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“Be The Leading Entity in Education”

FACULTY OF TEACHER TRAINING AND EDUCATION
SATYA WACANA CHRISTIAN UNIVERSITY
Salatiga, Central Java, Indonesia
JUNE 27th-28th, 2012



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Faculty of Teacher Training and Education,

Satya Wacana Christian University

Salatiga, Central Java, Indonesia

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Mark Woodward

(University of Illinois at Urbana – Champaign USA)

Pradeep Gupta

(Second Secretary for Education & ASEAN, The Embassy of The Republic of India)

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PREFACE

Message by Dean of Faculty of Teacher Training and Pedagogy Satya Wacana Christian University

Dr. Bambang S. Sulasmono, M.Si.
Dean of Faculty of Teacher Training and Pedagogy

Distinguished speakers and honorable presenters and participants

First of all, I would like to say thank you very much to Mr. Jonan Donaldson, Dr. Megawati Santoso, Mr. Ajar Budi Kuncoro, Mr. Mark Woodward, and Mr. Pradeep Gupta. Thank you very much for your willingness to present in this International Seminar. This seminar would not be that wonderful without your presence here.

In this opportunity, allow me to highlight some important points of this seminar. First, from Ibu Megawati we learn that to be a leading entity in Education in globalization era is mean that we must fulfill national qualification standard in order to succeed in international competition in a global world. The main implication is that all education institutions should redesign their curriculum in order to better prepare their students to be qualified in international job competition. But the most important implication of that policy is that all students, parents, and stakeholder should be aware that the education process is not just a process of earning a degree/title, but it is really a process of producing qualified and certified person. Because in the global era, whoever we are, we must run, run, and always run to be the winner in the global competition, and it means that we should be the leading entity in education.

Second, from Mr. Jonan Donaldson presentations we learn about

- a. Educators nowadays should change their paradigm from traditional one to more contemporary one; giving more chances/opportunities to students to be more creative and innovative. Educators should create environments where mistakes are seen as parts of the learning process. Students should have higher levels of power over their own learning, and should be allowed to be intrinsically motivated. In turn, educators should remove grades as extrinsic motivation, remove reward and punishment, replace tests with projects, and use student-made rubrics to assess their grade mastery. To do these, educators should use project based learning, collaborative learning and inquiry based learning in their teaching-learning processes.
- b. The teachers must make students have critical thinking about everything that happen around them through media and digital literacy without leaving traditional literacy. It is important for LPTK (Faculty of teacher's training and education) to facilitate the students to understand better about media and digital literacy.

Third, from Bapak Ajar Budi Kuncoro's presentation we learn about the importance of active learning. We have to realize that active learning is not just a program from the government, but it's also something that we must do. Pak Ajar points out three things for the sustainability of active learning:

1. The role of principals and supervisors: monitor, supervise, and provide assistance for teachers.
2. Support from the government: budget allocation and policy



3. Change in mindset and mentality of teachers

Fourth, from Dr. Mark Woodward we learn that there are some empirical evidences prove that education about religion doesn't diminish exclusivist thinking. So, Mark suggests that we need civic pluralism. Mark says that civic pluralism draws on the ideas that people enjoy the right to express and actively pursue their identity, be it on ethnic, religious or other grounds. It also focuses on how people can live together. The main educational strategies are: a) rejection of the idea of "religious others" as existential threats; b) emphasis on shared values, and emphasis on positive results of inter-confessional cooperation to solve common problems.

Fifth, from Mr. Pradeep Gupta we have seen how the qualified higher educational system grows rapidly in India. Moreover there are many opportunities for us to study in some universities in India, through the various scholarship schemes. I hope our faculty members will be awarded scholarship.

And last but not least, from all presenters in the concurrent sessions, we found there are many researches, best practices, and lessons learned that encourage us to move on research based teaching. Hopefully, we will find more researches and best practices in the next seminar. Thank you and see you in the next seminar. GBUs.



Message by Chair of the Organizing Committee

Petra Kristi Mulyani, M.Ed.
Chair, Organizing Committee

Distinguished speakers and honorable presenters and participants

Let us first of all extend to everyone present here our warmest greetings and heartfelt welcome to this auspicious occasion, International Seminar 'Be The Leading Entity in Education' at Faculty of Teacher Training and Pedagogy, Satya Wacana Christian University (SWCU).

My special welcome and appreciation go to Megawati Santoso, Ph.D., Indonesian Qualification Framework Team Coordinator at Directorate General of Higher Education, Ministry of National Education, Indonesia; Jonan Donaldson, Faculty Support Specialist for Distance Education and Academic Technology at Chemeketa Community College, Oregon, USA; Ajar Budi Kuncoro, Provincial Liaison, Bridging Team of USAID Basic Education; Mark Woodward, Ph.D. University of Illinois at Urbana – Champaign USA; and Pradeep Gupta, Second Secretary for Education & ASEAN, The Embassy of The Republic of India.

I would like to extend my deep gratitude to Prof. John A. Titaley, Rector of SWCU; Ferdy Samuel Rondonuwu, Ph.D., Vice Rector V of SWCU; Prof. Sutriyono, and Prof. Lobby Loekmono, Steering Committee; to the Organizing Committee members Susanti, Ajeng Ayu Widiastuti, Sapto Irawan, Adriana Setyawati, Yari Dwikurnaningsih, Y. Windrawanto, Kristien W. H., Bambang Ismanto, Wahyu Purwiyastuti, Kriswandani, Stefanus Christian Relmasira, Novisita Ratu, Henny Dewi K., Lanny Wijayaningsih, Arief Sadjiarto, Setyorini; and to all students Organizing Committee members.

Faculty of Teacher Training and Pedagogy International Seminar this year will be the start of the upcoming years' international seminars in this faculty. Faculty of Teacher Training and Pedagogy perceive the need to acquire and to share the results of current research and best practices in education as a good opportunity to maximize the role of alumni of the faculty and all education practitioners from various institutions to fulfill nowadays needs of education. This international seminar can also function as arena of scientific discussion among practitioners in education. There are a variety of topics and presentations of this seminar. Those include the research results and best practices in the following areas: education policy, education management, innovation in education, inclusive education, moral and ethical issues in education, multicultural education, and teacher performance.

Participants and presenters in this seminar are expected to come from a variety of educational practitioners like teachers, professors, staff of private institutions, government officials, religion leaders, foundation owners, counselors, researchers, students, etc. not only from the Faculty of Teacher Training and Education, Satya Wacana Christian University, but also from various universities, schools, institutions, and agencies in Indonesia and abroad.



Finally, we're hoping that you will get the best benefit in joining this seminar. We expect you to join us in our international seminars in the following years. We have the responsibility to serve in education, which is part of our responsibility to increase education quality through acquiring and sharing the results of current research and best practices, partly fulfilled through this seminar. We're hoping to see you by next year.

God's blessings are always with you.

Salatiga, June 28, 2012



School is Out, Education is In

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Abstract

We stand at a point in history where how we educate our young people is of crucial importance. Educators and educational institutions should replace the traditional focus on knowledge with a new focus on creativity and innovation. This is best done through project-based learning, collaborative learning, and inquiry-based learning in an atmosphere that embraces mistakes, allows greater student autonomy, and fosters intrinsic motivation

Keywords: Education, School, Teaching, Creativity, Innovation, Project-based learning, Collaborative learning, Inquiry-based learning

What made America so influential in the world? If you consider all the innovations and inventions that define our modern world, the large majority originated in America. Any analysis of international test scores will reveal the United States does not have the “best” educational system in the world. What America does have, however, is a great number of teachers who disregard the systematic pressure to focus on tests and instead focus on creativity and innovation.

Many countries around the world look to the United States as a model upon which to build their educational systems. I would argue that although America leads the world in terms of educational theory and research, the current system does not align with research-based educational practices. Therefore, those looking for a model upon which to base their educational system should look not to the system in America, but rather wipe the slate clean and start from the ground up, basing their practices upon research-proven methodology as well as local innovations.

How can we go from better to best? How can we become the leading entity in education? To do so, our students have to not only meet our expectations, but far exceed all our expectations. We must prepare them to blow us away.

The first time I ever stepped foot into a classroom was in college. I was fifteen years old, several years younger than my peers. I got excellent grades in all my college classes. So what did I do before I went to college? It’s all due to my mom and dad. Every weekend they took me to the library. They would let me check out as many books as I wanted to read during the week. They set up “apprenticeship” opportunities for me from a young age. I worked for a few months in a medical laboratory learning how to do things like white blood cell counts. I worked for a few months with a physical therapist learning how to do hydrotherapy treatments. I worked for a few months in a remedial reading school where I helped people with dyslexia learn how to read. I worked for a few months in a hospital helping the nurses. On a farm milking cows. At a school working on the databases.

