seems that English have no longer occupies the position of main subjects.

### English Teaching Learning in Prawirotaman Elementary School

The alteration status of English becomes extracurricular subjects are chosen in some schools by considering the local wisdom and advantages of community and the awareness of the globalization challenges. One of them is Prawirotaman Elementary School which settle extracurricular of English as priority for the 1<sup>st</sup> until 6<sup>th</sup> grade. The student are guided by an English Education Teacher who also become a Classroom Teacher. Its learning teaching schedule is executed between 1<sup>st</sup> until 8<sup>th</sup> time without any separation. Instead, it is taught in the morning time. The data taken from the observation and interview. Marshall stated that through observation, the researcher learn about behavior and the meaning attached to those behavior [12] Whereas, Esterberg stated that interview is the matching of two people in order to discuss about informations and ideas through question and answer for the meaning of certain topic reconstruction [13].

#### Interview

The learning teaching as a system consists of elements. They are 1) goals, 2) materials, 3) the learning activity, 4) methods, 5) tools/equipments, 6) learning resources, and 7) evaluation [14]. Grounded on the interview with the Headmaster, the policy of English extracurricular implementation was taken because of the opportunity of location in *Kampung Turis* (tourists village) which has a unique potential as learning resources for English [15]. (Deeply, the teacher explaine that *first*, most of student are from the area and surroundings. It means that *Kampung turis* is familiar to them. *Second*, the English learning teaching is exiting student enough through some methods that are singing, using medias, lecturing, and giving an assignment. *Third*, English worksheet is used as the main learning resources. Learning resources as an information which is delivered and saved in many forms of media and could assist the student as a curriculum representative [16]. The resources will involve how the evaluation does. Then in the class, the tacher mostly evaluate by practicing simple English (vocabularies, conversation, etc.), the written test within the worksheet, and spoken test.

The society participations in English learning teaching is not engaged enough. Directly in the class activity, teacher has never taken them in. Whereas, they are the closest sphere in having effective learning. The achievement target of English learning is simple conversation. But, the confidence, bravery, and motivations of students have not supported yet and impeded it. Some tourist visited the class sometimes to see how was the activities but the students had less of courage and skills to speak even answering them. Then, students have already had the knowledge about conversation or vocabularies possibly, but they still need more training, and challenging activity to improve their skills through more application. Four students from 5th grade was asked about their perspective of English and all of then answered that it is difficult and causes the less of attention and motivation within the class.

#### Observation

The observation was taken in Wednesday, February 26th 2014 at 11.00-12.00 in 5th grade which is small class with 25 students. The learning activities are consist of three activities, they are opening (pre-instructional), teacing (instructional), and evaluation and follow up [17]. The opening started by praying together and then having question and aswer about the previous and coming materials.

The teacher sill dominating the activities by explaining and lecturing. In the middle of teaching activities, teacher also asked to sing a song, but she did not have impressive respons. Then she decided to give some task in the worksheet until the end of class.

From the main learning activities showed that general evalation and confirmation had not run well. The teacher correcting their task one by one depended on whom had finished while guiding the others. And then close the lesson.

The less of interest and motivation to study could be seen from the learning process of students which had less enthusiastic and also had less of response in singing instruction. The learning process as a part of education has not been fully involved the people who act as providers of learning

resources. Indirectly, community involvement was still in curriculum.

#### **Prawirotaman Elementary School and *Kampung Turis*: an idealism**

SD Prawirotaman is one of the primary schools in Prawirotaman area. It is located in the middle of the *kampung Turis* which provides opportunities for communication establishment by native speaker for learning. That one of the benefits of the relationship between the communities with educational institutions for educational institutions is to facilitate the resource utilization [18]. Meanwhile, the major influence in developing the school community is, "..... that advocated community schools the curriculum that centers around the lives of students while involving members of the community as educational resources"[19]. The existence and functioning of communities that support the learning and can encourage 'learning to perform and to commne in it ' alluded to in the formulation of educational pillars proposed by UNESCO that there are four pillars that need to be considered in the study, (1) learning to know, (2) learning to do, (3) learning to live together, and (4) learning to be[20].

*Kampung Turis* Prawirotaman is a village in the south of Yogyakarta which is the central of the lodge for the tourists since 1970. Closer learning resource to students' lives that could facilitate the learning in the classroom as a miniature of community will be more meaningful and more effective to achieve learning objectives.

*Kampung Turis* provides a great opportunity to access these learning resources. Now, how the school attracts to access opportunities from a variety of programs such as the one door by volunteers of guest lecturing. In addition, the availability of local wisdom can uphold the hallmark of primary school graduates in print that excels in the mastery of foreign languages , not only English but maybe another foreign language. In the future, the students will be trained to develop entrepreneurship skills such as considering lodging business in their neighborhood. The cooperation between school and community can be contributed to the improvement of education quality in the

relevant elementary school by its characteristicsto become school model like SD Muhammadiyah Sapen with academic values and its achievements of international championships, SD Giwangan as a model of educational inclusion and so on.

#### **Implementation of Community-Based Education.**

As mentioned earlier, Indonesia applied the *Kurikulum Tingkat Satuan Pendidikan (KTSP)* or called as Education Unit Level Curriculum (SBC) in 2006 that combines the central and local wisdom as a special curriculum. The diversity of knowledges, cultures, values of province and areas in Indonesia was the reason for each school to have the authority to set curriculum according to their area of excellence. The concept of curriculum is very close to the concept of community-based education where KTSP has a linkage between the three interrelated aspects namely, (a) learning activities, (b) assessment, and (c) management of school-based curriculum [21]. In addition its development was formulated explicitly with the concept of community-based education that is (a) based on the needs, requirements, and interests of learners and the environment, (b) a diverse and integrated, (c) responsive to the development of sciences and technology and the arts, (d) relevant to the needs of life, (e) comprehensive and continuous, (f) lifelong learning, and (g) the balance between national and regional interests [22]. Even KTSP implemented English Learning Teaching, Prawirotaman Elementary School supported in terms of teachers and better facilities although direct community involvement was not running optimally. This becomes a problem, especially with make English as compulsory extracurricular that in fact support the teaching and facilities will be reduced. The Scottish Executive explained that community Education is a key contributor to lifelong learning and plays a significant part in combating social exclusion [23]. The community education is a key contribution to lifelong learning and critical role in the fight for social improvement). Education as a maturing process does not stop as long as the individual is still alive to help people to be active and proactive. The implication of concept lifelong education concept in educational programs as proposed by W. Ananda Guruge are, a) functional

literacy education, b) vocational education, c) professional education, d) education in the direction of change and development, e) education state citizenship and political maturity, and f) cultural education and leisure time [24].

Finally, the education process will be entirely devoted to improving the quality of life. Learning community also referred as a learning environment. William Burton classifies the environment, regional, state of nature, history, population, agriculture, economy and trade, factories and industry, banking and finance, transportation, communication, livelihood, wealth distribution, the standard of living, health, education, religion, government and politics, recreation, the view or community initiatives [25]. So that community-based education is a process that involves various aspects of both the material and non-material.

Before going further, these are the importance of learning communities are [26]:

- 1) Instill a realistic understanding of the social processes in life.
- 2) Develop an awareness and sensitivity to social problems.
- 3) Students learn on their interests, so that learning becomes more meaningful.
- 4) It is the practice of scientific thinking, based on the facts that exist in society.
- 5) To encourage a sense of responsibility towards society.
- 6) Strengthen and enrich the curriculum implementation in actual practical situation.
- 7) Prepare the student to face on of people's lives.
- 8) Also strives to improve the quality of people's lives.
- 9) Integrate the school with the community as an effort to make the school as an institution of public welfare.
- 10) Fostering cooperation among individuals with social institutions.

11) Develop observation skills and habits among students.

12) Develop an appreciation and understanding of the social services of the community.

Community -based education is an educational mechanisms that provides opportunities for lifelong learning, triggered by the demand for " independence " to survive in the modern and global era. So that management education should be tailored to the needs of the community and open up the opportunity for participation in the education community itself. Conceptually, KTSP is a community -based education isa model of education providing which is based on the principle of " from the people, by the people and for the people "[27]. Therefore, in practice, public education should be guided by the prevailing values, Michael W. Galbraith put forward the principle of community-based education as [28]:

- a. Self –determination.
- b. Self- help, reducing dependency problem solving for others.
- c. Leadership development.
- d. Localization, explore the local potential as a developing of independence and progress of society
- e. Integrated delivery of service, cooperation with various relevant agencies and organizations to develop community and public service.
- f. Reduce duplication of service
- g. Accept diversity: give the freedom to participate regardless of physical deficiencies, age, class, etc.
- h. Institutional resposiveness
- i. Lifelong learning.

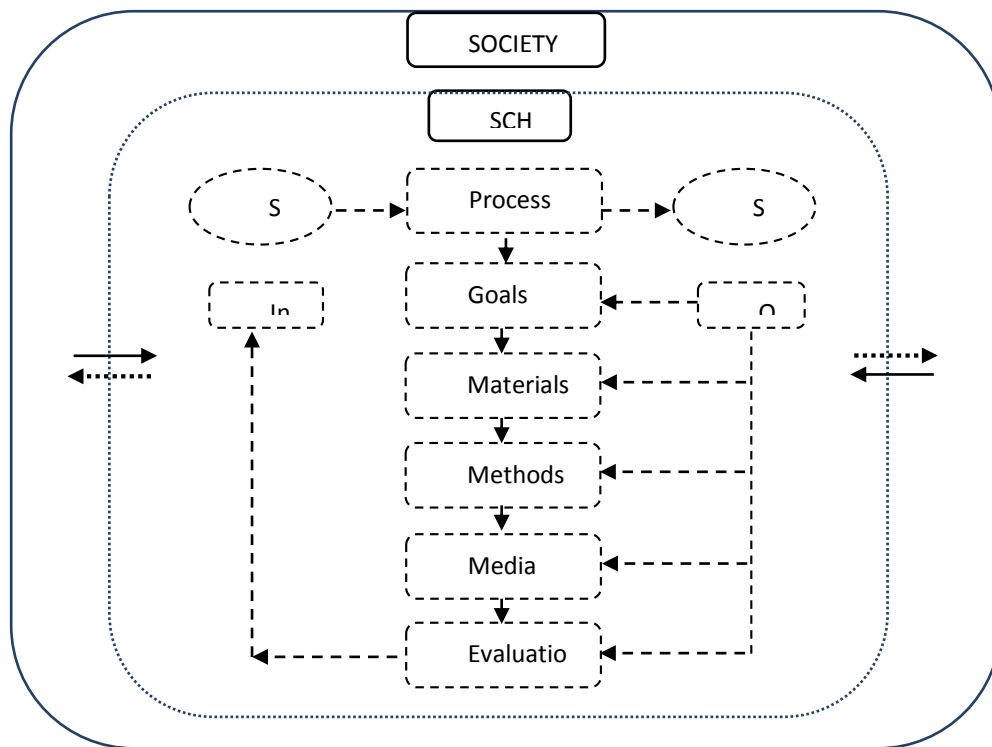


Figure 1. Relation between student, School, and Community

In addition, community-based education should also prepare a few things namely, (1) technology, (2) the availability of the institution, (3) meaningful learning programs, (4) learning programs into the community, (5) partnership / collaboration between community organizations [29]. The availability of technology and the ability of communities would improve the provision of facilities and measures to achieve the goal. Organizing and setting a group of people in a structured and systematic through institutional coordination will bridge the parties that can help develop community-based education. The simple institutions in Prawirotaman could be family, school institutions, the village officials, as well as the business manager of the village inn.

In addition, the community is a combination of individual and different groups, so that in seeking the progress of society, communication and collaboration is needed to achieve goals through programs that are useful for the community members. Motivation in the implementation of the program was also influenced by the ownership of the program where the program is initiated and owned by the community.

These five elements are carried in order to achieve a prosperous society and a civil society that is civilized and become central of civilization. Cak Nur mentioned the main features of civil society is egalitarianism, the award to someone based on merit (not ethnicity, descent, race, and so on), the openness of the active participation of all community members, law enforcement and justice, tolerance and pluralism and deliberation [30]. A just and equitable society without any discrimination in all aspects of life and uphold tolerance and appreciation of the diverse environments.

Next is to determine the steps to realize the civil society especially in the Prawirotaman through education. According to Marzuki, education both at school and outside of school society could be taken [31]. Law Number 20/2003 Article 4, paragraph 1 stated that education held in a democratic and fair and not discriminatory to uphold human rights, religious values, cultural values, and national diversity. Language education, especially in schools is represented in the learning activities that has been carried out English as an extracurricular. Whereas, in nonformal education, the adults in the school environment help to deliver the knowledge

and skills that have been acquired in the classroom in community interaction. The cooperation can be forged by the school and the community to support learning. *First*, representing native speaker on another speakers as the sources of learning. *Second*, bringing the students to the community with several techniques such as field trips, surveys and interviews with observation, dedication and community service, work experience, and camping. For the elementary school level, both activities that possibly be done is the field trip, surveys, and camping.

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## @UnESa-GAI<sub>n</sub> LEARNING STRATEGY FOR DEVELOPING THE SCIENCE PROBLEM SOLVING ABILITY OF ELEMENTARY SCHOOL STUDENTS

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### Abstract

The ultimate goal of this study was to produce a @UNESA-gain learning strategy that can impart knowledge and skills and processes to develop the science problem-solving skills of primary school students. This research used a quantitative method which implemented the Dick & Carey model of research and development comprising a preliminary study, the preparation and validation of learning tools and learning strategies design, formative evaluation which includes one to one try out, small group and try out the field try out, and summative evaluation. This result is the second stage of the research design. The @UNESA-gain learning strategy have 7 learning stages comprising Attention (@), Understanding Problem (Un), Exploration (E), Sharing (Sa), Game (G), Assesment (A) dan Individual Task (In). It is designed specifically for students with concrete operations stage of cognitive development with characteristic: training prerequisite processes skills before problem solving activities carried out, developing guided problem-solving skills that balances the role of teachers and students, more recreational by incorporating elements of play to strengthen the concepts understanding into long-term memory, considering the student cognitive styles in a way that balances the activity in accordance with it characteristics and providing appropriate scaffolding so that students with different cognitive styles may learn optimally. According to five experts of evaluation, @UNESA-gain learning strategy is said to be valid. It means that this learning strategy is developed based on a strong theoretical rationale, all components of the learning strategies are consistently interrelated and can be implemented in the learning of science for elementary school students.

**Keywords:** @UNESA-gain learning strategy, cognitive style, cognitive development, problem solving, process skills, problem solving skills, science

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### Introduction

Science learning paradigm are widely applied in our classroom is behaviorism that emphasizes transfer of knowledge and skill. In this paradigm teacher acts as a learning center, dominating the class, and as the main source of knowledge, lack of attention to the activity, interaction, and construction of knowledge by students. By this way, learning will not result the meaningful learning. Learning science should be able to bring the students actively involved in constructing knowledge.

Learning science in the state elementary school of Banjarmasin still tend to be take place conventionally i.e. through lectures method, the learning begins by describing concepts or theory, give examples, and closed by providing practice

questions to students. Science learning process does not involve high order thinking, very rarely use cooperative strategies and discussion methods and less utilize contextual environmental issues [1]. This condition is also thought to contribute to the low quality of science learning outcomes. PISA (the Program of International Student Assessment) in 2009 reported that the literacy science of 15-year-old Indonesian students is placed in rank 60 of 65 OECD countries and partner countries [2], and even dropped to rank 64 in 2012 with science literacy score below the average of OECD countries [3].

Education that just knowledge oriented will not be able to produce output that is able to adapt to the fast development of science and technology. Students need to be equipped with a variety of soft skills, a person's skills in dealing with oneself and others [4] as self-directed learning, high order



thinking, process skills, social skills, and problem-solving skills.