My story is proof that traditional schooling—with all the lectures and drills and tests—is not as effective as other methods. My story is proof that education can be better. My parents are the perfect teachers: they didn’t try to teach me what they knew, but rather they helped me figure out what I wanted to know and set up situations in which I could acquire whatever



knowledge or skills I desired.

We as educators shouldn't be trying to impart our knowledge to our students. Our knowledge is limited. Einstein said that imagination is more important than knowledge. Knowledge is limited. Imagination has no limits (Einstein, 1929). If we were to impart our knowledge perfectly, the best our students could achieve is to be as knowledgeable as us.

Our goal as educators should be to help our students go FAR beyond us. Our goal as educators should be to help our students be better—in all ways—than any human beings have ever even dreamed of being.

Is this possible? Absolutely! But, as John Dewey noted nearly a century ago, if we keep educating our students the same way as we have in the past, we rob them of their future (Dewey, 1944).

The key to helping our students fulfill the amazing potential we know they hold is creativity. Creativity is the ability to take your skills and knowledge and come up with something innovative and new that has value.

But how do we go about fostering creativity?

The first step in empowering our student to become more creative is to embrace mistakes. Thomas Edison created the electric light. Before he succeeded, he failed 2,000 times! He made at least 2,000 mistakes before he got it right. The average millionaire has been bankrupt nearly four times (Tracy, 2009). What kind of person can do this? Is it a strong will? No! It's a character that loves mistakes just as dearly as successes, a person who sees mistakes for the wonderful learning experience they truly are.

How do we deal with mistakes in school now? Do we give students tests where they get punished for making mistakes? Do we correct them?

Embracing mistakes involves saying "Yes!" when students make mistakes. It means trying to find ways to point out the good in any mistake. It means showing students your own vulnerability to mistakes—pointing out your own mistakes every time you make them (Darling-Hammond & McLaughlin, 1995). Most of all, it means keeping your mouth shut when you know students are on the wrong track—just trust them! They will get to where they need to go, and perhaps they will find a better path than you have in mind.

The second step in fostering creativity is to allow autonomy. This means giving students power and ownership of their own learning. It means valuing the student wishes over the curriculum. It means letting them decide what they will learn, when they will learn it, and how they will learn it.

Of course students don't always know what they want to learn. This is where you come in.

You can give them a great variety of options. You can give them learning objectives, such as

"we need to learn how the solar system works", then you can say, "we will work in groups—your group could figure out what the sun is made of, or what the different planets are made of, or how gravity keeps us from flying away, or how the solar system started, or what's



going to happen to our solar system in the future. There is no textbook. I will help you in any way you ask me, but YOU will figure out what you are going to learn, where to find the information, how to understand the information, and how you will present the information. At the end of this project, your group will teach the rest of the class everything you learned. Again, how you do this is totally up to you! If you get stuck, just ask me and I'll help if I can"

One example of this kind of learning is High-Tech High in San Diego, California. At this highschool, there are no “classes”. There are no lectures. There are no tests. There are no textbooks. Students work with their “coaches” and classmates to design projects. Is it successful? Well, 100% of graduates go to college.

Allowing students to take ownership of their learning through greater autonomy increases student engagement and creativity. When students know that they are making choices in terms of their learning, they feel empowered. The result is higher academic achievement, even in areas where they have not chosen to put their focus (Patall, 2012).

The third step in fostering creativity is to develop intrinsic motivation. Intrinsic motivation is the opposite of extrinsic motivation. Extrinsic motivation means doing something because of some external pressure. Some students have high academic achievement because they want to make their parents proud. This is extrinsic motivation. This might seem nice, but we want our students to want to learn for themselves. Some students have high academic achievement because they want good grades. This is extrinsic motivation. Other students do well because they are scared of bad grades. This also is extrinsic motivation. Some students do well because they want to earn more money when they get a job. This, again, is extrinsic motivation.

Intrinsic motivation is different. Intrinsic motivation is when we learn something because we feel a hunger to know about it. It is when we feel most alive—most excited—when we are working out new skills or understanding of something we are passionate about. Intrinsic motivation is directly related to self-determination (Skinner, 2012).

We can't remove all extrinsically motivating factors. We can't (and shouldn't) make our students not care what their parents think. We can't get them to stop dreaming of a comfortable salary. But we CAN remove the most damaging of all extrinsic factors—and this leads us to our second key to helping our students become people who can blow us away: End the Tyranny of Testing and Grades.

We noted earlier that tests create an atmosphere of fear of mistakes. It stifles creativity. It focuses students on black-and-white knowledge rather than skills or innovation. Fear of bad grades has the same effect.

In an ideal educational situation, grades and tests would be completely gone.

Now let's be realistic. Are we really going to do away with all grades? Are we really going to eliminate all tests? Well, maybe someday. But in the meantime, we CAN eliminate the power they have to damage student creativity, learning, and passion. How can we do this? We can use grades in the way Reed College does. There are Ivy League schools in the world—schools such as Harvard, Princeton, Yale, Oxford, and Stanford—and Reed College is one of them. At Reed College, students never see any grades until after they graduate (Clark, 1972). Professors keep track of grades, but they never tell students their grades, and the school never says anything either. If a student's grades fall too low, they will be called in



and politely invited to study somewhere else. Of course, they are told, they can stay if they work hard.

However, because of this system, students are almost never invited to leave! They all do amazingly well. They grow up to be Steve Jobs—the inventor of the iPhone and Mac computers. He went to Reed. That’s the kind of people who your students will be if you throw out this archaic and counter-productive idea that we should motivate students with grades.

In your school, you might not have the voice—the power—to create an environment in which students cannot see their grades. But there are some things you can do.

In an influential study several decades ago, (Morgan, 1984) children were observed to see how often they participated in drawing activities. Then some of the children were told they would receive rewards for their drawings, and the others were not told they would get any reward. The children who were told they would get a reward actually did better than the other students. So, rewards are good, right? Wrong! A few weeks later the same children were observed in a situation where they had access to drawing materials. The researchers wanted to see which group would draw more on their own—just for fun. The group who had previously been rewarded produced dramatically fewer drawings. In other words, by rewarding them, the researchers had destroyed their desire to draw.

In another study, a panel of experts analyzed works by artists (Amabile, 1993). Half of the artists’ works were commissioned (they had been paid to create them), and the other half were done on their own initiative. The experts didn’t know which group each piece of art belonged to, but rated them according to artistic qualities. The commissioned works of art were consistently rated much lower. In other words, if you are doing something for a reward (money, grades, praise), the quality of the work is lower.

How does this relate to your educational practices? The most important thing to remember is that students should neither be rewarded nor punished. Doing so will destroy their intrinsic desire to learn. In other words, NEVER let them know if you are keeping score (recording grades). Never let them know they are being assessed.

The first thing you can do to remove the power of grades is to never give tests. Of course, little quizzes (which are not graded) can be a good thing, but be careful—they should never have points attached to them. Even better is if the students can work in groups to create questions for class quizzes, and then check each-others’ answers. And, again, don’t record how they did on the quiz.

More importantly, don’t give tests such as mid-term or final exams. Instead, assess students on project work (essays, presentations, science projects, and so on) using rubrics. Hopefully, you won’t have to let students know that they are being assessed. This aspect should be as invisible as possible.

Finally, if you do have to give grades on student work, you can set up assignments that are graded 100% if they follow the requirements of the assignment. In other words, right from the very beginning of class, tell your students that every student in the class is going to get an “A”, and the only way they will get less than an “A” is if they don’t give each assignment their best effort. In other words, “If you try, you get an A, if you don’t try, you get an F”.



These alternatives to tests and grades bring us to our final key to helping our students blow us away: Replace lectures with educational best practices, including project-based learning, collaborative learning, and inquiry-based learning.

Earlier I mentioned a solar-system activity when I was talking about autonomy. This was an example of what research has proven to be the most effective educational practices. The first is called “Project-Based Learning”, the second is called “Collaborative Learning”, and the third is called “Inquiry-Based Learning”.

Project-based learning has been proven to be one of the most powerful educational methodologies to increase student engagement, student interest, problem-solving skills, depth of understanding, and transfer of skills to novel situations (Hmelo-Silver, 2007; Barron, et al., 1998). Project-based learning has students engaging with a topic while developing a wide range of skills—both related to the subject and incidental to the learning at hand. By structuring learning through projects, we enable our students to build rich schema concerning the topic on which they are working.

Collaborative learning has its roots in Albert Bandura’s Social Learning Theory. Due to reciprocal determinism, students learn at the deepest levels when working with others (Schacter, Gilbert & Wegner, 2011). Collaborative learning is not always easy to set up: “when teachers orchestrate collaborative learning and support creativity among students, they need to find the balance between different necessities, such as between design and real-time activity, the interrelationship between instruction and improvisation and the needs of different groups.” (Hamalainen & Vahasentanen, 2011). However, the greatly increased learning gains make the effort worthwhile.

Inquiry-based learning “represents a powerful repertoire of strategies for advancing an impressive range of significant learning outcomes. It is well grounded in contemporary theories of learning.” (Lee, 2011). The beauty of this approach is that it focusses the students on their own learning processes in a form of metacognition. In most applications of this methodology, students guide the learning process through their own inquiry. The traditional classroom of the past was teacher-centered, with a teacher in front of the class and students listening attentively. In the mid-70’s education saw a shift in the direction of student-centered classes, where the rule was that students should be speaking eighty percent of the time and teachers should be speaking less than twenty percent of the time. Inquiry-based learning sees a classroom where students and the teacher are gathered around a topic. In other words, instead of being teacher-centered or student-centered, inquiry-based learning is topic-centered.

Project-based learning, collaborative learning, and inquiry-based learning are often discussed separately, but they should be seen as inter-related aspects of educational best practices. Inquiry-based learning could result in collaborative student projects, for example. Bringing these aspects together is best viewed through the lens of Bloom’s Taxonomy (Baviskar & Lord, 2007). This taxonomy is a triangle which starts with a base of remembering knowledge and works upwards through understanding, applying, analyzing, evaluating, and finally, creating. Any learning activity should always be designed in such a way as to address as many levels as possible in Bloom’s Taxonomy, especially the higher levels where skills and understanding merge.

Bringing together a powerful mix of research-based best practices will ensure that we provide the best quality of education to our students. These best practices must be



implemented with a strong focus on creativity and innovation, fostered through the embracing of mistakes, allowing greater student autonomy, and nurturing intrinsic motivation. Our current system is cluttered with baggage from our educational past. We are now at a turning point where we will have to decide how we will proceed—whether we will continue trying to make minor improvements to the current system, or have the courage to implement entirely new and better ways of educating our young people.

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Financing Education in Community Empowerment Implementatiton 12 Year Compulsory Education In the District / City of Central Java Province

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Abstract

This study aims to determine the policies of government and local Governments to increase of public participation in the fulfillment of the budget implementation rate of 12 years of compulsory secondary education districts / Municipalities in the province of Central Java. Research covers secondary education budget 35 districts / cities in Central Java province. Research covers secondary education budget of 35 districts / cities in Central Java province. The result showed high contribution of education budget (SMA / SMK / MA) approximately 3.31% of the state budget (APBN) , The local budget (APBD) : 37.06% and 59.63% of the community. The result showed the high contribution of education budget (SMA / SMK / MA) approximately 3:31% of the state budget (budget), the local budget (budget): 37.06% and 59.63% of the community. 12-year policy of compulsory secondary education level from year 2012 in Indonesia to improve the quality and competitiveness of human resources. Empowerment of community development made since the planning, implementation and evaluation of budget management 12-year compulsory education. 12-year policy of compulsory secondary education level from year 2012 in Indonesia to improve the quality and competitiveness of human resources. Empowerment of community development made since the planning, implementation and evaluation of budget management 12-year compulsory education. Good governance in the management of the education budget should be developed to increase community participati on. Good governance in the management of the education budget should be developed to increase of community participati on.

Keywords: participation, public, 12-year compulsory education, good governance

INTRODUCTION

Education is one of the strategic program of improving the quality of human resources. A variety of educational programs intended to develop our potential to have the spiritual power of religion, self-control, personality, intelligence, noble character, as well as the necessary skills themselves, society, nation and state. Communities eligible to participate in the planning, implementation, monitoring, and evaluation of educational programs. Community shall provide support in the implementation of educational resources (Articles 8 and 9 of the Law on National Education System).

In order expansion and the equitable distribution of quality educational opportunities for every citizen of Indonesia, the Government established a policy of compulsory education. Compulsory education aims to provide a minimum education for citizens of Indonesia to be able to develop the potential of himself in order to live independently in the community or continuing education to a higher level. Compulsory education program organized to provide services primary education provide an opportunity for children to get basic education.



Compulsory education is the responsibility of the state held by government institutions, local government pe, and community (Article 34 of the Education Law).

Successful of Government in the implementation of learning 9-year basic education followed by a 12-year compulsory education policy at the level of secondary education. 9-year compulsory education began in 1994, in 2008 succeeded in realizing a number of education Parti rough anticipation SD / MI / Package A around 116.56 % 116.56% and level SMP / MTs / Package B around 96.18%. 96.18%. Compulsory education covers 12 years of Secondary education consists of general secondary education and secondary vocational education level of SMA/MA/SMK/MAK.

Public participation in the implementation of compulsory education as revitalisation autonomy enacted education undertaken since the beginning of regional autonomy in 2001. Regional autonomy is regulated Law No. 22/1999 which improved to Law No. 32/2004 on Regional Government establish a radical change in governance from centralized to decentralized system. Communities with Local Government and private parties subject to the increased equity, access and quality of education according to needs, aspirations and potential of the region concerned.

Constitution of 1945 in Article 31 paragraph (4) mandates the state to prioritize anggaran pendidikan sekurang-kurangnya sekurang-kurangnya education budget 20% dari anggaran pendapatan dan 20% of budget revenues and state expenditures and revenues and expenditures of local budgets for meet the needs of national education. As the implementation The mandate of the Constitution of the Education Law stipulates that education funding a shared responsibility between government, local government, and society. Government, local governments, and mobilize community resources resources. Management of education funds is based on fairness, efficiency, transparency and public accountability.

Compulsory education program organized to provide services broad basic education to citizens of Indonesia without of religion, ethnicity, social, cultural, and economic. Every citizen of Indonesia are entitled to a compulsory schooling age quality education services and parent / guardian shall provide an opportunity for children to get basic education. Compulsory basic education units held on the formal education, nonformal, and informal and should be accommodate children with disabilities as well as normal and have hambatan. barriers. Regulations on compulsory education covers the rights and obligations of citizens of Indonesia, government responsibility and local government. In compulsory education, public peranakans air in the form of resource support (Funds, facilities, personnel, administration, manajemen) and become foster parents.

Funding education is a shared responsibility between government, local government, and society. Scenario of education funding in the period 2010 - 2014 refers to mandate of the Republic Indonesia Constitution and Education Law 1945 and to continue the function and purpose (a) education by the government for the years 2005-2025, namely clarify partiality to the poor; (b) strengthening of decentralization (c) insentif and educational autonomy, and (c)incentives and disincentives for improved access, quality, and governance. Implementation of the three functions of education funding aims to realize the educational services in accordance with national standards of education are reflected in the structure and funding and budget division of funding responsibilities between the government and local government. Since the 2009 budget and the mandate of the 1945 Education Law (according to the No decision of the Constitutional Court 13 of 2008) have been met by the government by providing education budget 20% of the state budget.



In addition to the organizers and education units, educational funding as well the responsibility of students, parents and / or guardians of students. Responsibilities are (a) personal expenses of students, (b) funding program investment costs in addition to the educational unit of land rather than executing the program compulsory education, both formal and informal, are necessary to cover lack of funding provided by the organizers and / or unit pendidikan; (c) financing the cost of personnel in the educational unit is not program implementing compulsory education, both formal and informal, which required to cover the shortage of funding provided by; (d) financing costs nonpersonalia the educational unit is not implementing compulsory education, both formal and non-formal, uk unt needed to cover the shortfall of funding provided by the organizers and / or educational unit, and (e) funding with the cost of investments in education and / or part of the operating costs Additional education is needed to develop the educational units become an international and / or locally-based excellence. Education funding can be obtained also from people outside of the organizers and education units as well as established community of learners or people parent / guardian with the terms given voluntarily, is recorded and transparently accountable to stakeholders education, and audited by public accountant and was published in a transparent mediated national print and then are reported to the Minister of Education Nasional if the amount exceeds a certain amount set by the Minister Education.