Science education should be able to develop the necessary understanding and skills of students as a problem solver [5], [6], [7], [8]. In order that children are able to develop problem-solving skills early, learning science should integratively equip students with three capabilities namely cognitive, affective and psychomotor. This means that the learning paradigm should be student-centered, which fully engages students both physically and mentally in constructing knowledge through learning process. The National Curriculum 2013 [9] even emphasizes and reinforces this paradigm through the implementation of a scientific approach in learning. According to [10], problem-solving skills are not only important for students as provision in the future, but will also affect the success of students in their next lesson.

The ability to solve problems involving higher-order thinking can be taught from an early childhood through the appropriate learning [11]. Physical experiences, manipulation of environment and social interactions affect to the individual development. This means that developmental tasks can be taught to the children at the early developmental stages. Children can be successful in the more simple Piaget's developmental tasks that require the same ability [12].

Various studies show that implementation of problem-solving based learning strategies such as Problem Based Learning, generally success to improve the understanding of concepts and problem-solving skills of learners with the higher education level [13], but at the elementary school level it is still a early stage and have not been showed the consistent finding [14]. It is related to the cognitive development of learners, increasing their age increasing their formal reasoning ability so that they are able to work more complex problem solving analytically.

In order to develop problem-solving skills to elementary school students, the problem-solving-based learning strategy must be able to accomodate cognitive development of students, who are at the

concrete operations stage. At this stage, student will be able to think logically if these thinking can be applied to authentic or concrete examples [15]. According to [16], students in this concrete operations stage can draw conclusions based on the concrete experience gained through their senses (empirical inductive reasoning).

According to Dewey in [17], children are socially active learners who learn by exploring their environment. Students' knowledge will become meaningful and live when it's applied as a solution to variety of problems. Learning should also provide a funy environment, for instance by implementing game which appropriate to the students' characteristics. It's will lead the student to well perform accommodation and assimilation of knowledge.

In addition to the cognitive development stage, cognitive style also affects learning outcomes [18], [19], [20], [21], [22], [23]. Cognitive development related to one's readiness and ability to perform a certain development tasks including learning, while cognitive style refers to a person's preferred way to process information. Ref. [24] argues that "Cognitive styles refer to differences in people's preferred way of processing (perceiving, organizing, and analyzing) information, using cognitive brain-based mechanisms and structures. They are assumed to be rrelatively stable and possibly innate. Whilst cognitive style can influence a person's behavior, other processing strategies may at times be employed depending on the task demand-this is because they are only preferences".

Students with field independent (FI) cognitive style shows many characteristics as analytical, individual and independent, while students with a field dependent (FD) cognitive style tend to be global, social and less independent in perceiving, remembering, thinking, and problem solving [25], [26]. Although there is a tendency that FI student achieve learning outcome better than FD student, but according to [27] both FI and FD can be successful in learning as long as it is used the appropriate strategy to their style.

Accommodation of cognitive styles in learning, may lead to emergence self-motivation in learning. In addition, by knowing the students' cognitive style teacher will be easier to design strategy that facilitate cognitive style differences and provide scaffolding, in order that learning takes place optimally.

This study develops the guided problem-solving-based learning strategy appropriate to student's cognitive development stage and consider the student's cognitive styles. It's characteristic are (1) designed specifically for students with concrete operations stage of cognitive development (2) train the prerequisite skills before problem solving activities carried out if the process skills still need improvement, (3) intended to develop guided problem-solving skills that balancing the role of teachers and students (4) more enjoyable by incorporating elements of play to strengthen the understanding of the concept (rehearsal games), and (5) balance the activities in accordance with characters of difference student's cognitive styles.

This learning strategy was developed based on some fundamental theories comprising Piaget's theory of cognitive development, Witkins theory of cognitive style, Atkinson & Shiffrin's theory of information processing, Robert M. Gagne's learning event, cognitive learning theory, Bruner theory of learning discovery, and Vygotsky's social constructivist learning theory. This learning strategy is called guided problem solving based learning strategy of @UnESa-GAI (Attention, Understanding Problem, Exploration, Sharing, Games, Assessment and Individual task) or @UnESa-GAI learning strategy (see Table 2).

Implementation that learning strategy is expected to fully engage elementary school students in enjoyable learning, train students the problem-solving skills in the concrete cognitive development stage through application of process skills, consider the difference of students' cognitive styles and provide appropriate scaffolding, and improve the mastery of content knowledge.

The problem of this study is: Can the @UnESa-GAI learning strategy develops the

science problems solving ability of elementary school students? The problem that will be studied in the first stages is: How the validity of @UnESa-GAI learning strategy? Learning strategy is considered to be valid if it is developed based on a strong theoretical rationale and all components of the learning strategy are consistently interrelated.

### **Research Method**

This research applies design research and development model of Dick & Carey [28]. This study consists of four phases: (1) a preliminary study in the form of field survey to determine the teachers and students habits in learning as early information for designing the learning strategy, to know the students' cognitive development stage and cognitive styles (2) preparation and validation of the instructional strategy design and its tools, (3) field trials of learning strategy that include one to one evaluation, small group evaluations, field trial evaluation to determine its effectiveness and practicality in training science problem-solving ability to elementary school students.

### **Research Result and Discussion**

#### **Research Result**

##### **Preliminary study**

Based on a questionnaire completed by teachers of Banjarmasin elementary school, indicate that the category of schools (school accreditation: A, B, and C) is not related to the learning strategies used by teachers in science teaching, as well as teachers' experience. Strategy most frequently used by teachers in teaching science is the conventional strategy "explaining the concept, giving examples, asking-questions, giving exercise and evaluating learning outcomes through cognitive tests to measure understanding of the concept". According to students, learning science in class occasionally conduct investigations, observations, discussions and presentations both in the 5th grade and the low grades. Students are not accustomed work in cooperative group, discussing a concept and presenting the results in front of the class. Students of the school with accreditation level A or B generally stated that they occasionally work in

groups to do the exercises after the teacher delivering the lesson. Meanwhile, students of the school in with accreditation level C has never follow the learning with a group discussion.

The results of cognitive style test with GEFT instrument [29] and formal reasoning ability test by using Tobin & William's instrument were adapted by PSMS [30], shows that (1) almost all students have the concrete reasoning ability and few of them have transition and beginning formal reasoning and (2) the most students of school with category C and B have FD cognitive style while the majority students of schools with category A have the FD cognitive style although there is the significant number, 33 % of FI cognitive styles.

Validation results of @UnESa-GAI learning strategy design

@UnESa-GAI learning strategy has been validated by 5 science education experts comprising Prof. Dr. Muslim Ibrahim, M. Pd (Science Education Experts of PPS Unesa Surabaya), Prof. Dra. Herawati Susilo, M. Sc, Ph. D (Biology Education Expert of PPS UM Malang), Prof. Effendy, Ph. D (Chemistry Education Expert of PPS UM Malang), Dr. Wasis, M. Si (Physical Education Expert of PPS Unesa Surabaya) and Dr. H. M Zaini, M. Pd (Biology Education Expert of PPS UNLAM Banjarmasin). The expert validation results are presented in Table 1.

## Discussion

Strategy most frequently used by teachers in teaching science is the conventional strategy "explain the concept, give examples, ask question and answer, give exercise" and evaluate learning outcomes by using cognitive tests to measure the students understanding of the concept". Students are almost never involved in learning that requires them to find a concept through discovery learning. The use of the contextual environment in order to train the ability to observe, collect data and draw a conclusion also still lacking. This fact can be an indicator that students are not usual to apply various basic process skills that are needed to solve scientific problems. Thus the learning strategy that are designed to be able to train students to apply a range of skills required in the process of solving science problems. According to [31] the higher the class grades the better the students' science process skills. The average of integrated science process skills scores of junior high school students of Banjarmasin just reach 57.7. Based on these studies, it can be predicted that the elementary school students' process skills are still relatively inadequate. Therefore, students need to be trained science process skills early through appropriate learning strategy.

Table 1 Validation results of @UnESa-GAI learning strategy

| NO | Elements Rated                                                                                                            | Validator/Score |   |   |   |   |
|----|---------------------------------------------------------------------------------------------------------------------------|-----------------|---|---|---|---|
|    |                                                                                                                           | 1               | 2 | 3 | 4 | 5 |
| A. | The supporting theory of learning strategy                                                                                |                 |   |   |   |   |
| 1  | Conformity of supporting theory to learning strategy characteristic                                                       | 4               | 3 | 4 | 4 | 4 |
| 2  | The supporting theory is comprehensive                                                                                    | 4               | 3 | 4 | 4 | 4 |
|    | The mean score of the supporting theory element                                                                           | 3,8             |   |   |   |   |
| B. | Components of learning strategy                                                                                           |                 |   |   |   |   |
|    | The learning stages                                                                                                       |                 |   |   |   |   |
| 3  | Description of learning activities are clear and detail                                                                   | 4               | 4 | 4 | 4 | 4 |
| 4  | Generally, the learning stage can be implemented in learning process                                                      | 3               | 3 | 3 | 3 | 3 |
|    | The mean score of the learning stage element                                                                              | 3,5             |   |   |   |   |
|    | b. The social system                                                                                                      |                 |   |   |   |   |
| 5  | Learning atmosphere that is desired by learning strategy to support the development of students' problems-solving ability | 4               | 3 | 3 | 4 | 4 |
| 6  | Possibility of teachers to create the learning atmosphere in accordance with it desired by strategy                       | 3               | 3 | 3 | 3 | 4 |
|    | The mean score of social element                                                                                          | 3,3             |   |   |   |   |
|    | c. The principle of reaction                                                                                              |                 |   |   |   |   |
| 7  | The expected teacher's behaviors in learning, support the development of students' problems-solving ability               | 3               | 3 | 3 | 4 | 4 |
| 8  | The possibility of realizing the teacher's behavior as expected by strategy                                               | 3               | 3 | 3 | 4 | 4 |
|    | The mean score of principle of reaction                                                                                   | 3,4             |   |   |   |   |

| NO | Elements Rated                                                                                           | Validator/Score |    |    |    |    |
|----|----------------------------------------------------------------------------------------------------------|-----------------|----|----|----|----|
|    |                                                                                                          | 1               | 2  | 3  | 4  | 5  |
|    | d. Supporting System                                                                                     |                 |    |    |    |    |
| 9  | Learning tools prepared to support implementation of the strategy (worksheets, teaching materials, etc.) | 4               | 3  | 4  | 3  | 4  |
| 10 | Comprehensiveness of learning tools                                                                      | 4               | 3  | 3  | 4  | 4  |
|    | The mean score of supportingsystem element                                                               | 3,6             |    |    |    |    |
|    | e. Instructional and nurturing effects                                                                   |                 |    |    |    |    |
| 11 | The expected instructional effect ofinstructionin accordance with the purpose of learning strategy       | 4               | 3  | 3  | 4  | 4  |
| 12 | The expected nurturing effect ofinstructionin accordance with the purpose of learning strategy           | 3               | 3  | 3  | 3  | 4  |
|    | The mean score of instructional and nurturing effect of instruction element                              | 3,6             |    |    |    |    |
|    | C. The linkage between componentsof strategy                                                             |                 |    |    |    |    |
| 13 | The linkage of learning steps with other components of the strategy                                      | 4               | 3  | 3  | 4  | 4  |
| 14 | The linkage of social system with other components of the strategy                                       | 4               | 3  | 3  | 4  | 4  |
| 15 | The linkage of principle of reaction with other components of the strategy                               | 4               | 3  | 3  | 4  | 4  |
| 16 | The linkage of supporting system with other components of the strategy                                   | 4               | 3  | 3  | 4  | 4  |
| 17 | The linkage of instructional and accompanying effect with other components of the strategy               | 4               | 3  | 3  | 3  | 4  |
|    | The mean score of the linkage between componentsof strategy element                                      | 3,6             |    |    |    |    |
|    | D. General rating                                                                                        |                 |    |    |    |    |
| 18 | This learning strategypresents the activity that is appropriate to the concrete operations stage         | 3               | 3  | 4  | 4  | 4  |
| 19 | This learning strategy accommodate the individual differences especially student's cognitive styles      | 3               | 3  | 3  | 4  | 4  |
| 20 | This learning strategy balance the role between teachers and students in learning                        | 4               | 3  | 3  | 4  | 4  |
| 21 | This learning strategy provides opportunities for students to engage actively in learning                | 4               | 4  | 3  | 4  | 4  |
| 22 | This learning strategy providesadequate learning guidance or scaffolding for students                    | 4               | 3  | 3  | 4  | 4  |
| 23 | This learning strategy presents the contextual activity and enjoyable.                                   | 4               | 3  | 3  | 4  | 4  |
| 24 | This learning strategy can be well implemented in a class to achieve its goals                           | 4               | 3  | 3  | 3  | 4  |
|    | The mean score of the general of assessment element                                                      | 3,6             |    |    |    |    |
|    | Total validation scores                                                                                  | 89              | 74 | 77 | 90 | 95 |
|    | The mean of total validationscore                                                                        | 85              |    |    |    |    |

Validation score criteria: 4 = excellent; 3 = good; 2=moderate;1= poor

Total validationscorecriteria: 79-96 = very good ; 61-78 = good ; 43-60 = moderate ; 24-42 =poor

The results of the formal reasoning tests ability of elementary students, demonstrate compliance with Piaget's stage of cognitive development, where the children with 6-11 years old have the concrete cognitive development stage [12]. Almost all the students in grade 5 elementary school (age 10-11 years) are in concrete cognitive development stage, and a small portion is in the initial formal operations stage. At the concrete operations stage, students can draw conclusions based on concrete experience gained through their senses. Thus, materials and instructional strategy that are applied must be contextual and fully engage students in the process of constructing knowledge and achieve a certain skill. Therefore, the problem-solving based learning strategy and its tools should be designed so that appropriate to the concrete cognitive development stage of elementary school students.

Generally, problem solving based learning strategies involve analysis and synthesis activities that more suitable to students with Field Independent (FI) cognitive styles compared to students with Field Dependent (FD) cognitive style. Therefore, learning strategy and its tools have to facilitate students with FD cognitive style through assistance or adequate scaffolding in order that students are able to reach their zone of proximal development. If not, the student with the cognitive style of FD which is the largest part of elementary school students will fail in learning.

The components of @UnESa-GAln learning strategy designed refers to the Joyce & Weil model [32] (1992) where every model/strategy comprising syntax (syntax), social systems, support system, and the instructional effect and nurturing effect. Before implementing this strategy, teachers need to strengthen the basic prerequisite proses skills

include observing, classifying, measuring, inferring, and predicting through direct instruction strategy. Syntax of @UnESa-GAI learning strategy are presented in Table 2.

**Social system.** The social systems of @ UnESa-GAI learning strategy is based on the Vygotsky's social constructivism philosophy. This system emphasizes the social construction of knowledge were conducted by student actively base on his responsibility, but it will be stronger if it's done in heterogen cooperative groups that have varying cognitive styles. @UnESa-GAI learning strategy is designed for elementary school students that balance the roles of teachers and students in the learning process (moderate structure).

**The principle of the reaction.** This strategy combines activities in accordance with the character of Field Independent (FI) cognitive style that prefer to analysis, competition and independent, as well as activities in accordance with the character of Field Dependent (FD) cognitive style who prefer to teamwork and sharing in groups. Therefore, teachers should provide appropriate scaffolding, encourage, and motivate students a long the learning process so that all students can learn optimally. In the early learning teachers may play more important role, but a long with increasing problem solving ability of the students, teacher sholud reduce their role so that it is reach the balance. When the teacher playing a role in learning process, they acts as a facilitator.

**Support systems.** Support systems of the @UnESa-GAI learning strategy consisted of (1) guidebook of learning strategy (2) lesson plan (3) student worksheet which contains the problem to be solved and manual problem solving stage (4) teaching materials (5) various forms of assessment instruments as well as the assessment rubric (assessment of cognitive abilities, affective, psychomotor and portfolio).

**Instructional and nurturing effect.** The expected instructional effect of implementation of @UnESa-GAI learning strategy include: mastery of content knowledge, process skills, problem solving abilities (modified of [33] and [34], which comprise ability to understand the issues, make predictions, seek information from various sources/observation, present data,interpret data, make conclusions, present the solution, and evaluate the obtained solution. Meanwhile, the expected nurturing effect of this strategy comprise social skills [35], character as conscientious, honest, and responsible [9], and a positive attitude towards learning science.