Departing from the above background, the problem is the focus of research in is how can Government and Regional policy in the increased participation of the fulfillment of the budget implementation of compulsory education to 12 years according to the Government budget contribution and local governments and communities in the organization of secondary education districts / cities Central Java Province

This study aims to know the policies of government and local governments to increase public participation in the fulfillment of the budget implementation rate of 12 years of compulsory secondary education districts / municipalities in the province of Central Java. More specifically the study aims to determine the contribution the Government, Local Government and the people in the organization of secondary school (SMA / MA / SMK) and identifies the policy of the Government and Local Government to improve community participation in supporting the implementation of the budget needs of secondary education as a compulsory program of District 12 / town in Central Java province.

REVIEW OF LITERATURE

Policy is a series of targeted actions and patterns and consistently implemented to meet the goals and objectives of the policy is expected. MacRae (1985:3), "*a policy is a chosen course of action significantly affecting large numbers of people if chosen by government, it is public policy*". MacRae (1985:3), argues that "*a policy is a chosen course of action significantly affecting large numbers of people if chosen by Government, it is public policy*". Ebijakan K is the choice of a series of actions that significantly affect many people. *policy is purposive course of action followed by an actor or set of actors in dealing with a problem or matter of concern ...* If selected by the government then said to be *public policy*. In line with MacRae, Hill and Hupe (Anderson, 1979:3) argues that "*policy is a purposive course of action Followed by an actor or set of actors in dealing with a problem or matter of concern. .. publik policies are those policies developed by governmental bodies and officials . "* Those policies are public policies developed by governmental bodies and officials. (*what government do, why they do it, and what differenceit makes*). Policy is a series of actions performed by one actor or several actors to solve problems, and public policies are developed or determined by the agency with the power and pemerintah. T erkait government intervention, Dye (1995:2) defines policy as all the things that the government, why they are doing, and the results that



make a life together appear to be different (*what government do, why They do it, and what makes differenceit*).

Hill (1997:6) argues that *public policy is a course of action adopted and pursued by Government, party, ruler, statesmen, etc* ". While Easton (Hill, 1997:4) gives definition as *"public policy is the a u thorative act on the whole society, and everything the government choosed to do or not to do the allocation values results"*. Anderson (1978:25), suggests that *"policy implementation is the application of the policy by the government's administrative machinery to the problem. Then Edwards III (1980:1), argued that" ... is the policy implementation stage of policy increasingly Between the establishment of a policy And the consequences of the policy for the people whom it affects"*. *And the Consequences of the policy for the people whom it affects. "*

According to Government Regulation Number 38 of 2007, local government policy in the field of education funding include: (1) Providing the cost of providing early childhood education, primary education, secondary education and non-formal education according to their authority. (2) Financing education units appropriate quality assurance authority . In Government Regulation No. 48 of 2008 on Education Funding, stated that the cost of education includes; unit cost of education; the cost of providing and / or management of education, and personal expenses of students. Pendanaan education a shared responsibility between government, local government, and society. Cost of education is the responsibility of the Government allocated in the Government budget, and that is the responsibility of local government budgets are allocated in accordance with a system of local government budgeting in the legislation. While funding sources from m asyarakat include: a. organizers or educational unit established community, b. students, parents or guardians of students, and c. others who have interest and role in education. Source of education funding is determined based on the principles of equity, adequacy, and sustainability. The principle of justice means that the amount of education funding by the Government, local government, and society adapted to the capabilities of each. The principle of sufficiency means that the education funding sufficient to fund the implementation of education that meets National Education Standards. The principle of sustainability means that education funding can be used on an ongoing basis to provide educational services that meet the National Standards of Education (Art 50 PP 48 of 2008).

Government (central) and local governments responsible for providing the budget needed to meet the needs of the community endidikan p. This fits the mandate of Article 31 paragraph (4) of the 1945 Constitution which states that the State prioritize education spending at least two twenty percent of budget revenues and expenditures and revenue and expenditure budgets to meet the needs of national education.

Source of education funding is determined based on the principles of equity, adequacy, and sustainability. To meet these demands, according to article 47 paragraph 2 of the 1945 Constitution, the government (center), local governments, and mobilize community resources in accordance with laws and regulations that apply. community resources and the region need to be empowered according to the principles of good governance (good governance), which includes the principle of fairness, efficiency, transparency and public accountability (Article 48 paragraph 2 of the 1945 Constitution).

According to John (1983), used form of fiscal development to meet the financing needs of education include: (a) Estimates are made for the organizing of the federal government, state



or local, (b) Program grants and scholarships given by the government federal, state and local, and (c) Tax- Tax expenditures for tuition grants, donations, and training expenses. According Strategic Plan of Educational Ministry 2010-2014 year funding through the development of education policies : (1) Mapping the structure of the total cost of education; (2) Setting the education financing system that is proportional to consider the purchasing power index 3) Increasing the effectiveness of educational assistance to poor students taking into account the disparities between regions and sexes (4) increased intensity of research and international publications, (5) Increasing the effectiveness of educational assistance, research and service to the community in higher education to meet the needs of the community and increasing the competitiveness.

The program of School Operational Assistance as BOS specifically aims to (1) eliminate all poor students at the primary level of school operating costs, both in the public schools and private schools, (2) eliminate all public school students and junior high school for school operating costs, except for the stub international school (RSBI) and internationally at school (SBI) and (3) Relieve the burden of operational costs for students in private schools.

METHODOLOGY

The study was conducted with a qualitative approach by conducting assessments of education policy in implementing compulsory education in Indonesia. Descriptive analysis of the financing and the contribution of secondary education in the province of Central Java to support the central government fiscal policy analysis, and local government and community participation in meeting the needs of pe mbangunan education budget.

Descriptive analysis of education funding is done by the secondary data profile of education in Central Java Province Department of Education and Actual Budgets District / City of Ministry of Finance of the Republic of Indonesia Year 2008. Qualitative analysis is based on the policy of the Ministry of Education and Culture of the Republic of Indonesia and Central Java Provincial Government in the implementation of compulsory education.

To increase confidence in research data conducted data triangulation with secondary data analysis of more than 2 (two) as the source of the Central Bureau of Statistics, Ministry of Finance, Ministry of Education and Culture., Information Accountability Report Governor of Central Java, Central Java Provincial Education Office. Review education policy stems from the Strategic Plan of the Ministry of Education and Culture 2010 - 2014 and Regional Medium Term Development Plan 2008-2013 of the Province of Central Java.

RESULTS AND DISCUSSION

Education budget is allocated to secondary education program (SMA / MA / SMK) in Central Java Province Year 2008 sourced from the budget / budget for Rp.10.875.586.500, 000;. Average education budget 33-city district in Central Java Province of Rp.310.731.040.000;. Klaten highest Rp. 518.043.220.000; and lowest Salatiga Rp.114.829.750.000;. While the unit cost of providing secondary education by an average of Rp.1.975.912, 93, the highest in the district of Karang Anyar Rp. 4.818.880;., and the lowest in the District of Rp.875.190 Cilacap.

Implementation of the 9-year compulsory primary school / MI and SMP / MTs have been successful in increasing enrollment rates. In elementary / MI / SDLB / Package A gross



enrollment rate increased. In the Year of National Education Strategic Plan 2010 - 2014 stated that the level of SD / MI / SDLB / Package A gross enrollment rate increased (GER) from 112.5% in 2004 to 116.56% in 2008 and estimated to be 116.95% in 2009. Along with that number The net enrollment (NER) increased from 94.12% in 2004 to 95.14% in 2008, and is estimated to be 95.40% in 2009. Compulsory education at least at the primary level as part of human rights and the rights of every citizen compliance efforts must be planned and executed as quickly as possible. Fulfillment of the right to quality basic education is a measure of justice and equity for the development and investment as well as a human resources needed to support sustainable development of the nation.

Despite the increase in GER at secondary education level in Indonesia is still below 100%. APK SMA / SMK / MA / SMAB / Package C has increased, which is 49.01% in 2004 to 64.28% in 2008, and is estimated to be 68.20% in 2009. Disparities GER SMA / SMK / MA / SMALB / C Package between counties and the city declined from 33.1% in 2004 to 30% in 2008 and is expected to fall to 29.2% in 2009.

Table 1. Contribute to the delivery of Secondary Education Funding (SMA / SMK / MA)
 Central Java Province Year 2008

Resources	SD-MI (%)	SMP-MTs (%)	Wajar 9 Thn (%)	SM (%)
1. The Government (APBN)	21.42	10.97	16.195	3.31
2. Local Government (APBD)	72.29	45.2	58.745	37.06
3. Community	6.29	43.83	25.06	59.63
Total	100	100	100	100

Source : Educational Profil of Central Java Province (analysis)

On the table shows that most of the needs of the cost of providing basic pendidikan p SD / MI in the province of Central Java in 2008 covered local government is allocated from the budget of about 72.29%, followed by state budget (APBN) approximately 21.42% and the remaining approximately 6.29% were contributed by the community. Basic education SMP / MTs most of her sources from the regional (45.20%), budget (10.97%) and the contribution of the community around 43.83%. In total, the implementation of compulsory primary school / MI and SMP / MTs in the 2008 County / City Largely the province of Central Java (58.75%) sourced from the budget, the contribution of local communities and the remaining approximately 25.06% 16.20% coming from the state budget. the contribution of secondary education Regency / City in the province of Central Java in 2008 the majority (59.63%) sourced from the public, about 37.06% Local Government and Central Government about 3.31%.

Relatively large contribution of the community in the administration of secondary education should be a consideration in the Government, the Regional Government of Central Java province and regency / city in setting funding policy in the implementation of compulsory education at 12 SMA / MA / SMK. Berbagai problems, especially the decline of participation and commitment of the community in the implementation of 9-year compulsory education needs to be input in setting policy.

From 2013 Kemendikbud Universal Secondary Education organized 12 years. According to Education Minister Mohammad Nuh, 2012 Hardiknas momentum as well as used for the launching of 12-year compulsory education as an effort to give birth to the golden generation of 100 years of independent Indonesia (Reuters May 3, 2012). A variety of experiences and



learning problem compulsory nine should be considered in the determination of education funding policy.

Free educational socialization SD / MI and SMP / MTs as the implementation of 9-year compulsory education through print and electronic media and direct campaigns in schools and communities create the 'stigma' understanding that all needs and budgets of education borne by the Government or Local Government. This condition results in difficulty school in charge of education of parents and communities to improve the quality of education.

The Program of the School Operational Assistance called BOS aims to ease the burden of financing public education in order quality 9-year study. Determination based on the number of students giving BOS SD / MI and SMP / MTs resulted in differences between schools. Schools located in urban and or strategic place has a lot of the students will receive a relatively large allocation of BOS funds. While the operational needs such as payment of electricity bills, water, telephone, maintenance of infrastructure remains relative size of the student. Effort to motivate parents and the private sector (company / industry) in supporting the needs of the school budget is relatively difficult due to the understanding of free education and the existence of funds can meet the operational needs of the school. What's reasonable for the quality improvement of 9 years in this condition would complicate the management of schools in promoting public awareness to support the funding needs of technology and information.

Most of the SD / MI had difficulty in managing the Special Allocation Fund called the DAK from the stage of the process of planning, management and accountability. Most of the SD / MI is mainly owned by the government does not support definitive and Vice Principal of Administration to assist the Principal in preparing a proposal, implementation and accountability DAK. Principal difficulties and obstacles in implementing the program as well as fear of DAK. This resulted in SD / MI DAK rejected allocated from government budgets (budget). Most of the fear of matters alleged corruption due to the management of DAK. The school committee SD / MI and SMP / MTs become a strategic stakeholder in the management of programs and sources of financing education in schools. Openness and access to information about education and school funding should be developed and local governments. This becomes important in terms of giving parents the opportunity, the public and private sectors to find out the program, budget and participation needs to do. In preparing the program of financing policies 9-year compulsory education, the public has not been involved in an optimal since the planning, implementation and accountability. If people involved in planning the school will assist in the dissemination of school programs and budget requirements and sources of financing education.

CONCLUSION

- a. Society is not involved in the optimal planning, implementation and evaluation of program financing 9-year compulsory education. This resulted in people not knowing the improvement of access and quality of basic education. Limited access and information and the cost is a problem in society empowerment
- b. Socialization in the 9-year compulsory primary education free of cost impacting the decline participation community in providing education.
- c. The existence of the School Committee has not been able to optimize its role in increasing public participation. Meanwhile, people's participation in the organization of secondary education is relatively high. Management information was developed to give parents the opportunity and stake holders in obtaining information about the financing of



education. Management support, human resources and education level of the School Committee to support the SMA / MA / SMK in improving public participation.

RECOMMENDATION

- a. Socialization 12-year policy of compulsory secondary education level conducted in a systematic and realistic. Based on the experience of 9 years compulsory education, free education campaigns lose motivation in supporting the needs of the education budget
- b. Community participation is made since the preparation of educational programs, the calculation of school budgets, implementation, evaluation and accountability of the school budget

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Shariah Preserve in All Schools (Jogja Case Study from 1998 to 2003)

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Abstract

It is the study of relations between civil societies with the state in Indonesia post president Soeharto era. Studies conducted on the case of the policy on religious education for Christian private school in the DI Jogjakarta, during the period 1998 to 2003.

The study was conducted to describe the dynamic tension between the leaders of Christian private schools, who are members of the School of Christian Communication Forum (FKSK) with provincial educational bureaucracy and the political power outside the bureaucracy on the policy of religious education. This study used a qualitative descriptive method, with in-depth interviews and study of documents as data collection techniques.

The results showed that the schism between the education bureaucracies to the private Christian school administrators in Yogyakarta is essentially engaged in the arena of three different perspectives, namely the perspective: (a) particularity vs. politicization of human rights (the student), (b) legality vs. authority, and (c) the existence vs. political movements. By considering the third scene, there is reasonable suspect to be a fundamental mistake made by the bureaucracy that used its authority to conduct a political movement through the politicization of human rights (students) with a purpose: undermining the existence of Christian private schools in Yogyakarta and turning them into national private schools.

The policy was clearly counterproductive, because it did not touch the real problems faced by religious education in Indonesia. Therefore, the education bureaucracy should focus more on efforts to improve religious education in Indonesia to initiate the birth of a genuine policy in favor of the rights of students and the progress of Indonesia in the future. Policies should be intended to: (a) ensure that there was diversity education / schools (in accordance with the principle of Unity in Diversity *Tuggal* and in accordance with reality), (b) guarantee the right of freedom of the students / parents to choose education / schools (as guaranteed by constitution), (c) protect the free choice of each student / parents in choosing education / school of any kind of politicization and interference of others (so that events do not recur anarchists, as happened in Samigaluh) and (d) has the tendency to erode (all religion) to provide a partial religious education (focusing on a doctrine that is exclusive, superior, and tended to result in a claim as the most correct) as well as developing a religious education that fosters openness, respect diversity, and care about public issues (for cemented Indonesian character in us, not being distracted because of the transnational movements).

Such a policy would be much more in tune with students' rights, is more beneficial to students and more hopeful future for the realization of a better Indonesia.

Keywords: Shariah preserve in school, Jogja case study 1998 to 2003



INTRODUCTION

Schism between the education level of bureaucracy with the Provincial School of Management distinctively Christian in DIY on the implementation of religious instruction during the years 1998 -2003 and was phenomenal for at least three reasons. First, the case was sticking out soon after the New Order regime collapsed as the fall of President Suharto's statement on May 25, 1998. Familiar with the situation "uncomfortable" because it was protected by government policy during the New Order of the fact it was quite disturbing many people, especially the distinctively school stakeholders. Second, the interference perceived by the stakeholders to be redoubled, because in such cases the schools were characterized typical not only have to face to face with the holders of formal authority, but also must deal with informal political forces (pressure groups and special interest groups) in society, with the usual subject matter of such competition on the educational facilities it touched the realm of typical school -the school. Third, the case was eventually 'as' boils down to determining the success of Law No 20 of 2003 on National Education System, which accommodated most of the political aspirations of Islamic religious education in this country. The fact that during the case of Yogyakarta, the distinctively private school administrators, managed to stem the desire of the parties concerning the subject of religion to impose its will, a lack of potential foster care for the implications of the provision of religious instruction which has now been published in the Law on the national education system. This article researched a single point of view to understand the case.

DISCUSSION

1. Policy on Religious Education: Ideological Battle Event

Religious education in Indonesia continued to be controversial, especially if the material was associated with the existence of distinctively private schools. Already since 1949, when Indonesia National Committee Room (KNIP BP) for the first time discussed the Draft Law (Draft) Education in the Indonesian independence, the issue of religious education was a subject of debate in parliament. Two main issues were the objects referred to in the struggle were (a) religious education and (b) private schools. The debate about religious education took a lot of time because of differences in interpretation of how implementation in schools and the depth of religious education in the community Pancasila. Heated debate occurred when they were about to decide whether or not the required religious education in government schools (Tilaar, 1995).