Expert rating to the learning strategy shows that the mean score of elements between 3-4 which means that each element of the @UnESa-GAI learning strategy in good to excellent category. Meanwhile, base on the mean of total validation score (85), the learning strategy is in excellent category. At the end of the evaluation, all validators also stated that "@UnESa-GAI learning strategy acceptable". It means that the learning strategy can be applied in learning science to train the science problem-solving ability of elementary school students.

Based on the input from the validator, the design of strategy have been rivised include: individual tasks that previously only as enrichment, it's improved by incorporating into construction of assessment (2) assessment of affective be qualitative by discribing its trend, the scores are not averaged, and (3) optimize the use of ICT in learning, particularly in the teaching materials. In addition, one of the 5 experts also suggests to habituate teachers and students, who are not familiar yet to the strategy, through lesson study.

Then, @UnESa-Gain learning strategy will be field evaluated in class that include one to one evaluation, small group evaluations, and field trial

Table 2 Syntax of @UnESa-GAI<sub>n</sub> learning strategy

| No                                        | Learning Steps        | Learning Activities                                                                                                                                                                                                                                                                                                                                                                       | Objectives                                                                                               |
|-------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| @UnESa-GAI <sub>n</sub> Learning Strategy |                       |                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                          |
| 1                                         | Attention             | Teachers attract the students' attention to learning through: delivery of learning objectives, apperception, remind and reinforce the prerequisite knowledge                                                                                                                                                                                                                              | to prepare students physically and mentally to learn<br>to ensure that student have prior knowledge      |
| 2                                         | Understanding Problem | Teacher convey a problem, and ask groups to understand the problem and instructions on the worksheet                                                                                                                                                                                                                                                                                      | to train the students' ability to analyze information, identify and formulate the problems (FI)          |
| 3                                         | Exploration           | Teacher encourage and help students to gather the appropriate information, conduct the simple eksperimen or observation to solve the problem.<br>Students are encouraged and guided by the teacher to:<br>formulate hypothesis or prediction<br>seek informations from various sources or perform observation to gather data<br>interpret data<br>draw conclusion<br>evaluatethe solution | to train students to solve problems by applying process skills and collaboration (FI & FD)               |
| 4                                         | Sharing               | Teachers become moderator in sharing of ideas between groups and provide feedback<br>Students share their ideas between groups about the problem-solving results                                                                                                                                                                                                                          | to train students to communicate the solution of the problem (FD)                                        |
| 5                                         | Game                  | The teacher invites students to play rehearsal game in order to deepen and strengthen the content knowledge<br>Students play the rehearsal game<br>The throwing ball game: Ball that contains the questions of key concepts thrown from one student to another (accompanied by singing). Students who get the ball as the singing was stopped must answer the question                    | to deepen and strengthen retention of content knowledge with enjoyable (FI & FD)                         |
| 6                                         | Assesment             | Teacher evaluate both knowledge and problem solving ability<br>Students take the test                                                                                                                                                                                                                                                                                                     | to measure conceptual understanding, problem-solving ability and motivate the students for learning (FI) |
| 7                                         | Individual Task       | The teacher gives the individual task of problem solving as learning enrichment<br>Student solve the problems individually as the homework                                                                                                                                                                                                                                                | to strengthen the problem-solving ability and facilitate the transfer of knowledge (FI)                  |

Note:

FD = learning process tends to correspond with the character of field dependent cognitive style  
FI = learning process tends to correspond with the character of field independent cognitive style

evaluation to observe the effectiveness and practicality in training the science problem-solving skills of elementary school students.

#### Conclusion

According to evaluation conducted by five experts, @UnESa-GAI<sub>n</sub> learning strategy is said to be valid. It mean that this learning strategy is developed based on strong theoretical rationale, all

components of the learning strategy consistently interrelated and can be implemented in learning science for elementary school students.

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## SCIENTIFIC APPROACH IN THEMATIC INTEGRATED TEACHING OF CURRICULUM 2013 TO DEVELOP CRITICAL THINKING SKILLS OF ELEMENTARY SCHOOL STUDENTS

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### Abstract

The purpose of this paper is to reveal that the scientific approach used in the integrated thematic teaching based on Curriculum in 2013 could be used to develop the critical thinking skills of elementary school students. The writing of the paper used a descriptive method from the sources in journals, reference books, articles and other media. The stages of data analysis were data collection, data reduction, data display and conclusion. The results of this study are expected to be used as a reference in the classroom, especially for elementary school students. The students can use the regular stages of learning approaches to solve problems around their learning environment.

**Keywords:** *scientific approach, thematic integrated, Curriculum 2013, critical thinking, elementary school students*

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### Introduction

Entering the century and the era of globalization the world has a lot to deal with and prepare for things that would be a big issue. The issue was also encountered issues that can affect human life. That is global warming, hunger, food security, poverty, health, and others. Therefore, various preparations necessary to address the issues that arise, provide innovative ideas, as well as take the opportunity of these issues for the good of the many people.

However, in an effort to do that then everyone needs to know what problems arise. Knowledge of the issues that arise obtained through critical analysis of an issue or problem. Through this attitude in addition to assessing a person's problems are also expected to take the appropriate steps.

A critical attitude is itself a character entered in the focus of education in Indonesia. It was stated in the realm of 18 characters that must be developed in the learning process (mendikbud.go.id). This is because, in the educational process not only emphasize on the knowledge skills and attitudes remained well.

Thus, it is critical because one of the characters then it must be fostered. This is because, according to (Helen G. Douglas via Samani and Haryanto, 2011:41) states that the character is not a legacy, but a process that must be provided on an ongoing basis.

Based on the above the primary school level is one of the formal education that can initiate this critical character recognition step. This is because students need a habituation to a character that is expected.

Therefore, the Indonesian government has also implemented a new curriculum that is curriculum in 2013. This curriculum is based on that learners also require education that shape their character. In addition, this curriculum in elementary school education contains about subjects that are integrated within a particular theme. The theme used is a theme that is close to the life and experiences of students. This is because students are expected to be more easy to understand the material presented.

In addition, the curriculum is learning to use a scientific approach. This approach shows the steps that can be passed students in understanding a particular mater. This approach contains observing,

questioning, associating, experimenting, and communicating. Thus, students can understand the material in a structured way.

The use of this curriculum is still a lot of trial and invite controversy. However, the actual curriculum can support the cultivation of students' critical stance early on. Thus, according to the cognitive level of Bloom's revised (Sanjaya, 2008:213) that is created in addition to the students at the school can get knowledge so they can begin to find solutions to problems that arise in their environment.

## **Discussion**

### **Scientific Approaches in Primary Schools**

Under Decree No. 65 In 2013 then there are some characteristics in the learning curriculum of 2013. In this lesson students focused on three areas of education. First, the knowledge gained from remembering, understanding, applying, analyzing, evaluating, and creating. Secondly, the attitude obtained from the receiving, running, respect, appreciate, and practice. And the third is a skill that is used to acquire the knowledge and attitude of observing, questioning, experimenting, associating, presenting, and creating.

Of exposure to the realm of education in the curriculum of 2013 over the learning approach used is scientific approach (Kemdikbud, 2013:60). As is the scientific approach consists of observing, questioning, associating, experiment, and communicating. The application is based on that learning should be oriented and creative process rather than results. The evaluation is also necessary that covers the entire process of authentic assessment.

This scientific approach is based on the scientific method. Therefore, this approach to support the learning process was using the method of inquiry or research. To encourage the learners ability to produce contextual work, either individually or in groups then it is highly recommended to use project-based learning approach to the learning process (Regulation No. 65 th in 2013).

### **Embedding Attitude of Critical through Scientific Approach**

To strengthen the scientific approach is necessary to associating and critical attitude of students in order to research (discovery). In order to so-called scientific, the research method (method of inquiry) should be based on evidence of the object observable, empirical and measurable with the principles of the specific associating. Because the scientific method generally includes a series of data collection activities or facts through observation and experimentation, then formulate and test hypotheses. Actually what is discussed with reference to the scientific method : (1) the existence of a fact, (2) the nature of free - prejudice, (3) the nature of the objective, and (4) the existence of analysis. With the scientific method as it is expected we will have a love of nature is an objective truth, not easily believe in things that are not rational, want to know, is not easy to create prejudice, always optimistic (Kemendikbud, 2013 : 141).

Based on the statement above, the critical attitude can be trained from the learning activities using scientific approach. Students will observe to give up to find his own concept of the material presented. Thus, students will gain a learning experience to ensure learning objectives achieved (Sanjaya, 2008:60).

Critical thinking can be obtained from the activities inquired and through inquiry based learning methods (Hii Sii Ching and Fong Soon Fook, 2013). It is also found in 2013 that the curriculum scientific approach students are expected to questioning for the facts derived from observation activities. In addition, as mentioned above that this approach should also be supported by research learning. Thus, students can understand the material independently with the guidance of a teacher.

Karabulut (2012) states that there are three things that can support the formation of a critical attitude of students. Three things are discussions as a way to promote critical - thinking in classrooms, use of writing as a way to promote critical - thinking in classrooms, and use of questions as a way to promote critical - thinking in classrooms. The three

things are also contained in the learning activities that use scientific approach as follows.

1. Discussions as a way to promote critical - thinking in classrooms  
The discussion has become a major requirement in the curriculum of learning activities in 2013. Students emphasis on process and creativity (Kemdikbud, 2013:59). The discussion in this study is in menaya activities in which students can discuss with the teacher, experiment, and communicate the results.
2. Use of writing as a way to promote critical - thinking in classrooms  
In learning activities that use scientific approach also trained students write down the facts of observation. This is expected to ease in making sense of the observations.
3. Use of questions as a way to promote critical - thinking in classrooms  
After students conduct observations of the students are expected to produce a question. It will be used as ingredients in further activity that is associating, experimenting, and communicating.

Thus, it can be seen that through scientific approach used in the learning process, students can practice critical thinking. Through this approach the learning activities can be oriented to student centered where the teacher acts as a facilitator.

## Conclusion

Scientific approach to the curriculum in 2013 is used to emphasize the process of learning the process and creativity of students. Stages of this approach consists of observing, questioning, assosiating, experimenting, and communicating. The approach can also train the students' critical thinking attitude. This is due to the fact that students can ask derived from observed activity as a next step.

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## INCREASING THE INTEREST IN READING IN THE LIBRARY OF GRADE IV STUDENTS OF OF WATES WONOBOYO ELEMENTARY SCHOOL, TEMANGGUNG

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### Abstract

This study was aimed at describing and proving the implementation of reading in the library in increasing the reading interest of grade IV students of Wates Wonoboyo Elementary School. The data collection techniques were interviews, questionnaires, and non participation observation. The results of this study indicated that (1) the level of reading interest showed a pretty good improvement over where students often took the advantage of time off school to visit the library, (2) the use of the library as a media of student learning could provide tangible evidence as an educative function which helped a lot of students to learn and acquire the ability to transfer the basic concepts of knowledge, (3) the activity help students in creative writing.

**Keywords:** *library, interests, reading*

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### INTRODUCTION

The library's role which is as a learning resource in the era of curriculum implementation in 2013 will be very important. This is appropriate to the characteristics of the 2013 curriculum, which requires adjustment model of active student learning, innovative, creative and interesting by using the approach (science approach) and authentic assessment, in which the scientific approach focuses on learning activities of observing, asking, reasoning, trying, and communicating and forming networks and at last it can produce a creative man. One of the roles that can produce a creative and innovative learning place is a library. Learning is not only in the classroom but also in other places, especially in the library. The result is getting and finding creative and innovative students through reading.

1. As a source of teaching and learning activities. The school library helps the educational and teaching programs related to the objectives contained in the curriculum. Developing a child's ability to use information sources. For teachers, school library can be a place to help them in teaching and enriching knowledge.
2. Helping students to clarify and to extend knowledge in the field of study. The existence

and purpose of the school library should be integrated with the rest of the teaching and learning activities. Therefore, the school library can be used as a light laboratory in accordance with the objectives contained in the curriculum.

3. Developing a culture of reading interests and habits towards independent learning.
4. Helping children to develop talents and love interests.
5. Allowing children to find information on library. Students' proficiency in finding information in library will help them to learn independently and to accelerate in following lessons.
6. Library school is a place of healthy recreation obtaining material through reading appropriate books to the age level of the child's intelligence.
7. Library schools expand learning opportunities for students.

### Increasing The Interest in Reading

The interest in reading is a strong and deep concern that is accompanied by a sense of excitement to the act of reading so that it can move a person to read on their own accord. Interest in

reading is a powerful source of motivation for someone to analyze and to recall as well as to evaluate the readings that have been read, which is a learning experience and it will affect the shape and intensity of a person in determining his or her goal later in the future. It is also a part of the self-development process that should always be sharpened because the interest in reading was not obtained from birth (Petty & Jensen, 1980; Hurlock, 1993).

Interest in reading can also be explained as an intrinsic motivation to channelize or to transfer new ideas and thoughts which effects positively on personal enrichment process, intellectual development, helping others to understand the issues and to develop a self-concept as a learning process that can be used for a long time. (Petty & Jensen, 1980; Ormrod, 2003).

The current condition of the students are generally less like a boo, reading is not obtrusive, and they would rather watch television. Reading will be limited to the basic textbooks used in schools. It is similar to a forced and because there is repetition or the teacher gives homework. Persistence of reading is only owned by a couple of kids at school. As a result, children have very limited knowledge, the mastery of the language is low and the ability in capturing the contents of reading is too low. This case must be a sign and a warning for teachers and parents where interest in reading must be nurtured and developed. When interest in reading is high, teacher will be easier and lighter to carry out their duties. Children will be more active in finding and gaining knowledge. Children would fill their own containers sense of curiosity. Classroom atmosphere will be lived and active children who learn in the classroom will get meaningful lesson.

According to an expert, "Tell me what you are reading, I will soon be able to assess your attitude". The phrase means that a private person can be known through his reading because reading materials can be formed personally. Therefore, it is necessary for the child choose selectively in his reading. In entering upon this era of globalization, the role of reading is very important in human life. Reading activities is needed and necessary to

achieve progress and success in the politics, social, economic, and cultural. Rapid flow of information and communication today cause what we know today, about yesterday, perhaps this morning or last night has changed. Development of reading is needed to be improved on an ongoing basis in order to form a civilized society to read. Especially in this country, a popular effective way to obtain information is through reading. Therefore, people need to be motivated from an early age in order to be happy and aware on reading. The teachers must have the ability and willingness to read so that to implement the learning process is not only relying on science that has been ever learned before becoming a teacher. If teachers assume that their knowledges are adequate and does not follow the development of the science, they can lead conflict between teachers and students, because the material which is taught to the students may have been 'old' or 'out of date'. It actually does not need to be happenened if the teachers always 'up to date' by reading. Actually the purposes of development of reading interest among others are to:

- 1 Encourage interest and habit of reading in order to create a civilized society to read;
- 2 Improve library services;
- 3 Create an informative society that is ready to participate in all development aspects;
4. Have current knowledge, not 'out of date';
5. Improve the ability to think; and
6. Fill free time.

Interest in reading can be grown and developed so that it becomes a habit especially at 2nd points can help students to improve their reading skills and also through mastery of proper technique. Proper reading techniques can make reading be more efficient, effective, and attractive. The activities for increasing interest and habit of reading among are:

- 1 Implementing the schedules of story in the school library;
- 2 Giving reading assignments;

- 3 Giving the task of making an abstract;
- 4 Motivating the implementation of wall magazine;
- 5 Organizing competitions reading;
- 6 Implementing race -making clipping;
- 7 Motivating school magazine or newsletter;
- 8 Organizing book exhibitions associated with the commemoration day of national and religious;
- 9 Giving assignment to students for helping the librarian in;
- 10 Implementing of the reading program;
- 11 Providing technical guidance for reading.

Based on all activities above, there is meaningless things if there is no teacher's support. Teachers have important roles to improve their students' interests in reading. Regarding to the 1st point above, there is a need to help the students' skills in reading that occurs at 4th grade in SD Negeri Wates Kecamatan wonobojo Kabupaten Temanggung.

#### **Library Guidance**

One of the activities to promote and to enhance the skills of reading is library guidance. It refers to The Laws of The Republic of Indonesia in 1989 number 2 about National Education, article 35 and an explanation, that each educational path should provide learning resources. Thus, the library becomes an absolute requirement in the organization of education in some levels and implementations.

The viability and success of education in school will also be determined by the empowerment of school library as a learning resource center. Library as a learning resource center should be able to play an active role in attracting the students' interests because by reading the science window will be opened. Students' knowledge is no longer confined to the four walls of classroom but they will search, browse, and explore the science presented in the form of reading good books, magazines, and newspapers. For sure, if it comes with the presence

of electronic media (TV and Internet), students' knowledge will rapidly develop with extensive knowledge.

If students have opened their hearts to find the broadest science, reading means it has grown on him/her and has stayed further development of the educators and school library. For both teachers and library managers must know how to read the implemented lessons in order to nurture students to understand and to comprehend the content of reading in a relatively short time. In the implementation of library development, teachers and library managers must first understand the duties and functions of the library which is as a center of teaching and learning activities that are capable of developing the child's ability to use resources, to help teachers in teaching, and to enrich science knowledge. Besides, there are also to help students for clarifying and expanding his knowledge of a lesson in class and for conducting research in the library. Furthermore, developing interests, abilities, and habits of reading will lead to the habit of self-learning.

Next, helping children to develop talents, interests, and passions is also needed. Besides, getting children to look for information in the library will help him/her later in the next lesson. In addition, the school library is a place for recreation that is obtaining material through reading fiction books. Similarly, school libraries expand learning opportunities for students to move on from the things above, then the library is set to gather reading material, to provide, to manage, to organize, to spread information, to foster interest in reading, and to develop students' knowledge and to give reason on power supplied through reading. The library is selected. Thus, the library also serves as a filter and a reading the flow information that is coming into the library as a source of support of active student learning.

In general, library management includes organizing the school library, provisioning of collection, administrating of the collection (collection and inventory identity), collecting management (classification of the type of object, subject, charts, and tables), cataloging (descriptive

and subject), and giving library user services (promotion, user guidance, service system, loan system, statistical services, and preparation of a book on the shelf).

#### Library Implementation of Reading Interest of 4th Grade in SD Negeri Wates Kecamatan Wonoboyo Kabupaten Temanggung

After the library construction of SD Negeri Wates Kecamatan Wonoboyo Kabupaten Temanggung, its development is significantly improved. Considering to the 4th grade of this school, the data shows that students' interest are enough high what can be proved with the following results :

#### Data analysis

The following will describe the results of research on the use of library school in improving students' interest of reading, through field research using questionnaires with 20 questions. The analysis in the field can be presented in tabular form. In calculating the percentage, the formula used is:

$$P = \frac{F}{N} \times 100 \%$$

Description:

P : Percentage

E : Frequency of respondents

N : Sample

The number of samples taken in this study the authors was 25 % x 155 : 38.75 students. Then the writer made it up to 40. The distribution of questionnaires was divided into 20 respondents for 4th grade and 20 respondents for 5th grade. In this study, the writer used a sample of random sample selection process whereby each unit of the population has an equal chance to be selected. The number of samples is based on the opinion of Arikunto who stated that " if a population of more than one hundred people then the sample can be taken around 10 % -15 % or 20 % -25 % or more" depending on the ability of the study.

This questionnaire of Wates Wonoboyo Waterford Elementary School was made especially for 4th and 5th grades. From the results of questionnaires that was based on 40 respondents consisting of 20 students from 4th grade and 20 students from 5th grade, the writer find the results that is outlined in table, as below.

Tabel 1. Habits are often performed at the time

| Answer Alternative | Frequency | Percentage Class IV (%) | Frequency | Percentage Class V (%) |
|--------------------|-----------|-------------------------|-----------|------------------------|
| Reading            | 10        | 50                      | 15        | 75                     |
| Watch TV           | 3         | 15                      | 0         | 0                      |
| Play Games         | 5         | 25                      | 5         | 25                     |
| Play with Friend   | 2         | 10                      | 0         | 0                      |
| Total              | 20        | 100                     | 20        | 100                    |

Based on Table 1, the result of a questionnaire made by researchers then can be seen that the habits most often done in my spare time is reading, watching TV, playing games, and playing place off friends. With the translation

of the results of alternative answers to the class I V and V as follows, for the fourth grade reading alternatives there are 10 respondents (50%) and 5 respondents (25%) claimed to play the game, 3 respondents (15%) stated watching TV, 2

respondents (10%) states around the place of man. As for class V results following alternative answers of 15 respondents (75%) stated that reads, 5 respondents (25%) claimed to play the game. So

the conclusion from the above table that the habit is often done at the time a higher grade class V (75%) stated reading, of the class IV (50%) stated reading.

Table 2 The benefits of reading

| Answer Alternative  | Frequency | Percentage Class IV (%) | Frequency | Percentage Class V (%) |
|---------------------|-----------|-------------------------|-----------|------------------------|
| Getting Information | 15        | 75                      | 20        | 75                     |
| Do Homework         | 3         | 0                       | 0         | 0                      |
| Pleasure            | 0         | 0                       | 0         | 0                      |
| Study               | 5         | 25                      | 0         | 0                      |
| Total               | 20        | 100                     | 20        | 100                    |

Based on Table 2, the results of a questionnaire study the benefits of reading the answers obtained as follows: for an alternative answer to the fourth grade results are 15 respondents (75%) claimed to obtain the information and then 5 respondents (25%) for the study, while the task of the teacher and entertainment no one answered. For class V 20

respondents (100%) stated to obtain information, while the task of the teacher and entertainment no one answered. So it can be concluded that the benefits of reading more of the class V (100%) stated to obtain information, from the fourth grade (75%) claimed to obtain the information.

Table 3 Preferred reading material

| Answer Alternative         | Frequency | Percentage Class IV (%) | Frequency | Percentage Class V (%) |
|----------------------------|-----------|-------------------------|-----------|------------------------|
| Reading Newspaper          | 0         | 0                       | 0         | 0                      |
| Reading Magazine           | 3         | 0                       | 0         | 0                      |
| Reading Komik              | 7         | 36                      | 10        | 0                      |
| Books related to the hobby | 13        | 64                      | 10        | 0                      |
| Total                      | 20        | 100                     | 20        | 100                    |

Based on Table 3, the results of a questionnaire that was made by researcher showed that the alternative answers to read newspapers, reading magazines, reading comics, books relating to the hobby, can be seen as follows:

There were 13 respondents (64%) expressed the books relating to the hobby, while 7 respondents (36%) stated that reading comics, reading the newspaper and read a magazine no one answered. For class V 10 respondents (50%) claimed to read comics and 10 respondents (50%) expressed the books relating to the hobby, while reading newspapers, reading magazines, no response at all. So it can be concluded that the most preferred reading between classes IV and V prefer the books relating to the hobby, with a ratio of grade IV (65%) expressed the books relating to the hobby.



Table4 How to Read Books which like

| Answer Alternative                  | Frequency | Percentage Class IV (%) | Frequency | Percentage Class V (%) |
|-------------------------------------|-----------|-------------------------|-----------|------------------------|
| Reading books borrowed from friends | 0         | 0                       | 0         | 0                      |
| Reading a book in a bookstore       | 0         | 0                       | 3         | 15                     |
| Reading a book in a library         | 17        | 85                      | 14        | 70                     |
| Reading Books at home               | 3         | 15                      | 3         | 15                     |
| Total                               | 20        | 100                     | 20        | 100                    |

Based on Table4, the results of a questionnaire study the benefits of reading the answers obtained as follows: 17 respondents (85%) claimed to read a book in the library, 315% of respondents claimed to read a book at home. As for reading books borrowed from friends and reading a book at the book store no one answered, the class V to obtain 14 respondents (70%) claimed to read a book in the library 3 respondents (15%) claimed to

read a book in a bookstore, then 3 respondents (15%) stated that reading a book at home. Reading books borrowed from friends no answer.

By comparison of the above results it can be concluded that how to read a book you like, then the value obtained grade IV (85%) claimed to read a book in the library, from the fifth grade (70%) claimed to read a book in the library.

Table5 Frequency of Library Visitors

| Answer Alternative | Frequency | Percentage Class IV (%) | Frequency | Percentage Class V (%) |
|--------------------|-----------|-------------------------|-----------|------------------------|
| Every day          | 9         | 45                      | 7         | 35                     |
| Every week         | 11        | 55                      | 0         | 0                      |
| Every month        | 0         | 0                       | 0         | 0                      |
| rarely             | 0         | 0                       | 13        | 65                     |
| total              | 20        | 100                     | 20        | 100                    |

Based on Table 5 above with alternative library patrons frequency response obtained 11 respondents (55%) stated that every week 9 respondents (45%) stated that everyday, month and "rarely" have no answer. For class V 13 respondents (65%) stated rarely then 7 respondents (35%) expressed everyday. There were no answers that

belonged to the choice in every week and every month.

It can be concluded that the advance of library patrons class IV and V as follows: with comparison of class V (65%) stated rarely, from the fourth grade (55%) stated every week.

Table6 Influence of Learning in the Library

| Answer Alternative        | Frequency | Percentage Class IV (%) | Frequency | Percentage Class V (%) |
|---------------------------|-----------|-------------------------|-----------|------------------------|
| Greatly increase reading  | 9         | 45                      | 3         | 15                     |
| Increase reading          | 11        | 55                      | 17        | 85                     |
| Not increase reading      | 0         | 0                       | 0         | 0                      |
| Very not increase reading | 0         | 0                       | 0         | 0                      |
| Total                     | 20        | 100                     | 20        | 100                    |

Based on the table 6 above, studying in the library influences the results that obtained as follows: 11 respondents (55%) stated increase reading, then 9 respondents (45%) expressed very increase reading. As for class V 17 respondents (85%) stated increase reading, 3 respondents (15%) expressed very increase reading. It can be concluded that between class IV and V the influence of learning in the library, with the ratio of the V class more than the class IV, class V (85%) stated increase reading, from the fourth grade (55%) stated increase reading.

With the results above it can be concluded that students Fourth Grade Elementary School District of Wonoboyo Wates Waterford County after the library is very helpful in increasing interest in learning the interpretation students will also increase as well.

## **CLOSING**

## **CONCLUSION**

Learning disabilities are a disorder in one or more of the basic psychological processes that include the use of language understanding and speech or writing. If traced further details of learning difficulties of children includes several aspects. Among them is the difficulty in the form of speech language, reading, writing and numeracy difficulties interacting, all the difficulties of learning is influenced by two factors: internal and external. The troubleshooting step is to optimize the reading improvement reading at the library. Based on experience in SDN Wates Wonoboyo District of Waterford County has obtained significant results.

## **ADVICE**

With limited knowledge of the author of the comments and suggestions that we need to be , builds very good for the sake of this paper .

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## ABILITY GROUPING MODEL USING VIDEO LEARNING AS AN EFFORT TO IMPROVE STUDENTS' LEARNING OUTCOMES IN THE DRAWING TECHNIQUE COURSE

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### Abstract

The purposes of this study are (1) knowing the improvement of students' cognitive learning outcomes in the drawing technique course using video learning by applying learning model of ability grouping; (2) knowing the improvement of students' affective learning outcomes in the drawing technique course using video learning by applying ability grouping learning model, (3) knowing the improvement of students' psychomotoric learning outcomes in the drawing technique course using video learning by applying the learning model of ability grouping. This study is an action research conducted in two cycles. The first cycle began with the identification of existing problems in the classroom, and then planning the steps of learning by using ability grouping model, action, observation, evaluation, analysis and reflection to determine the action in the second cycle. The subjects were grade 11 students of Wood Construction Engineering of SMK Negeri 2 Surakarta in the academic year of 2013/2014. The data were obtained from cognitive, affective and psychomotor domains through observations and interviews. The data analysis of this study was interactive analysis technique. It can be concluded that (1) The use of video learning by applying the ability grouping learning model in the academic year of 2013/2014 improved the students' cognitive learning outcomes in the Drawing Technique Course at SMK Negeri 2 Surakarta; (2) The use of video learning by applying the ability grouping learning model in the academic year of 2013/2014 improved the students' affective learning outcomes in the Drawing Technique Course at SMK Negeri 2 Surakarta; (3) The use of video learning by applying the ability grouping learning model in the academic year of 2013/2014 improved the students' psychomotoric learning outcomes in the Drawing Technique Course at SMK Negeri 2 Surakarta.

**Keywords:** *ability grouping, video learning, learning media, cognitive, affective, psychomotor*

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### INTRODUCTION

Learning to teach is a complex process that is influenced by a range of factors (Victoria Sánchez & Salvador, 2003:1)[25]. Too often the ineffectiveness of teacher instruction is not regarded as influential in ineffective learning (Nuthall, 2004:278)[20]. Over the last few years, research efforts have provided insight into this process and the factors conditioning it (Borko & Putman, 1996)[4]. Interest in the role of subject matter knowledge for teaching and in the process of transformation of subject matter for the purpose of teaching has grown, particularly since the work of Shulman and his colleagues (Shulman, 1986; Wilson, Shulman & Richert, 1987)[23][26].

When meaningful learning becomes the goal, remembering becomes a means to an end, rather than an end in itself. The focus is on transfer of knowledge and the cognitive processes of understanding (Mayer, 2002:228)[15]. It is clear that teaching and learning cannot be dealt with as separate entities and that the relationship between teaching and learning is rather complex (Oser & Baeriswyl, 2001:1031)[22].

Teachers should provide subject matter to be accepted optimally by all learners in the class. Attractive and interactive teaching can foster goodwill and spirit of the students to a subject matter presented by the teacher. The quality of teachers too, is measured by the performance of

learners on assessment tasks (Mestry, Hendricks & Bisschoff, 2009:475)[17].

Ainley (2002:545) "Interest has a strong influence on individuals' cognitive and affective functioning". This requires teachers to be able to attract the attention of students [1].

Harackiewicz (2008:8) state that "student who begin a courses with low initial interest may also develop continuing interest and purpose further course work in the content area, if their situasional interest can be held over time"[6].

Oemar Hamalik(2011:9), the task of the teacher as facilitator is to: provide ease of learning for all students, so that they can learn in an atmosphere of fun, happy, energetic, and anxious not dare openly express opinions [21].

Based on the observations made in class (class of XI TKK SMKN 5 Surakarta) many students feel tired of learning, because students just sit and listen to the teacher's explanation. Interactions between learners with learners and learners with teachers less interactive causes the learning situation becomes unattractive.

In responseto these problems, teaching methodsneedto be improvedin ordertosolve the problem, analternativethat can be appliedistoapply the Ability Grouping learning modelusinginstructionalvideos.

Ability Grouping Model is a student activity groups regardless of race, religion, and economic background. Student activities directed by teachers to achieve a common goal which is a consensus among them in addition the learning process can be directed to develop the skills of cooperation between learners.

Ability Grouping is a learning model that can be classified as cooperative learning. Jhonson &Jhonson (Isjoni, 2010:17)Cooperative learning is to group students in the class into small groups so that a student can work with a maximum of their abilities and learn from each other in the group[10].

Within an ability-grouped class, students are able to contribute more equally to group work (Mills & Durden, 1992)[18]. In ability-grouped class, students are able to contribute more equally to group workand discuss ideas together more easily (Koshy, 2001) [13].

Ireson, Hallam & Plewis (2001) studied 45 English secondary schools, and found that overall self-concept was higher in schools with moderate levels of ability grouping than in tightly streamed or un-streamed schools [8].

AbilityGroupingisalearningsystemthathasstude ntsin groupactivitiesandmore emphasis ondisscussionbetweenlearners ingroupssso thatthis learning systememphasizeshow studentsdigestandpresent the results ofthe discussion ofthe subject matter(Murniati,2007) [19].