In a meeting on October 18, 1949, members of the BP KNIP Zainal Abidin Ahmad delivered what became known as the Memorandum of Aceh. Memorandum signed by Tengku Muhammad Daud Beureuh, as the leader of the people of Aceh, dated October 16, 1949, addressed to the Chairman of BP KNIP in Yogyakarta, among other things, that: First, that religious education was a required subject (*verplichtleervack*). Second, to religious schools teaching was recognized as a government school teaching. Third, that religious school was valued as government schools. Fourth, in terms of mixing of boys and girls (co-education)



should not be contrary to local customs and religious feelings of Sumatra. In the debate about religious education was the view expressed by Mr. Christian. Tambunan was who basically reminded of the importance of religious freedom in Indonesia based on Pancasila society.

In Law No. 4 of 1950 which was then produced, ultimately determined that: (a) In state schools religious instruction was held, the parents determined whether their children would follow the lesson, (b) The implementation of religious instruction in public schools set up the school, the regulations was set by the Ministry of Education, Teaching and Culture, together with the Minister of Religious Affairs (article 20). Explanation of article 20, among other things, that (a) whether a particular type of school giving religious instruction was regarded on age and intelligence of the students, (b) students who were adults may participate and establish whether or not involved in religious instruction, (c) the nature of learning religion and the number of teaching hours stipulated in the laws of the type of school, (d) religious instruction did not affect the increase of in the student number in the class¹. Implementation of these provisions could be briefly described in the following description.

Period of Parliamentary Democracy (*Demokrasi Parlemen*)

4
After Law No. 4/1950 was issued, the government set up a Joint Committee composed of representatives from the Ministry of Religious Affairs and the Department of PP & K. The committee managed to put together the material which was then confirmed in a joint decree (SKB, January 1951), which contents included: (a) religious education given from class IV People's School (Primary School); (b) In areas of strong religious communities (e.g. in Kalimantan, Sumatra, etc.), then the religious education given from class I SR with a note that the quality of knowledge generally should not be reduced as compared to other schools religious education given from class IV; (c) In high school first-level and upper level (general and vocational) gave religious education as much as two hours a week; (d) Religious education was given to students at least 10 people in one class and got permission from a parent / guardian; (e) The appointment of religion teachers, the cost of religion education, and religion education materials were borne by the Ministry of Religious Affairs.

Subsequently, in July 1951, Minister of PP and K together with the Ministry of Religious Affairs issued a joint regulation of religious education. It consisted of:

- a. In each of the primary and secondary schools (public and profession) were given religious education (article 1);
- b. In the lower schools, religious education starting from grade 4 would have 2 (two) hours a week (article 2, paragraph 1);
- c. In a privileged environment, religious education could start in first grade and the time allotment could be added according to need but did not exceed than 4 hours per week provided that the quality of general knowledge for the schools should not be reduced (article 2, paragraph 2);
- d. In primary school and junior high school level for both public schools and religious education profession were given 2 (two) hours a week (article 3);
- e. Religion education was given to every student;
- f. Religion Education was given to a class consisted of at least 10 (ten) students who were believers (article 4, paragraph 2);



- g. Students who were believers were given the lesson. Students who were not believers could be given lessons of certain religion with the parents' permission (article 4, paragraph 3).

In 1952, there were 1951 guidelines for the implementation of the decree governing the supervision of religion subject by the Department of Religion. There was a provision (article 9) that to particular schools, the management was based on a direct request to the relevant provincial office of religion subject. In 1958, there was PP. 32 1958, which in article 5 stated that the school based on a religion or belief system should provide freedom for the students, civil servant teachers and teaching staff to belief a religion different from the one that underlying the school.

Thus, since the early decades of 1950's until 1959, national education carried out by PP and K Law 1950/1954 was based on the spirit of the 1945 Constitution. At this time, religion education was practically managed entirely by the Ministry of Religious Affairs. The curriculum and the teaching of religion education in state schools performed very loose class hours were relatively low, the subjects of religion was not the setting of the classroom). While in private schools, its implementation varied depending on the policy of the institutions.

Such fact could be understood, because in this period of neutral religion community was quite big. Moreover, the political power of 'religious neutrality' was dominant. Its indication appeared from the results of the 1955 election in which the power of 'religious neutrality' were two (PNI and PKI) among four major parties, and four (Parkindo, Catholic Party, PSI, and IPKI) among six medium-sized parties (Feith, 1999).

Period of Guided Democracy (*Demokrasi Terpimpin*)

Since the Decree of President Soekarno on July 5, 1959, the political direction began to change to the influence of national education. Changes were mainly on the direction of national education which tended to increase nationality and sociality.

TAP MPRS No.II/MPRS/1960, for example stated: (a) Providing national education policy and its system using formation of experts to the development in accordance with the terms of Indonesian human socialist, the noble character (chapter II, article 5), (b) Implement the Political Manifesto in the field of mental / religious / spiritual culture and material provided to each citizen could develop Indonesian personality and nationality and avoid the negative effects of foreign culture (article 2, paragraph 1), (c) Religion education as a subject in public schools began from primary school up to the university, with the understanding that students were not eligible to participate in religion education if the student parents/guard objected (Chapter II, Article 3).

Thus, as with the previous period, this period made religion subject as the alternative, not a compulsory subject. Students were allowed to not follow religion subjects. Students who did not follow religion subjects were required to follow character education. In this era, religion education in primary schools was integrated in character subject. In middle school, religion



education was integrated with basic manners subject. In high school, religion education became part of the philosophy of the Political Manifesto and was a complementary subject.

Period of New Order (*Orde Baru*)

In 1966, MPRS met the followers and sympathizers of the eradication of G30S/PKI. This agenda was to vary the policy of religion education. In this case, TAP MPRS No. XXII / MPRS 1966 on Religion, Education, and Culture of article 1 stated the establishment of religion subject in schools starts from state primary school to universities. Thus, since 1966, religion was no longer an option, but a compulsory subject from primary school to university level, across Indonesia.

The birth of MPRS was followed by the birth of the rules by the Minister of Religion Affairs and the Minister of Education and Culture on October 23, 1967. It was stated that in the first and second grade of elementary school, religion subjects was 2 hours per week. In the third grade, it was 3 hours per week. In the fourth to sixth grade, it was 4 hours per week. It also applied to high school. While in college, it was 2 hours per week.

By the end of 1970, the Minister of Religion Affairs proposed changes to the curriculum of religion instruction. It was proposed that religion instruction in all primary and secondary school classes was held for 6 hours per week. This proposal did not succeed because it was not approved by the Ministry of Education and Teaching. On the other hand, in early 1980, there was a proposal from public that government should include comparative religion curriculum for senior high school. However the proposal was opposed by the Moslem, saying it could undermine and weaken the faith of the students (Noer, 2001).

By the end of 1970, the Government issued a Ministerial Decree No. P & K. 0211/U/1978, which contained a provision that fasting month, was a time for students to learn and use the headscarf ban at school. The decision led to the controversy in the community, because fasting month was a month-long holiday (Darmaningtyas, 2004). MUI called for the Department of Education and Culture to review the policy should not be for fasting month. However, in the meeting forum with House Commission IX, the Minister of P & K Daed Joesoef remained to the decision that in the fasting month schools still have to make teaching and learning activities as usual.

The cases above (proposal to have Department of Religion and decision on religion subject in the Ministerial Decree P & K No. 0211/U/1978) showed that there were differences in meaning between two government agencies; described in TAP MPRS No. XXII / MPRS 1966 about Religion, Education, and Culture. This fact was of course inseparable from the interests of the bureaucracy worked in both agencies. Religion department seemed very concerned with religion education process, but is not the case with the Ministry of Education and Culture.

In 1989, the government issued the National Education System Law No. 2 of 1989. It was the first Education Act in the New Order era. In terms of education and religion instruction, the Act contained a provision which was very different from the Law No. 4/1950 and Law No. 12/1954. In this case, the provision of religion instruction during the enactment of the



Education Act 1950 and 1954 applied only to public schools, since there was Law No. 2 1989 provision for religion instruction shall also apply to private schools, including private schools with distinctive religion. It was not separated from the intense lobbying, especially from the community groups *agamaisasi* pro-education.

In addition, Law No. 2 1989 contained provisions concerning the obligation of each student to acquire religion education in accordance to their religion. In explanation of article 28 of the Act stated that every student must obtain an appropriate religion and religion instruction by teachers who were also co-religionists. Objections raised by various parties on this. The president then stated assurance that such obligation applied to only public schools. Schools with certain religion education were not required to do other religions, other than the religion that became its trademark. Assurance was then amplified through Government Regulation, No. 29/1990, which explicitly stated that schools with certain characteristics of religion were not required to provide religious instruction differently from the religion that characterized the school.