In heterogeneous groups, high ability students may do most of the work, so that average students have less opportunity to think and learn(Winebrenner & Devlin, 2001)[27].Ability Grouping is a learning strategy with a number of students as members of small groups with different levels of ability. In completing the task group, all participants must work together and help each other to understand the subject matter. Implementation of this learning model aims to motivate students to dare to express their opinions,friends' opinions, and exchange opinions.

Ireson, Hallam, Hack, Clark & Plewis (2002) In their study of 45 English schools, found that there were gains for high-achieving students in streamed classes, and slight losses for low-achieving students [9].

According toAnita Lie (2010 : 39) Ability Grouping the model has several advantages, the advantages are: (1) positive interdependence among group members; (2) participants have individual responsibility of having to express opinions and tasks; (3) face-to-face between his fellow group members and members of the class in a discussion together; (4) the communication between group members and class members can be more closely; (5) makes it easy to evaluate between-group and inter-group members [2].

Since there is considerable diversity even within same-ability classes, there is potential for both heterogeneous and homogenous groupings to be used, even within ability-grouped classes. (Boaler et al., 2000)[3]. It is also in line with what is proposed Kalchman & Case (1999) [11].

Stages of implementation Ability Grouping model of using video-learning:

1. Grouping students in the class into groups, dividing the capabilities of each member of the group, from high to low ability (based on test results and school documents).
2. Teacher explains the summary of the subject matter to be discussed to students.
3. In the discussion, the teacher monitors the activity of the group.
4. Teachers require each group to collect the results of discussions.
5. Discuss the subject matter has been discussed by learners with Teacher.
6. Teachers stimulate questions from the students together.
7. Teacher explains the subject matter in greater depth as a continuation of the explanation in the beginning and give assignments to the students.
8. All students are required to complete the task and make conclusions on the subject that has been studied.
9. Learners complete the task and make conclusions.

According to Oemar Hamalik (2011:37) Learning is a process of changing individual behavior through interaction with their environment. Learning outcomes of a learner is usually expressed with numbers, to get the value of assessment [21].

Assessment is an attempt or action to determine the extent to which learning objectives can be achieved, in other words, the goal of learning is a tool to determine the success of the learning process that involves educators and learners. Assessment of learning activities and the value of the results can be done with an evaluation tool in the form of the test. Not only serves as an assessment tool to determine whether or not the goal is achieved, but also as an ingredient in making program improvements.

According to Ella Yulaelawati, (2004:59) Bloom's Taxonomy classifies three categories of learning behavior: cognitive, affective, and psychomotor [5].

Cognitive, Bloom classified six levels in the cognitive domain of simple knowledge or awareness of facts as the lowest level assessment to a more complex and abstract as the highest level. These six levels are:

1. Knowledge  
This capability is an initial capability includes the ability to know and mention the memory if necessary. Includes considering the materials, objects, facts, symptoms, and theory.
2. Comprehension  
Comprehension is defined as the ability to understand the subject matter. Understanding can also be demonstrated by the ability to estimate the inclination, ability to foresee the consequences of the various causes of the symptom..
3. Application  
It is the ability to use materials that have been studied and understood in a real situation. These capabilities include the use of knowledge, rules, formulas, concepts, principles, laws, and theories.
4. Analysis  
It is the ability to decompose the material into parts or components that are more structured and easy to understand. Analyze ability including the ability to identify the parts, analyze the relation between parts, as well as recognize or express the organization and the relationships between parts.
5. Synthesis  
It is the ability to collect the parts into a complete and comprehensive form. These include the ability to produce a unique form of communication in terms of the theme and how to communicate, research proposal, making a model or pattern that reflects the whole structure and thorough understanding of the linkages or abstract information. The results of the study emphasize the synthesis of creative behavior with emphasis on the formulation of a new pattern or structure and unique.
6. Assessment  
It is the ability to estimate and test the value of a material for a particular purpose. Assessment is based on the defined criteria.

These criteria include criteria for internal and external criteria. Learners can define their own criteria or from informants. Learning outcomes assessment is the highest cognitive levels because contain elements of all categories.

In this study, to measure student learning outcomes are used only on the cognitive aspects of three stages, namely the stage of knowledge, understanding, and application. Measurement of cognitive learning outcomes is using written tests in each cycle.

Affective, related to feelings, emotions, heart attitude indicates acceptance or rejection of something, a feeling of appreciation and social adjustment. The purpose of teaching is directed at the affective area is oriented on emotional factors, such as feelings, interests, attitudes, adherence to moral, and so on.

Kratwohl (Ella Yulaelawati, 2004:61) [5] gave limitation orientation and affective aspects of the following classification:

1. Acceptance is awareness or sensitivity is accompanied by a desire to tolerate an idea, object, or symptoms.
2. Responsiveness is an ability to respond to an idea, object, material, or certain symptoms.
3. Calculation or assessment is an ability to provide an assessment or calculation of the ideas, materials, objects, or symptoms. Calculation or assessment of learning outcomes is a desire to be accepted, counted, and assessed others.
4. Arrangements or management is an ability to organize or manage the actions associated with the assessment and calculations have been held.
5. Value based, is the peak action in the embodiment of a person's behavior that are consistently in line with the value or set of values that are deeply held.

Psychomotor, psychomotor domains by W. S. Winkel (1999:249) [28] divided into 7 classifications are:

1. Perception, include the ability to hold a proper discrimination between the two stimulants or more, based on the

distinction between the typical characteristics of each stimulus. The existence of this capability is expressed in a reaction that shows awareness of the presence of stimuli and the differences between the existing stimuli.

2. Readiness, include the ability to place himself in a state will start a movement or series of movements. This capability is expressed in the form of physical and mental readiness.
3. Guided movement, is the ability to perform a series of gestures, according to the example given. This capability is expressed by moving limbs, according to the pattern shown or played.
4. Movement accustomed, include the ability to perform a series of movements smoothly, as already trained sufficiently, again regardless of the examples given. This capability is expressed in moving the limbs, in accordance with appropriate procedures.
5. Complex movements, include the ability to perform a skill, which consists of several components, with smooth, precise and efficient. A consecutive series of actions and incorporates several sub skills into a skill movements regular.
6. Adjustment patterns of movement, the ability to change and adjust the pattern of movements to local conditions or to show a level of skill that have reached proficiency.
7. Creativity, the ability to perform the patterns of new gestures, entirely on the basis of self-initiative and initiative.

Based on the background of the problems that have been submitted, then the formulation of the problem of this research are:

1. Is Ability Grouping Model Using Video Learning can increase students' cognitive learning outcomes in drawing techniques courses?
2. Is Ability Grouping Model Using Video Learning can increase students' affective learning outcomes in drawing techniques courses?
3. Is Ability Grouping Model Using Video Learning can increase students' psychomotor learning outcomes in drawing techniques courses?

Based on the formulation of the existing problems, the study aims to:

1. Knowing the improvement of cognitive learning outcomes of students in

2. Knowing the improvement of affective learning outcomes of students in drawing techniques courses by applying ability grouping model using video learning.
3. Knowing the improvement of psychomotor learning outcomes of students in drawing techniques courses by applying ability grouping model using video learning.

## METHOD

This study is an action research, held in SMKN 5 Surakarta. Address Jl. Adisucipto No.42 Surakarta, Kode Pos 57143. The subjects in this study was student of class XI TKK SMKN 5 Surakarta academic year 2011/2012, amounting to 23 students. Data from this study were obtained from the results of school documents, tests, and observations.

Mertler (2009:4), "Action research is define as any systematic inquiry conducted by teacher, administrators, counselors, or other with a vested interest in the teaching and learning process" [16]. The model used in this study is action research model developed by Kemmis and Taggart (Rochiati Wiriaatmadja, 2007:66) with four principal components that can support the research steps are, (1) planning, (2) the action; (3) observation; (4) reflection [24].

Planned cycles, consisting of planning, action, observation, and reflection. Application of learning used is Ability Grouping using video learning.

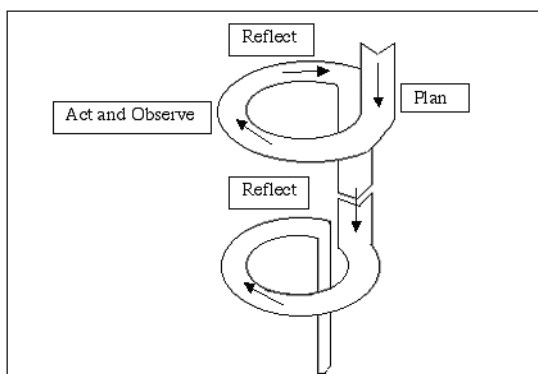


**Figure 1:** Action Research Cycle  
(source Kemmis, S. & McTaggart, R. 1988)[12]

Analysis of the data is processed by descriptive qualitative with interactive analysis which consists of data reduction, data display and conclusion. Miles and Huberman in Sutopo (2006:119-120) which includes three main components, namely: reduction, presentation, and drawing conclusions [7].

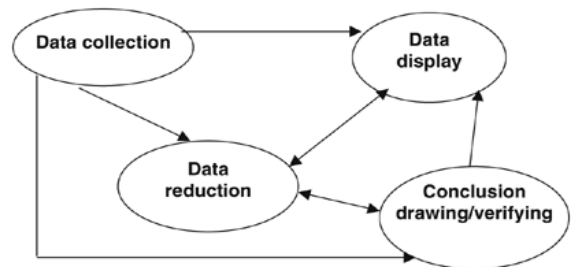


**Figure 2:** The interactive qualitative data analysis model  
(Miles & Huberman, 1994:12) [14]

Indicators of successful learning in this study based on an increase in learning outcomes of the application of Ability Grouping using instructional videos, a rise in the number of students who pass the study of both aspects of cognitive, affective, and psychomotor.

Table 1. Indicators of research performance

| Aspect      | Percentage of Students' grades Targeted | How to Measure                                                                                                                                    |
|-------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Cognitive   | 75%                                     | Measured from the completeness of student learning outcomes at an average grades 75% calculated from the number of students that scored $\geq 75$ |
| Affective   | 75%                                     | Observed from the attitudes and interests with an average grades 75% calculated from the number of students that scored $\geq 75$                 |
| Psychomotor | 75%                                     | Observed student activities with an average of 75% grades is calculated from                                                                      |

|  |  |                                              |
|--|--|----------------------------------------------|
|  |  | the number of students that scored $\geq 75$ |
|--|--|----------------------------------------------|

Successful learning targets set by a score of 75 based on provision of school. Instruments used:

1. Achievement test, to determine the cognitive aspects of student learning outcomes at this stage of knowledge, understanding and application, including the ability to test early, test after the first cycle, second cycle and post-tests. Using the reference benchmark ratings (PAP). Cognitive tests refer to Winkel (2010: 280) [28].
2. Observation sheet, to assess student learning outcomes in the affective and psychomotor. Grating affective and psychomotor assessment refers to Winkel (2010: 282-285) [28].

## RESULT

### 1. Pre Cycle

This initial observation aims to determine in advance the learning process and identify existing problems in learning. pre-test and initial observations carried out at this stage.

The results of the cognitive grades of pre-cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 before the action against 23 students obtained the following data:

- a. Students who pass the study with grades  $\geq 75$  as many as 12 students (52%).
- b. Students who didn't pass the study with grades  $< 75$  as many as 11 siswa (48 %).

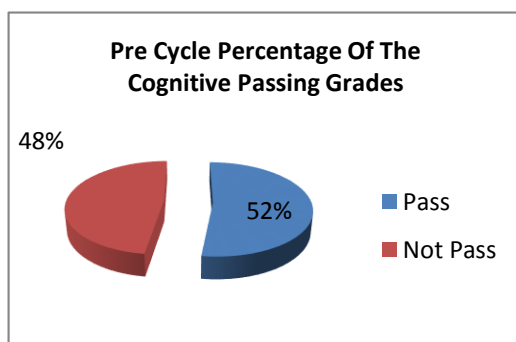


**Figure 3:** Pre Cycle Percentage of The Cognitive Passing Grades

The above value is the grades of students' competencies derived from cognitive tests with a passing grade by 75.

The results of the affective grades of pre-cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 before the action against 23 students obtained the following data:

- a. Students who pass the study with grades  $\geq 75$  as many as 13 students (57%).
- b. Students who didn't pass the study with grades  $< 75$  as many as 10 siswa (43%).

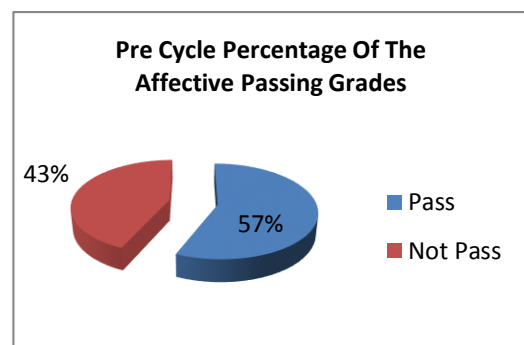


**Figure 4:** Pre Cycle Percentage of The Affective Passing Grades

The results of the psychomotor grades of pre-cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 before the action against 23 students obtained the following data:

- a. Students who pass the study with grades  $\geq 75$  as many as 11 students (48%).
- b. Students who didn't pass the study with grades  $< 75$  as many as 12 siswa (52%).

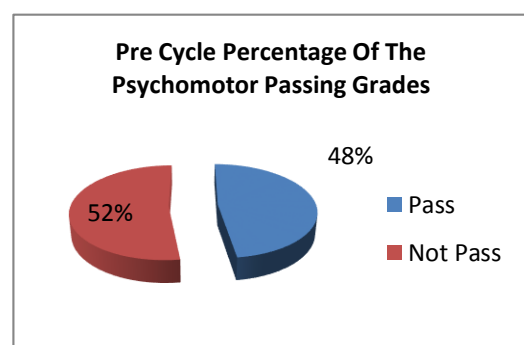




**Figure 5: Pre Cycle Percentage of The Psychomotor Passing Grades**

The above value is the grades of students' competencies derived from psychomotor observation with a passing grade by 75.

## 2. First Cycle

### a. plan

Action research is planned to be conducted on Monday April 16, 2012, during 2 hours lesson. The planning stages are as follows:

- 1) Observation on learning activities in class XI TKK Surakarta SMKN 5.
- 2) Identify the problem
- 3) Analyze and formulate the problems
- 4) Designing a model of learning ability grouping
- 5) Discuss the application of ability grouping learning models
- 6) Setting up the learning device (RPP, media video learning, assessment criteria, tools, evaluation)
- 7) Arrange group of learning, ability grouping
- 8) Plan a group task.

Table 2. Lesson Plan

| Learning                                 | Teachers' activity                                                        | Students' activities                        |
|------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------|
| Grouping students                        | electing and arranging groups according to their learning ability sorting | Gather in a group                           |
| Subject matter                           | Explain material to students                                              | Listen and record, ask if given the chance  |
| Discussion                               | Observe and record the reactions of students                              | Discussion                                  |
| Collecting the results of the discussion | Receiving the results of the discussion                                   | Explained and handed to the teacher         |
| Discuss together                         | Explain the subject matter in more detail                                 | Listen, ask questions, and submit feedback  |
| The task of making conclusion            | guiding students                                                          | Doing the Task and concludes the discussion |
| Providing the Achievement test           | Provide test and monitor                                                  | Doing test individually                     |

Applied learning process is learning in groups of learners whose abilities vary with regard to the value and the determination of in-class group discussions with subject teachers Drawing Techniques Building. The explanation could be

disrupted by Video Learning and each group has an instructional video that can be run with a note book.

Early in the planning of activities, explain to students the learning objectives for 10 minutes. Students are divided into groups with 4-5 members each person who has been prepared based on their abilities. Time used to carry out the activities of the division of this group is for 10 minutes.

Further, describes the Ability Grouping learning techniques and the things that need to be followed by students, it took 5 minutes. Discussion group discuss the subject matter led by a head and one reporter.

### b. Implementation

Implementation of action research for the first cycle conducted in two meetings. Implementation of the first cycle starts on Monday April 16, 2012. The duration is two-hour lesson, 4 x 45 minutes.