The application of the provisions in above description was an outline that could be presented as follows. Basically, public schools provided religion instruction according to students' religion and the same religion taught by the teachers to the students. Thus, students who were Moslem got Islamic lessons taught by the Moslem teachers, Catholic students acquired Catholic catechism taught by Catholic teachers, students acquired Christian instruction of Christianity taught by Christian teachers as well, and so on for students who were Buddha and Hindu.

In distinctively religious private schools, such provision; any student must obtain religion instruction according to the religion and co-religionists teachers; were not implemented. In this case, a private school served only distinctively Islamic studies, as well as Catholic and Christian private schools only gave Catholic and Christian lesson for all students.

Such practice disturbed the attention of several parties and the pros and cons as well as triggering massive demonstrations in various parts of the country as a substitute for discussions of the draft Law No. 2 1989. One issue was the bill that was debated in religion instruction in schools.

2. Dynamics of Religion Education Policy

Dynamics of discourse, regulation, and implementation of religion education as explained, as inseparable from the political dynamics of Indonesia, especially the dynamics of the relationship between Islam and the state (politics). Long time before Indonesian independence, political aspirations Indonesian on the relationship between religion and state had been split in two. In one side, there were some who wanted the union of state and religion (Islam) in Moslem countries such as aspirated by Syarikat Islam. On the other hand, there were some who want a separation of state and religion as aspirated by nationalist groups, such as aspirated by PNI (Noer, 1984). It was argued that Indonesian political dynamics was characterized by competition between those who want to establish an Islamic state and the nation-state. Some of the momentum of history showed as follow:

- a. Long and hard debate in sessions of the formulating PPKI, BPUPKI, and the first principle of Pancasila in 1945, which led to the birth of Masyumi party in the early days of



- independence and the development of Department of Religion in 1946; which there was still an effort to reduce the movement or to establish an Islamic state
- b. Ongoing movement of DI / TII in various regions of Indonesia during year 1949-1963
 - c. Prolonged debate between the figures of Masyumi (M. Natsir, mainly) and figures of PNI (Sukarno, mainly) on the basis of the state right for Indonesian since 1953; although in reality the existing formal state basis was Pancasila.
 - d. Endless debates in the Constituent assembly in 1957 - 1959 on the state basis for Indonesia
 - e. Efforts to revive the Jakarta Charter in the early days of New Order
 - f. Polemic about the suitability of women (Megawati Sukarno Putri) became president of RI 1999 - 2004, which continued to polemic about the Christian dominance in the Democratic Party candidate list in 1999 election, as well as about the proper polemic / absence of representatives of the people of PDI P who were non-Moslem became chairman of the Parliament 1999 - 2004 in the early days of reformation era, and
 - g. Efforts to revive the Jakarta Charter by a number of parties in the Assembly through UUD 1945 amendment process in the early reformation era (Subekti, 2008)

History showed that despite the political power struggled for the union of state and religion had been up and down, but the core aspirations or ideas survived from time to time, from generation to generation. NU Masyumi and Islam as a political force was 2 (two) of 4 (four) most popular parties voted in 1955 election. Masyumi, through the characters of M. Natsir fought for the union of the country with religious principles in the constituent assembly and former of the Constitution in 1950, 1957 -1959.

Such a thing was possible because of the political climate developed at that time was much nuanced in a liberal value of freedom. The situation changed significantly when the Soekarno's government in a very repressive Guided Democracy was against anyone who was seen as political opponents, including Masyumi which then disbanded for being involved in the PRRI / Permesta. New Order regime, which replaced the Soekarno regime, also implemented policies that were not conducive to the political power of Islam in Indonesia. Policy of a single principle, which obliged all political parties based on Pancasila, the prohibition of the use of religious symbols as a symbol of the party, scrutiny of state discourse on the various community groups, repressive policy against movements that threatened the stability of the countries, and the like had spawned a reaction amongst various Islamic.

An analysis by Adnan (Budiman, 1990: 458) mentioned that the power of Islam in the New Order could be categorized into three groups: (a) Accommodative group, (b) Moderate Idealists group, and (c) the Idealists radicals. Accommodative groups were groups who believe that Islam never ordered the establishment of an Islamic state, because such state never existed in Islamic history. Therefore, Moslem did not need to fight for an Islamic country. Islam changed society as the culture. Islam developed not because of its ideology but because of its culture. To change the Moslem community was better to use the cultural approach rather than an ideological approach, which required power. They accepted Pancasila as the sole basis. Moderate Idealists group also received Pancasila, but they argued that in addition to religion, Islam was also an ideology. They sought to expand the consciousness of Moslem to understand that Islam was not just a religion but an ideology. Idealists were radical groups fought with a more progressive approach. They opposed the state-propaganda and



stirred the emotions of the masses. They rejected the establishment of Pancasila as the only principle, and did not believe in the statements that the authorities would ensure that Pancasila did not displace the role of religion. Actions of idealists radicals eventually manifest in a variety of political violence, such as aircraft hijacking Woyla, GPK case Warsidi in Lampung, Tanjung Priok case, etc.

In the end of the Soeharto government in 1998, there was a return to the starting point on the rising of Islam political power. In 1999 election, political parties emerged with an Islamic identity. Marijan (2010) for example, recorded no less than 28 Islam party-style, but only 21 Islamic parties could join the 1999 election and 8 parties in the 2004 election.

Like in the past, Islamic political parties were also not labeled single. Fealy (in Marijan, 2010) for example, distinguished Islamic parties into the categories of formalist Islamic parties and pluralist Islamic parties. PPP, United Nations, and MCC were parties that fell within the formalism, while PAN and PKB were into pluralist category. If PPP and other parties related tried to fight for Islam values into the legislation and state policies, PKB and PAN did more to fight for the values of Islam in Indonesian plurality. Group formalism itself was still divided into groups of formalist moderate Islamic parties such as PPP, and radical formalist Islamic parties such as MCC and United Nations.

Evans (as modified by Pratikno, 2007) charted the political parties today were as followed. Evans thought that the above mapping, especially for Islamic parties, was quite in line with the categorization as mentioned by Fealy.

Besides the Islamic political party, there were also interest groups and pressure groups based on the religion. Interest groups like Muhammadiyah and NU were involved in the formation of new parties as PAN and PKB. In addition, new groups emerged as DI / NII, Jama'ah Islamiyah (JI), the Indonesian Mujahidin Council (MMI), Front Islamic Defenders Front (FPI), Communication Forum of Ahlu Sunnah (FKAWJ), and Hizb ut-Tahrir (HT). Marijan (2010) described the political stance of radical Islamist groups was as followed:

Radical Islamist Political Attitudes

Group	Comprehensive Sharia	Islamic State	Khalifah	Democracy
DI / NII	Yes	Yes	No	No
Jemaah Islamiyah	Yes	Yes	Yes	No
MMI	Yes	Yes	Yes	No
FPI	Yes	No	No	Yes
FKAWJ / LJ	Yes	No	No	No
Hizb ut-Tahrir	Yes	Yes	Yes	No

Six organizations in the mass of supporters were small, but they were very active in fighting for their interests. FPI actively voiced their enforcement of Islamic law, engaged in the raid of



immoral places in Jakarta, etc. FKAJW directly involved in inter-religious conflict in conflict areas like in Maluku and Poso. JI was an organization that some members are involved in acts of terrorism not only in Indonesia but also in Southeast Asia.

4 CONCLUSION

The discussions showed some of things that we could make into the following conclusion:

1. Religion subject at schools in the country, since the beginning had become a tool to realize Islam shari'ah inside the nation. Along the process, it was mandatory for state schools, and it is now legally obliged that religion should be implemented in all schools in accordance with the students' religion; by teachers who are also co-religionists.
2. Political power of Islam in this country is still largely divided into two the group of moderate and radical groups. The political power of radical Islam is still not for the moderates, but the intensity of their activities and even more pronounced impact for the nation.
3. The implications of the rise of Islamic political power from the main radical were felt through the case of Jogja 1998-2003. The school administrators faced pressures not only from the bureaucracy but also from radical groups in society. Already since 1998, Saptono noted how radical groups in society continued to suppress the existence of distinctively school. In terms of acceptance of new students, it is common in that there was an idiom of studying at Christian schools is unlawful. It was used to light public in deterring new entrants who would register to Christian schools. Some teachers in Blora, Cepu, Navan and Kulonprogo said that it was done by (1) intercept the new entrants who will register to the Christian schools, (2) comes from house to house of new entrants, (3) in Islamic religious instruction in public schools before the admission of new students, and (4) using the recitations before the admission of new students. In case of SMK BOPKRI Samigaluh, Jogja was also a means of radical groups. Through an organization called itself as FROPENTAS was the radical shift to students of SMK BOPKRI Samigaluh. All could be understood as an attempt to maintain the shari'ah among Moslem younger generation, including when they are (already) attended distinctively schools.