When class started, the teacher opened the lesson, give apperception and convey indicators that must be mastered by the students on the subject matter, the time spent in this activity is for approximately 10 minutes according to plan. The next activity, the teacher divides students into groups which have been prepared in advance and give the name of the group. This activity lasted for 10 minutes according to the plan.

Further explaining the subject matter to students and continue the discussion. After the discussion, students express their opinions and make conclusions.

### c. Observation

The research data were collected through the first cycle of observation and tests. Observations made by the observer to observe students' activities. The observation conducted during learning begins until the end of the first meeting and the second meeting of the first cycle. Achievement tests performed at the end of the first cycle.

The results of the assessment in the affective domain through observation sheet that covers five aspects: acceptance, participation, assessment, organizing, and forming lifestyle.

The results of the assessment in psychomotor domain through observation sheet which covers seven aspects of perception, readiness, guided movement, the movement of unfamiliar, complex movements, adjustment patterns of movement, creativity.

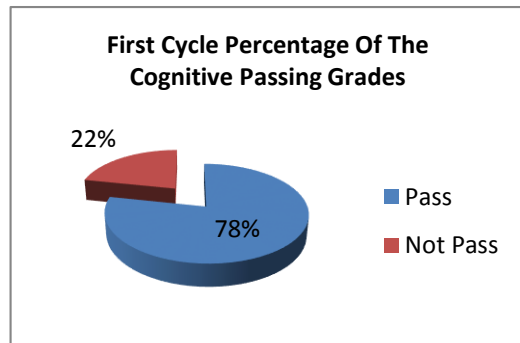


**Figure 6:** First Cycle Percentage Of The Cognitive Passing Grades

The results of the cognitive grades of the first cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 against 23 students obtained the following data:

- 1) Students who pass the study with grades  $\geq 75$  as many as 18 students (78%).
- 2) Students who didn't pass the study with grades  $< 75$  as many as 5 siswa (22%).

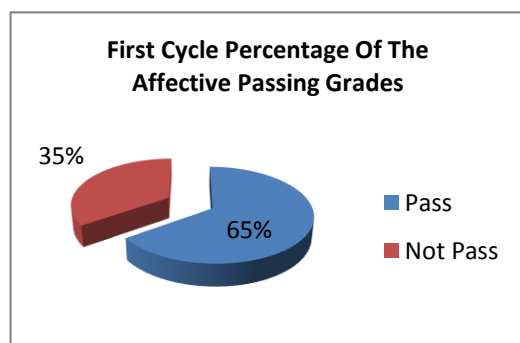


**Figure 7:** First Cycle Percentage Of The Affective Passing Grades

The results of the affective grades of the first cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 against 23 students obtained the following data:

- 1) Students who pass the study with grades  $\geq 75$  as many as 15 students (65%).
- 2) Students who didn't pass the study with grades  $< 75$  as many as 8 siswa (35%).

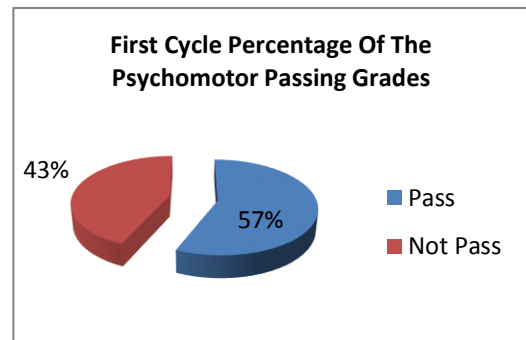


**Figure 8:** First Cycle Percentage Of The Psychomotor Passing Grades

The results of the psychomotor grades of the first cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 against 23 students obtained the following data:

- 1) Students who pass the study with grades  $\geq 75$  as many as 13 students (57%).
- 2) Students who didn't pass the study with grades  $< 75$  as many as 10 siswa (43%).

In this first cycle, the cognitive domain obtained the number of students who pass the achievement tests were 18 students (78%). The target completeness planned by 75% of the number of students. So that it can be interpreted that the student learning outcomes in the cognitive domain has exceeded the minimum target of completeness.

But for the affective and psychomotor, completeness classes didn't achieve 75% as the minimum targets. So for the implementation of the first cycle in affective and psychomotor domain has not reached the target.

#### d. Reflection

Based on observations on the implementation of the first cycle can be analyzed that the first cycle of the research result is not declared successful, because the results of the study are not in

accordance with predetermined indicators. The affective and psychomotor learning outcomes have not reached the minimum target planned. So that still needed improvement learning methods. Improved methods of learning will be done in the next cycle. Some of the reasons why the target is not reached:

- 1) Explanation of the subject matter by the teacher so quickly that many students are not able to follow the lessons.
- 2) The explanation of ability grouping was not optimal, so many students do not understand.
- 3) Teachers' classroom management's not good, especially in the discussion process
- 4) Students' lack of concentration in the following study, while giving the task to be done, some students crowded themselves.
- 5) Some students are not serious in their group assignment.
- 6) Classroom atmosphere is less controllable, some students were sleepy, playing alone, and do not pay attention when teachers teach.

Reflective actions that can be taken based on the observations and analyzes that have been done are:

- 1) Teachers have to pay more attention to students, so each student with learning difficulties will be easily helped.
- 2) Teachers should be more creative in creating an atmosphere conducive to learning.
- 3) Teachers should explain the procedure on ability grouping learning model clearly.

### 3. Second Cycle

#### a. Plan

The results obtained in the first cycle is not optimal, to see lesson plans that have been implemented as a point to develop patterns of teaching. See the results and observations made in the first cycle, the second cycle of action research continued.

#### b. Implementation

The second cycle begins with a plan of action which is based on the results of a reflection on the first cycle. Learning implementation in the second cycle was held on Monday, April 30, 2012. The duration is two-hour lesson, 4 x 45 minutes, and followed by evaluation of the second cycle. Activity

which is implemented on the second cycle is as follows:

- 1) The teacher divides students into groups with new members, according to Ability Grouping planning and directing students
- 2) The teacher explains the subject matter and tasks that will be used for discussion.
- 3) Students discuss and work together to accomplish the task given by the teacher.
- 4) Teachers enable discussions between groups and monitor the work around each group and help groups who are experiencing difficulties.
- 5) Each group presented the group's work
- 6) Teachers and students conduct joint discussions.
- 7) Students submit assignments and the conclusion of the discussion.

Each member of the study group together, they discuss together to accomplish the task given.

#### c. Observation

The second cycle of research data were collected through observation and tests. Observations were made from the beginning of the learning process until the discussion is completed.

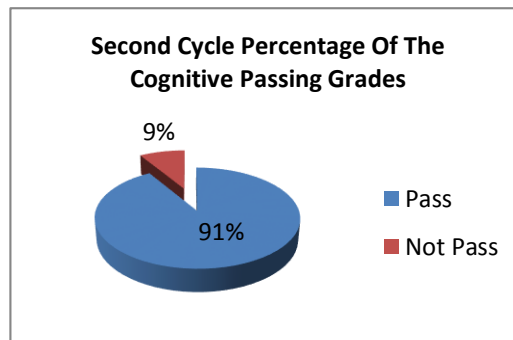


**Figure 9:** Second Cycle Percentage Of The Cognitive Passing Grades

The results of the cognitive grades of the second cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 against 23 students obtained the following data:

- 1) Students who pass the study with grades  $\geq 75$  as many as 21 students (91%).
- 2) Students who didn't pass the study with grades  $< 75$  as many as 2 siswa (9%).

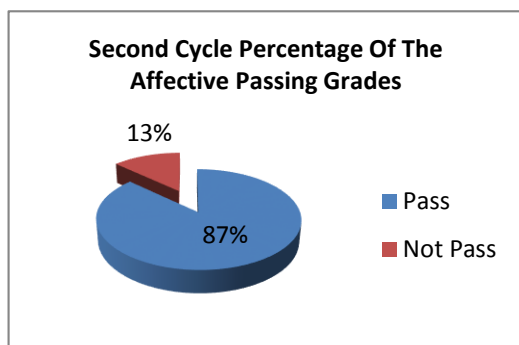


**Figure 10:** Second Cycle Percentage Of The Affective Passing Grades

The results of the affective grades of the second cycle on the implementation of Ability Grouping Model Using Video Learning class XI TKK academic year 2011/2012 against 23 students obtained the following data:

- 1) Students who pass the study with grades  $\geq 75$  as many as 20 students (87%).
- 2) Students who didn't pass the study with grades  $< 75$  as many as 3 siswa (13%).

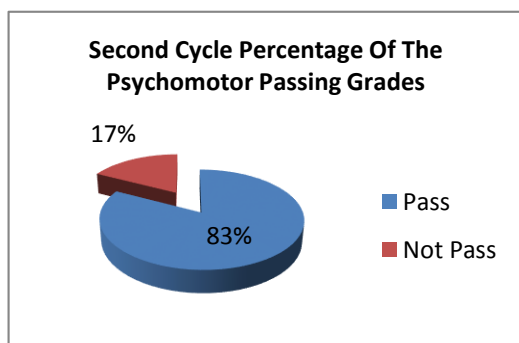


**Figure 11:** Second Cycle Percentage Of The Psychomotor Passing Grades

The results of the psychomotor grades of the second cycle on the implementation of ability grouping model using video learning class XI TKK academic year 2011/2012 against 23 students obtained the following data:

- 1) Students who pass the study with grades  $\geq 75$  as many as 19 students (83%).
- 2) Students who didn't pass the study with grades  $< 75$  as many as 4 siswa (17%).

From the observations mentioned above illustrate that the percentage value of each domain has met the target. The target

planned by 75%, so for the second cycle all the domains have already reached the target.

#### d. Reflection

Based on observations on the implementation of the second cycle can be analyzed that the research has met predetermined indicators and an increase results from the first cycle to the second cycle, so the research on the second cycle was declared successful.

Although the second cycle has reached the target, action carried out with fixed reflection following recommendations:

- 1) Teachers must continue to improve the teaching style that can make students interested in learning.
- 2) Teachers must continue to increase the liveliness and courage of students to express opinions.
- 3) Teachers should be more careful in observing the courses of the study group of students, so the objectivity of the assessment of each domain can be maintained.
- 4) Teachers should be able to find out the problems faced by each member of the group to be able to immediately help provide a solution.

## DISCUSSION

Based on observations in the learning process, learning outcomes for all domains has increased continuously from pre-cycle, the first cycle and second cycle. Student learning outcomes for each domain in the second cycle can exceed the target set. It can be stated that the Ability Grouping learning model using video learning can improve learning processes and outcomes in drawing techniques courses.

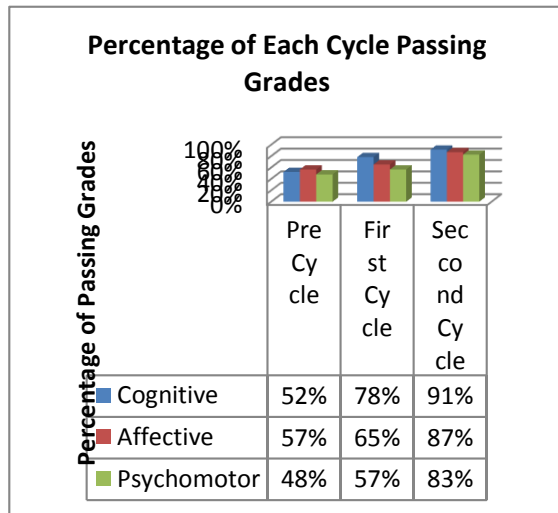


**Figure 12:** Percentage Of Each Cycle Passing Grades

Learning process is carried out on each cycle has increased both the quality of the cognitive, affective, and psychomotor. Value of each domain can be increased up to the achievement of the target in the second cycle. Students increasingly have a sense of responsibility, liveliness, and cooperation. Students are more active in group tasks and more active and to express their opinions.

Figure 12 shows the percentage increase in the number of completeness results of cognitive learning, affective, and psychomotor on pre-cycle, the first cycle and second cycle. The percentage of pre-cycle cognitive domain passing grade = 52%, first cycle = 78% and second cycle = 91%. The percentage of pre-cycle affective domain passing grade = 57%, first cycle = 65% and second cycle = 87%. Percentage of pre-cycle psychomotor domains passing grade = 48%, first cycle = 57% and second cycle = 83%.

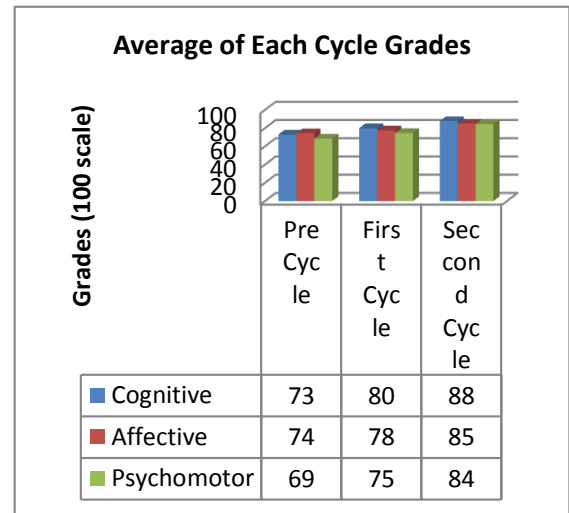


**Figure 13:** Average of Each Cycle Grades

After the implementation of the Ability Grouping Model Using Video Learning, classical completeness achievements in each domain showed an increase in pre-cycle, first cycle to second cycle.

Figure 13 shows the increase in the average value of the results of cognitive learning, affective and psychomotor on pre-cycle, the first cycle and second cycle. The average cognitive domain grade of the pre-cycle = 73, the first cycle = 80 and second cycle = 88. The average affective domain grade of the pre-cycle = 74, the first cycle = 78 and second cycle = 85. The average psychomotor domain grade of pre-cycle = 69, the first cycle = 75 and second cycle = 84. After the implementation of Ability Grouping model of learning using video learning, achievement of the average grade of each cycle on the three domains showed a continuous improvement in all cycle (pre-cycle, first cycle and second cycle).

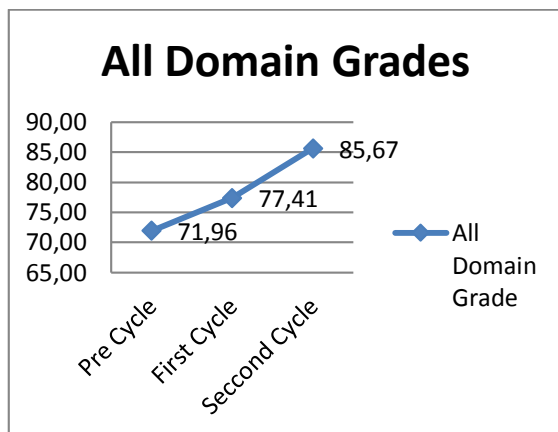


**Figure 14:** Average of all domain grades (cognitive, affective and psychomotor) in each cycle grades

From the diagram above concluded that the application of Ability Grouping learning models using video learning can increase the average grades of all domains (cognitive, affective and psychomotor) on pre-cycle, the first cycle and second cycle can be seen in Figure 14. Average grades of all domains in the pre-cycle = 71.96; first cycle = 77.41 and second cycle = 85.67. This indicates that the students' interests and attitudes formed during learning activities take place are getting better continuously.

## CONCLUSIONS

Based on the results and discussion, it can be concluded that:

1. Ability Grouping Model Using Video Learning is proven to Improve Students' cognitive Learning Outcomes in Drawing Techniques Courses
2. Ability Grouping Model Using Video Learning is proven to Improve Students' affective Learning Outcomes in Drawing Techniques Courses
3. Ability Grouping Model Using Video Learning is proven to Improve Students' psychomotor Learning Outcomes in Drawing Techniques Courses

## Acknowledgment

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## DESIGNING COMPUTER GAME BASED ON COMBINATION OF DRILL-PRACTICE AND DECISION MAKING CONCEPT FOR ENHANCE CHILDREN'S PERCEPTION OF ANTI-CORRUPTION

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### Abstract

The aim of this study was to develop a computer game with the theme of anti-corruption moral education for children. Techniques or strategies used in the development of this game were drill and practice techniques combined with decision-making techniques. In this game, the words or the pictures were arranged into two options that represented corruption and anti-corruption statement. Decision making activities to choose any word or image were done repeatedly to build awareness of anti-corruption which affected memory. The result of this study was an educative computer game for children to improve their awareness and perception on the moral of anti corruption. Next, it needed to be tested on samples to see whether the kids who played this game were more concerned with the positive perception to avoid corruption.

**Keywords:** computer games, drill and practice, moral education

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### INTRODUCTION

In the eyes of Asian investors, corruption in Indonesia, in this case is corruption in the courts, Indonesia scored 8.03 on a scale of 1 to 10 with a note that gets a score of 1 is the best and who got a score of 10 is the worst (www.kpk.go.id). Now corruption is not only a systematic crime, but it has reached the level of holistic. Corruption has pierced the heart of the cultural and billions of bacteria spread to the brain and soul of the people of Indonesia [1]. Corruption is a destructive force, which destroys democracy in Indonesia in the form of bribe, inflated prices, corruption makes the nation and the people suffer [2]. Legally Indonesia has made ratification of the United Nations Convention against Corruption, 2003, through Act No. 7 Year 2006. Corruption in Indonesia is widespread and systematic as well as an extraordinary crime and requires extraordinary countermeasures [3]. In addition, the reason of the application of MPR Decree year 1998 because corruption is still a national concern, need decisive action to combat corruption and eradication of corruption has not been implemented seriously [4].

In the history of corruption in Indonesia turned out to various regulations have been issued and various institutions have been established by the government to combat corruption. Based on the Corruption Perceptions Index 2003 (published by Transparency International) that Indonesia is ranked 122 with a score of 1.9. While the Corruption Perceptions Index 2006 showed that Indonesia is ranked 130 with a score of 2.4 (rank 1 is Finland with a score of 9.6). In this case the score and rank Indonesia rose, meaning that during the years 2003 to 2006 to eradicate corruption in Indonesia is experiencing success, but success was not better than the progress made by other countries.

With the implementation of Curriculum 2013, automatically learning paradigms and strategies used in schools also need to change. One important factor that will affect the character of learning models is the development of information and communication technology (ICT). Teachers are currently required to have sufficient ICT competence to facilitate student learning. With ICT everyone including children will be very easy to access information for various purposes.



Games in adolescents and children can lead to addiction effects, resulting in neglect of real life. This is the real problem faced by many gamers to be more able to perform self-control. The effects of this addiction can lead to negative behaviors such as stealing money to buy new games, skipping school, doing homework lazy, or a feeling of calm when not playing games. In addition, most of the addiction or play games will also be able to disturb the development of the child [5] and also encourage the criminal act [6].

In this study there are three keywords that become the center of interest, namely, anti-corruption, education of children and adolescents, as well as games. This study tried to find a solution how to provide a positive game for children and adolescents as part of anti-corruption in the education process. The results of this study did not address certain subjects in school, but more on providing technology-based gaming environment in children and adolescents who can build their character early on. Game developed a web based games to fit the gadget which is very popular and commonly used by children and adolescents while playing the game. Socialization this game there will be done through a variety of social networking there and also at the game shop there.

Noting the importance of character education in the curriculum of Education in 2013, it need attention for educating anti-corruption stance early on for children and teens to be things that. On the other hand corruption is a major problem of the nation also needs to be eliminated through early anti-corruption education. The development of ICT especially games as a positive, an opportunity for the provision of an alternative environment for anti-corruption education for children and adolescents. With these premises, the formulation of the problem in this research is how to develop web based games for the anti-corruption education in children and adolescents. The purpose of this study is in accordance with the formulation of the problem that has been presented previously is developing web-based gaming for an anti-corruption education in children and adolescents.

## THEORETICAL BACKGROUND

### Corruption definition

Corruption is derived from the Latin word corruption or *corruptus*. Corruption comes from the word *corrumpere*, an old Latin word. That's down from the Latin European languages such as English is corruption; and the Netherlands is *corruptie*, *korruptie*. Of the Dutch language is this word that is down to the Indonesian *korupsi*. Corrupt: foul; false; bribery (Indonesian Dictionary, 1991) bad; damaged; like to receive a bribe; misappropriate money/ goods or state-owned enterprises; receive money by using his position for personal gain (Dictionary of Law, 2002). Corruption: crime; dishonesty; immoral; deviation of sanctity (The Lexicon Webster Dictionary, 1978) bribery; forgery (Indonesian Dictionary, 1991) misappropriation or embezzlement of money or the company as a State where a person works for personal gain or other person (Dictionary of Law, 2002). According to Syed Hussein Alatas there are 7 topology of corruption, namely:

- Corruption transaction corruption shows that the agreement between the parties to give and take for the sake of mutual benefits that both parties are equally active running corruption.
- Corruption is corruption ex-coercion include certain forms of coercion where the donor is forced to bribe in order not to endanger themselves, interests, people or other things that he valued.
- Investee Corruption is corruption that involves an offer of goods or services without any direct linkage with certain advantages obtained giver, in addition to the benefits expected to be obtained in the future.
- Nepotistic corruption is corruption in the form of special treatment or a friend who has a close relationship in order to hold public office. In other words put close relationship and contrary to the norms and rules that apply.
- Corruption is corruption authigenic individuals because they have the opportunity to benefit from the knowledge and understanding of something that is only known to themselves.

- Corruption is corruption trigger a supportive atmosphere conducive to the creation of protecting or maintaining the presence of corruption.
- Corruption is corruption defensive forced in doing in order to defend themselves from extortion.

Based on understanding of article 2 of Law No. 31 of 1999 as amended by Act 20 year, 200, Corruption is an act with intent unlawfully enriches themselves/ others (individuals or corporations that could harm the financial/ economic state. Elements that must be met in order to be considered as an act of corruption is: unlawfully enrich themselves/ others, and "be" detrimental to the financial/ economic.

In daily practice are not rare public servants/ officials/ organizers country/ waitress nation expects to receive the gift of the services they provide. The new service is sometimes given when there kickbacks or fees. Do not expect public services will be smooth if not handed baksheesh [7]. Based on the description can be understood that in fighting corruption, there are 3 forming elements, namely prevention (anti-corruption/ preventive), action (prevention/ contra-corruption)/ repressive) and community participation. Combating corruption is a step to establish good governance [8].

### 1.1. Games

Game is something that can be played by certain rules so that there are winners and there are losers, usually in the context of no serious or entertainment purposes. Games are divided into two types of web-based games and text-based games. Web-based game is a game application that is placed on a server on the Internet where players only need internet access and a browser to access the game. So there is no need to install to play. While text-based game is the beginning of web-based games. Text-based games have been around a long time, by which time most of the computers is still low and difficult spec to play games with great graphics, so that game players only interact with existing texts and little drawings.

### 1.2. Influence Game to Children

Mohammad Fauzil Adhim, in his article, found children who love to play online games is very child like the challenge. These children tend to dislike stimuli whose appeal is weak, monotonous and not challenging. It is at least result in academic learning. Children become lazy to learn or often skipped school just to play games. Akio Mori, a professor at Tokyo's Nihon University doing research on the effects of online games on brain activity. Akio Mori of research it can be concluded that there are two important points.

To prevent a child's play is certainly not an easy job. Internet facilities are widely available everywhere, one internet cafe, one of the children can access the Internet from anywhere. Does not always have to play at home, the child could steal time after school by visiting the arena of online gaming or internet cafes that surround their schools. For that, there are some things parents should do. Some of them are:

- In collaboration with teachers at the school to take part in monitoring the progress of student learning.
- Establish informal communication so that a child could be open to parents, so that parents can provide education to a child without the child feel judged.
- Learn about online gaming. So you can discuss with your child about the game. If this can happen, the child will not need to look for an escape with his friends to just talk about the game online games. So that children can feel more at home in the house because it can get a chat friend who understands their world.
- Give special time playing online games, and more strict to your child not to play beyond the agreed time. It shows that you do not merely prohibit, but gives leeway. On the other hand you teach your child to be responsible at the time he had.

### METHOD

This research is the development of a model using 4D (define, design, develop, and disseminate). This research was funded by the Institute for Research and Development, University of Ahmad

Dahlan period in 2014. Because this research is being in the implementation, so in this article cannot be discussed in full all phases of development research. Results are shown only at the stage of conceptual models approach the game with a drill and practice as part of the decision making process.

## RESULT AND DISCUSSION

It is used as the basis for the initial development of the game is decisive game application specification. Here are the games the specification in the application of this anti-corruption game.

**Features.** Like the game in general features provided in this game include: game instructions, game level, the score obtained, the number of chance to play, a slide bar for the movement, bonuses, and challenges.

**Platform.** This game was developed to be in the browser Firefox, Opera, Safari, Chrome and others, so it will be developed with HTML5. The development of the application will use Adobe Flash.

**Decision Making.** This game is basically a game for a quick decision. The decision to be taken is to choose between the negative words associated with corruption and positive words associated with non-corruption. Decision provided a fast time. This is because of the victory in the game or to move level determined how many words are chosen properly.

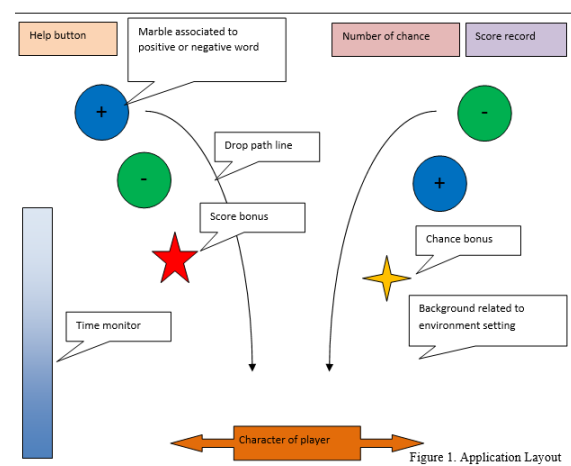
**Drill and Practice.** The words used negative and positive overall at every level of no more than 15 words. This action will continue as repetition at that level to get a high score. The appearance of the words is done randomly. With this repetition is expected to occur on the internalization of self-player game.

**Playing Strategy.** The words will slide or fall from a random direction between the upper right and upper left with varying distances from the center position as the default position of the player. Players have to choose quickly. The rule is if positive word should be arrested, and if a negative word to be thrown. Fail in the capture would lead to a

reduction in value. Conversely, if true would provide score addition.

**Scoring.** It is given the opportunity to play three times. Reduction of continuous values will cause death or reduction in the chance to play. Instead of collecting the maximum value of the scores will finish the game and move to a higher level. Yet despite the continually accumulated score, the game will be stopped due to time constraints that have been provided. In addition, during the game will be given a bonus game that randomly appear in the form of value addition, the addition of extra playing time and a chance to play (lives).

**Setting the game.** The game is available that describes the three levels of the game setting. Settings provided are the decisions about corruption at home, school, and community.



Based on the specifics of the game that has been described, the conceptual layout of the game is shown in Figure 1.

## CONCLUSION

This article reveals only define and design phases of the 4D stages. Other stages have not been done. The important thing to consider is the time of dissemination. At this stage needs to be seen whether it will be a change in behavior and perception of anti-corruption stance in children.

Trials to evaluate their effectiveness need to consider the duration of use of this game in order to see the changes.

In the development, in fact the present era most games are developed with the Android base

associated with user mobility. The particular gadget game can only be played with the base web view that as lacking of this game application.

#### ACKNOWLEDGMENT

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# CERTIFICATE

Ref : 8247/UN34.17/TU/2014



This is to certify that

**Dr. Masrukhin, S.Ag., M.Pd.**

has participated in

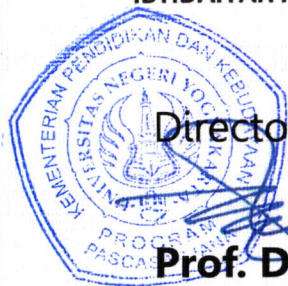
**INTERNATIONAL CONFERENCE ON EDUCATIONAL RESEARCH AND EVALUATION (ICERE) 2014**

organized by Graduate School, Yogyakarta State University on November 8 - 9, 2014

as a: **PRESENTER**

with the paper entitled

**AUTHENTIC ASSESSMENT DETERMINANT IN ISLAMIC RELIGION EDUCATION EXECUTION TOWARDS  
COGNIZANCE QUALITY HAVES A RELIGION IN STUDENT AT ELEMENTARY SCHOOL AND MADRASAH  
IBTIDAIYAH AT KUDUS REGENCY**



Director

**Prof. Dr. Zuhdan Kun Prasetyo, M.Ed**

NIP.19550415 198502 1 001

Yogyakarta, November 9, 2014

Chairperson



**Prof. Dr. Sudji Munadi**

NIP. 19530310 197803 1 003

**THE SCHEDULE OF THE 2<sup>nd</sup> INTERNATIONAL CONFERENCE ON  
EDUCATIONAL RESEARCH AND INNOVATION (ICERI 2014)  
YOGYAKARTA STATE UNIVERSITY**

| <b>Wednesday, 7 May 2014</b> |                    |                                                                                                                                                                                                                                                                                                  |                       |
|------------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|                              | AGENDA             | PRESENTER                                                                                                                                                                                                                                                                                        | ROOM                  |
| 07.30-08.00                  | Registration       |                                                                                                                                                                                                                                                                                                  |                       |
| 08.00-08.30                  | Conference Opening |                                                                                                                                                                                                                                                                                                  | Ballroom of UNY Hotel |
| 08.30 - 09.15                | Keynote speech     | <b>Prof. Dr. Joko Santoso</b> (Director of Higher Education, Ministry of Education and Culture)<br>"Trend and Current Issues of Educational Research "                                                                                                                                           | Ballroom of UNY Hotel |
| 09.15–09.30                  | Coffee break       |                                                                                                                                                                                                                                                                                                  |                       |
| 09.30 – 11.00                | Plenary Session 1  | <b>Professor Dato' Dr Ibrahim Ahmad Bajunid</b> (INTI-Laureate International Universities, Malaysia)<br>"Strengthening Teaching and Research of Higher Education in New Wave Research Era"<br>Moderator: Herman Dwi Surjono, M.Sc., M.T., Ph.D.                                                  | Ballroom of UNY Hotel |
| 11.00 – 12.30                | Plenary Session 2  | <b>Dr. Elizabeth Hartnell-Young</b> (Director of Australian Council of Educational Research)<br>"Student Learning Improvement and Its Research Development Models, and Australian Experiences"<br>Moderator: Prof. Sugirin, M.A., Ph.D.                                                          | Ballroom of UNY Hotel |
| 12.30 - 13.30                | Lunch break        |                                                                                                                                                                                                                                                                                                  |                       |
| 13.30-15.00                  | Parallel Session 1 | Parallel Presentations                                                                                                                                                                                                                                                                           | Parallel Rooms        |
| 15.00-15.30                  | Coffee Break       |                                                                                                                                                                                                                                                                                                  |                       |
| 15.30-17.00                  | Parallel Session 2 | Parallel Presentations                                                                                                                                                                                                                                                                           | Parallel Rooms        |
| <b>Thursday, 8 May 2014</b>  |                    |                                                                                                                                                                                                                                                                                                  |                       |
|                              | AGENDA             | PRESENTER                                                                                                                                                                                                                                                                                        | ROOM                  |
| 07.30-08.00                  | Registration       |                                                                                                                                                                                                                                                                                                  |                       |
| 08.00–10.00                  | Plenary Session 3  | <ul style="list-style-type: none"> <li><b>Prof. Darmiyati Zuchdi, Ed. D</b> (Yogyakarta State University)<br/>"Toward Human of Character through the Development of a Comprehensive Education"</li> <li><b>Dr. Seloamoney Palaniandy</b> ( Infrastructure University of Kuala Lumpur,</li> </ul> | Ballroom of UNY Hotel |

|               |                                |                                                                                                                         |                          |
|---------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------|
|               |                                | Malaysia)<br>“Teacher Performance and Moral Agent in Educational Transformation Era”<br>Moderator: Sumarno, M.A., Ph.D. |                          |
| 10.00– 10.15  | Coffee break                   |                                                                                                                         |                          |
| 10.15 – 11.45 | Parallel Session 3             | Parallel Presentations                                                                                                  | ParallelRooms            |
| 11.45 – 12.45 | Lunch break                    |                                                                                                                         | Restaurant               |
| 12.45-14.15   | Parallel Session4              | Parallel Presentations                                                                                                  | ParallelRooms            |
| 14.15 – 15.45 | Parallel Session 5             | Parallel Presentations                                                                                                  | ParallelRooms            |
| 15.45 – 16.15 | Wrap-up Session and<br>Closing | Moderator: Sumarno, M.A., Ph.D.                                                                                         | Ballroom of UNY<br>Hotel |
| 16.15 – 16.45 | Coffee Break                   |                                                                                                                         |                          |



## THE SCHEDULE OF PARALLEL SESSIONS

**Wednesday, 7 May 2014**

| TIME          | PRESENTATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | CHAIR                         | ROOM |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------|
| 13.30 – 15.00 | <b>Group A</b><br>1. Curriculum Design and Innovation in the Tertiary Educational Level in Indonesia: English Curriculum at Managerial Accounting, Politeknik Negeri Batam<br><i>Yosi Handayani</i><br><br>2. Curriculum 2013 Implementation as a Change in Organization (A Case Study in SMP Negeri 2 Dempet Demak )<br><i>Ada P, Tituk NF, Donny A.P</i><br><br>3. English as a Local Content in the Elementary School Curriculum: Problems and Impacts<br><i>Susiati</i><br><br>4. Teachers' Creativity and Loyalty in Overcoming the Impacts of the Implementation of Curriculum 2013 in Grade 1 of Elementary Schools<br><i>Anastasia S., Lasiati, Sumekarwati</i> | Nasser Al-Rawahi              | I    |
|               | <b>Group B</b><br>1. Case Study of Developing Apperception in the Microteaching Activities for Undergraduate Students of Mathematics Education<br><i>R. Rosnawati, Marsigit</i><br><br>2. Role of Student Centered Learning (SCL) Based on Case-based Learning (CBL) to Improve the Learning Method of Agrarian Law in Indonesia<br><i>Imam Koeswahyono, Mohammad Hamidi</i><br><br>3. Contribution of Engineering Research in Enhancing Engineering Education<br><i>David Thambiratnam</i><br><br>4. Promoting Case-Based Teaching for University Students of Sociology<br><i>Rochman Achwan</i>                                                                       | Ardita Markhat<br>us Solekhah | II   |



|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                               |     |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----|
|               | <b>Group C</b><br>1. Development of Learning Devices Oriented to Multi Representation in Reducing Errors in Physics Preconception of XI Grade of Science Students at SMA Negeri 1 Majene<br><i>Dewi Sartika Asrul Batiran, Muris</i><br><br>2. Developing Integrated Assessment of Attitude, Skills and Cognitive in Physics Senior High Schools<br><i>Mustika Wati</i><br><br>3. Implementation of Collaborative Learning Project-Work for Manufacturing Vocational Students<br><i>Widarto</i><br><br>4. Multiple Intelligence-Based Teaching: An Attempt to Gain Equity in Education<br><i>Hesti Wijaya</i>                                                                                                                                                                         | Ernie Noor<br>FaizahBintiNaim | III |
| 15.30 – 17.00 | <b>Group A</b><br>1. Implementation of Demonstration Method to Improve Student' Skills on Making Batik and Achievement in the Art Subject in SMP Negeri 2 Gedang Sari, GunungKidul<br><i>Endriyani</i><br><br>2. Implementation of Group Investigation Method to Increase Students' Achievement and Liveliness inthe Social Studies Subjectof the 7th Grade Students in SMP Negeri 2 Gedang Sari GunungKidul<br><i>Kiswanti</i><br><br>3. Improving Student's Learning Outcomes of the Social Studies Subject and Speaking Skills by Using Jigsaw in 7th Grade Student of SMP Negeri 2 Gedang Sari, GunungKidul<br><i>Sri Purwanti</i><br><br>4. Deconstruction of <i>Keraton Cirebon Batik</i> Motif: 'Influence of Keraton Ornaments in Cirebon Batik Motif'<br><i>AgusNursalim</i> | Anton<br>Herujiyanto          | I   |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |     |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----|
|  | <p><b>Group B</b></p> <ol style="list-style-type: none"> <li>PAWANG (Puzzle Wayang) Instructional Media Development Based Macromedia Flash in the Javanese Language Learning in Grade V of Elementary Schools<br/><i>Annisa Nurul Islami</i></li> <li>UUM (Uthak-UthikMathuk) Media Development Based Macromedia Flash in the Javanese Language Learning in Grade V of Elementary Schools<br/><i>Arih Afra Inayah</i></li> <li>Developing “MAJEDA” based on <i>Dolanan Anak</i> to Optimize the Growth and Development of Kindergarteners<br/><i>Wawan S. Suherman</i></li> <li>Comics Media to Reduce Bullyingamong Elementary School Students<br/><i>Isna Hidayat</i></li> </ol>                                                                                                                                                                                         | FauziaAgustini | II  |
|  | <p><b>Group C</b></p> <ol style="list-style-type: none"> <li>@Unesa-Gain Learning Strategy for Developing the Science Problem Solving Ability of Elementary School Students<br/><i>Arif Sholahuddin</i></li> <li>Scientific Approach in Thematic Integrated Learning of Curriculum 2013 to Develop Critical Thinking Skills of the Elementary School Students<br/><i>Fani Akdiana</i></li> <li>Increasing the Interest in Reading in Library of Grade IV Students of Wates Wonoboyo Elementary School, Temanggung<br/><i>Slamet Hidayat, Walminto, Kabul</i></li> <li>Designing ComputerGameBased on Combination of Drill-Practice and Decision Making Concept to Enhance Children's Perception of Anti-Corruption<br/><i>Dwi Sulisworo</i></li> <li>Mental States in Achievement Context from Story in Indonesia First Grade School Books<br/><i>Maria MNE</i></li> </ol> | Dadan R        | III |

| Thursday, 8 May 2014 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                   |      |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------|
| TIME                 | PRESENTATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CHAIR             | ROOM |
| 10.15 – 11.45        | <b>Group A</b><br>1. Snake and Lader Cultural (SLC) Game: An Effort to Introduce Cultural Differences to Elementary School Students<br><i>Shinta Larasaty</i><br>2. Character Building with Students Impact on A Touch of Love Learning Process<br><i>Tri Sulistyowati</i><br>3. CDP Cooperative Learning Approach in Research Methodology Subject to Develop Students' Characters of Collaboration and Responsibility<br><i>Dimyati</i><br>4. <i>Rountokarta</i> (Around To Yogyakarta) :Games to Learn the Local Culture of Yogyakarta<br><i>Fatma Pratiwi, Wahyu Dwi Ulfah</i>                                              | YosiHanda<br>yani | I    |
|                      | <b>Group B</b><br>1. Strategies Used to Defend the Existence of SMP Stella MatutinaSalatiga<br><i>Virene, Widiarso, Dwi, Obaja, Telma</i><br>2. Environmental Management through Green School Program in SMA Negeri 2 Salatiga<br><i>Merfin Sibuea, David Tuhurima, Sulastri, Marlen Daik</i><br>3. High School Major Selection Using Neural Network<br><i>Arief Hermawan</i><br>4. Creative Personality Structural Model and Teaching Commitment for Creative Teaching in Living Skill<br><i>Nazeri Mohammad</i><br>5. Moral Leadership in Building Learning Organization Culture at the Superior Schools<br><i>Masrukhin</i> | RochmanAch<br>wan | II   |

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|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----|
|               | <b>Group C</b><br>1. Implementation of Payment with Billing System<br><i>Fatia Fatimah</i><br><br>2. The Local Government's Policies in Reducing the Cost of the Nine Year Compulsory Education Program in Salatiga– Indonesia<br><i>Bambang Ismanto</i><br><br>3. Togetherness-Based Educational Marketing Strategy at Bethany Elementary School Salatiga<br><i>Astiti R. A., Ecclesia T., Inneke P. R., Innes S. N., and Novita W.</i><br><br>4. Cost-Effectiveness Analysis: A Comprehensive Education Cost Evaluation Approach<br><i>Ernie Noor Faizah Binti Naim</i>                                                                                                                                                                                                                                                                                                        | Annisa Nurul Islami | III |
| 12.45 – 14.15 | <b>Group A</b><br>1. The Effect of Information System Quality, Perceived Usefulness and Information Quality To End Users' Satisfaction Of Accounting Dry Lab Program At Open University of Indonesia<br><i>Irma Sumantri</i><br>2. Effective Implementation of Quality Management System (QMS) ISO 9001: 2008 Development in School Based Management in State SMK 1 Sayung<br><i>Dewi Ariyanti, Miftahul Ulum, Nurul Hidayati, Yulianti Ida</i><br>3. Commitment In Enhancing the Principal Discipline<br><i>Dwi Ampriyati, Rita W., Sunarni</i><br><br>4. Improving the Quality of Care and Quality Assurance Assessment In Learning Science through Laboratory-Based Integrated Development of CMI (Computer Managed Instructional)<br><i>Dadan R, Ekosari Roektingroem</i><br>5. Development Model Of Collaborative Educational Supervision In Middle School<br><i>Widodo</i> | Arif Sholahuddin    | I   |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |     |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----|
|  | <b>Group B</b><br>1. The Lecturer Empowerment for Increasing Work Productivity of Management Lecturer through Development of Learning Material in Medan City<br><i>Fauzia Agustini</i><br><br>2. Improving Teachers' Competence in Designing Lesson Plans through KKG in Elementary Schools<br><i>Tri Atmono, YE Retno Saptawati Kawuryan, Sugiyarti, Sri Sularni</i><br><br>3. Continuing Professional Development Policy of Three in One Model for Teachers after Certification<br><i>Mintasih</i><br><br>4. Reinforcement of Society Based Education Concept on English Learning Teaching in Prawirotaman Elementary School in <i>KampungTurisPrawirotaman</i> , Yogyakarta<br><i>Ardita Markhatus Solekhah</i> | HestiWijaya             | II  |
|  | <b>Group C</b><br>6. Enhancing Writing Skills through the Spirit of "Iguh" Principles<br><i>Anton Herujiyanto</i><br><br>7. Creative Writing -Based Learning Personal Experience<br><i>Prembayun M</i><br><br>8. Writing a Conservation-Based Drama Script through Workshop Technique Cooperative Model for College Students<br><i>Ucik Fuadhiyah</i><br><br>9. Picture Paired Retelling toImprove the Motivation of Law Faculty Studentsin Learning English Descriptive Texts<br><i>Windiahsari</i>                                                                                                                                                                                                               | ArditaMarkhatusSolekhah | III |

|               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |    |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----|
| 14.15 – 15.45 | <b>Group A</b><br>1. Baseline Data Decision Support System <i>Kartu Jakarta Sehat</i><br><i>Henricus Bambang Triantono, Esti Rahayu</i><br><br>2. The Factors of Changes in the Organization of Bina Raharja Civil Servant Cooperation in Kebonagung District, Demak<br><i>Siti Anny Faizun, Suyadi, Slamet Pujiono, Junaedi, Dwiyono Kusmiyanto</i><br><br>3. Enterprise Asset Management Hospital<br><i>Angelina Permatasari, Henricus Bambang, Esti Rahayu</i><br><br>4. Effects of Financial and Non-Financial Aspects to Value Business through the Volume of Business in Cooperative Savings and Credit in North Aceh<br><i>Syamni Ghazali</i>                                   | R Rosnawati | I  |
|               | <b>Group B</b><br>1. Ability Grouping Model Using Video Learning as an Effort to Improve Students' Learning Outcomes in Drawing Techniques Course<br><i>Abdul Haris S</i><br><br>2. Improving Students' Motivation of Learning Using Blended Learning Strategy and Vark Learning Style: Case Study of SMKN 1 Bantul<br><i>Yessica Mega Aprita</i><br><br>3. Javanese Parenting Role In Students' Moral Development<br><i>Mashud Syahroni, Annisa Nurul Islami</i><br><br>4. Optimization Of Puppet Paper Toys Through Story Of Javanese Puppet (Sojet): A Means Of Character Education And Local Culture Introduction For Children<br><i>Tri Hardiyanti, Ardita Markhatus Solekhah</i> | Widodo      | II |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |             |     |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----|
|  | <b>Group C</b><br>1. Student Performance Prediction Model of Online Tutorial of the Laboratory to Accounting Introduction<br><i>Hana Norhamida</i><br><br>2. Questioning Skills of PGSD Students in Semarang State University<br><i>Tri Murtini</i><br><br>3. Effect of the Recognition of Prior Learning and Experiences on the Performances of the Bachelor Education In-service Teachers Programme and Its Related Factors<br><i>Slameto</i><br><br>4. Omani PE Candidate Self-Reports of Learning Strategies Used to Learn Sport Skills<br><i>Nasser Al-Rawahi</i> | Windiahsari | III |
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INTERNATIONAL CONFERENCE ON  
EDUCATIONAL RESEARCH AND INNOVATION  
(ICERI 2014)

Second Annual Conference

Yogyakarta State University, Yogyakarta, Indonesia, May 7 - 8, 2014



**INVITATION LETTER**

Dear Masrukhin,

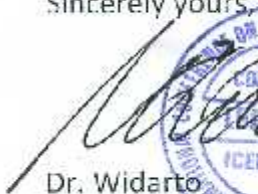
Kindly refer to our notification letter in which you find our statement that your paper proposal entitled "Moral Leadership in Building Learning Organization Culture at the Superior Schools" has been accepted to be presented in oral presentation in the 2<sup>th</sup> ICERI International Conference to be held in Yogyakarta, Indonesia, on 7-8 May 2014.

In this opportunity, the Organizing Committee invites you to present your paper in the following conference schedule, which will be presented in the program book.

I look forward to meeting you at the conference.

May 5, 2014

Sincerely yours,

  
Dr. Widarto  
Organizing Committee







**INTERNATIONAL CONFERENCE ON EDUCATIONAL RESEARCH  
AND EVALUATION (ICERE) 2014  
YOGYAKARTA STATE UNIVERSITY  
GRADUATE PROGRAM**

Kampus Karangmalang Yogyakarta – 55281,  
Telp.: +62274-550836, Fax.: +62274-520326

October 20, 2014

**NOTIFICATION OF ACCEPTANCE AND INVITATION**

Dear **MASRUKHIN, S.Ag., M.Pd.**  
STAIN Kudus

On behalf of the committee, we are pleased to inform that your abstract entitled:

**“AUTHENTIC ASSESSMENT DETERMINANT IN ISLAMIC RELIGION EDUCATION  
EXECUTION TOWARDS COGNIZANCE QUALITY HAVES A RELIGION IN STUDENT AT  
ELEMENTARY SCHOOL AND MADRASAH IBTIDAIYAH AT KUDUS REGENCY”**

is accepted to be presented at International Conference on Educational Research And Evaluation (ICERE) 2014. The event to be held 8 November 2014 in Rectorate Hall and Graduate Program of Yogyakarta State University, Indonesia.

In relation to this, we would like to invite you to present your article at the parallel session, and please:

- 1) send your full paper (in english) not later than 27 October 2014. Paper can be submitted via email at [anggitprabowo@gmail.com](mailto:anggitprabowo@gmail.com). Please make sure that your full paper meets our requirements: up to 12 pages, font size 12, Times New Roman, 1.5 spacing, and completed with abstract, key words, introduction, method, finding and discussion, conclusion and suggestion, and references.
- 2) complete the list of equipment required for your session, including preparing slides in the form of Power Point Presentation. In the conference room, we provide you with the standard conference facilities: LCD and laptop.

We're looking forward to seeing you at the the International Conference on Educational Research and Evaluation (ICERE) 2014 in Yogyakarta, Indonesia.

Yours sincerely,

Prof. Dr. Sudji Munadi  
Committee