With the dynamic development of the discourse, setting up and realizing the movement of Islamic Shari'ah in the life of the nation as such, the managers would either had distinctively school or took lessons from the cases on 1998-2003 in Jogja as a provision to maintain and boost the existence of Christian education in this country.

¹ As with the issue of religious education, private schools (private) is also the subject of debate in the BP-KNIP meeting. Nevertheless the existence of private schools had a special place in the Act which was then generated. In Article 13, for example, determined that: (a) On the basis of freedom of each citizen adheres to the religion or belief of living things, then given the opportunity freely to establish and organize private schools. (B) Special rules about private schools established by law. Furthermore, in section 14 mentions that: (a) private schools that meet the requirements can receive subsidies from government for financing. (B) The requirements mentioned in the details of the rules (c) subsidies and regulations were stipulated in government regulations.



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Alumni's Competences and User Satisfaction of Primary Teacher Training Department – Faculty of Teacher Training and Education – Satya Wacana Christian University

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Study Program Elementary School Teacher Training and Pedagogy

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Abstract

This research aims to describe the actualization alumni competence, user satisfaction and the competence which must be developed by the Program of Primary Teacher Training, SWCU (*Program SI PGSD UKSW*). This study is a survey research. The study sites spread across the state and private elementary schools in 8 districts which are Salatiga, Semarang, Boyolali, Grobogan, Blora, Temanggung, Wonosobo, and Kebumen. Data collection technique is using a questionnaire that has been tested for the validity and reliability. Analysis showed that the corrected item-total correlation is 0,794 for the highest and 0,221 for the lowest. Reliability test results showed that the alpha reliability coefficient is 0.945. Moreover, the techniques of data analysis are using descriptive statistical analysis and gap analysis. The study found that 1) the overall satisfaction with the performance of the alumni of the *Program SI PGSD UKSW* is in the category of very satisfied, 2) the competence to be developed through the planning and structuring the curriculum / subject is a competence to select and organize material of teaching, solve problems in the classroom through CAR, write scientific papers, and master English, as well as leadership competence in solving educational problems.

Keywords : curriculum, alumni competence, and the level of user satisfaction

INTRODUCTION

The interesting phenomenon that needs to be examined from a graduate of the Teacher Training Institution (*LPTK*) in Indonesia is the inability of graduates to quickly adapt to the needs of the school (Rasto, 2009). While environmental changes faced by school education requires high adaptability related to educational theory, teaching style, the application of ICT, and the ability to master international language, and managerial skill. A study of the graduates of teacher education institutions in Malaysia found that the problems that are faced by users of graduates are not on the technical skills but on the soft skills of alumni. The graduates possessed technical field such as control and mastery of information and communication technologies (Information and Communication Technology), teaching and learning technology and school management as well. In other hand, they have low ability in communication, leadership, adaptability to the jobs and the environment, ability to work in teams and ability in problem solving (Juhdi, 2007). Certain quality standards are demanded by users, and it will give effects to the competence actualization (Abdul Majid, 2009). So the user is the primary appraiser who determines whether the performance of a graduate is qualified or not. Therefore, the identification of needs and expectations of the school are very important to be able to meet users' needs and expectations.

PGSD FKIP UKSW Salatiga as teacher training institute which produce primary school teachers are obliged to evaluate the implementation of the curriculum through its graduates or



alumni. Services which provides appropriate courses curriculum are presented to students as consumers. When students are satisfied with the lessons, they would be interested and motivated to master, explore, and develop what it received from the lectures. This means that students appreciate and enjoy it. These conditions are very favorable because the alumni's competence is assured on its quality and have a positive impact on the image of the institution because it will become famous for the prospective students. In the other hand, when they are not satisfied, it may result in the decline of the institution. Faculty of Teacher Training and Education (*FKIP*), particularly *PGSD* needs to do continual improvements in managing and implementing the curriculum to provide qualified graduates. Being unprepared in fulfilling the needs in the field will cause the gap between the demands of work and performance of graduates and the low level of user satisfaction of graduates.

Based on the above background it is understood that the quality of graduates should be viewed from the perspective of the school principals as users. The quality of graduates is an important study in the tracer study of the quality management program as a teacher trainer. Hence, the user satisfaction survey about the graduate of Program *SI PGSD UKSW* is important to do.

REVIEW OF LITERATURE

In organizing the educational system of competency-based curriculum for Teacher Training Institution (*LPTK*), teacher competence becomes the center of attention in the *LPTK*. Mastery of the competences of teachers by students as prospective teachers with the task becomes the basic capital in the future. The weak or strong mastery of competencies is defined by how far the institute packages their course curriculum system. Course curriculum system that can accommodate variety of primary sources of teacher competences (eg, vision and mission of the study program, Act 14 of 2005 on Teachers and Lecturers, and Decree No. 16th 2007 on the Standards of Academic Qualification and Competency) is believed to equip the students. However, the lack of curriculum package will have negative impact on the actualization of competence and lack of users' satisfaction of graduates. Therefore, to obtain feedback about how strong the curriculum is packaged, each department or institute should ideally perform tracer study of graduates. To obtain a picture of the nature of competence, user satisfaction and packaging graduate curriculum, the following describes the nature of competence, user satisfaction and packaging graduate curriculum.

Competence of teachers is knowledge, skills, capabilities and abilities that a teacher achieves, which become part of his or her being to the extent he or she can satisfactorily perform particular cognitive, affective, and psychomotor behaviors (Robbins, 2001; Sofo, 2002; & Mulyasa, 2003).

From the definition limitation, it seems that the nature of competence does not only contain the knowledge, skills and attitudes, but what matters is the application of knowledge, skills and attitudes needed in the job. Having different views, Muhaimin (2004) describes a set of competencies is a responsible act of intelligence that a teacher should possess as a requirement to be able to implement the tasks in the field of education. The nature of intelligence must be presented as a skill, determination, and success of the act. Nature of the responsibility must be shown to be a true act from the point of view of science, technology and ethics. In line with the understanding by Muhaimin, Ministry of Education (2004) defines of teacher competence as knowledge, skills, and basic values which are reflected in the habit



of thinking and acting. Based on the discussion above, teacher competence can be defined as the mastery of the knowledge, skills, values and attitudes which is reflected in the habit of thinking and acting of the profession.

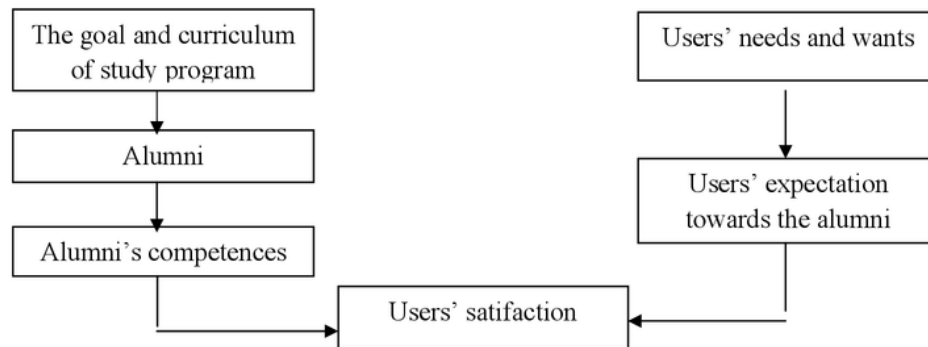
Related to teacher competence, the Act 14 of 2005 on Teachers and Lecturers article 10 paragraph (1) provides that the competence of teachers covering 4 competencies, namely 1) pedagogic competence, 2) personal competence, 3) social competence, and 4) professional competence gained through professional education. The first competence, according to the Decree of the Minister of Education no. 16 of 2007 about the Academic Standards and Competency Qualifications include: (1) mastery of the learner characteristics from the physical, moral, social, cultural, emotional, and intellectual aspects, (2) mastery of learning theory and principles of learning that educates, (3) developing the curriculum which is related to the subjects/ areas of development which is being taught, (4) conducting an educational learning, (5) using information and communication technology for the sake of learning, (6) facilitating the development of potential learners to activate various potentials, (7) communicating effectively, empathetic, and courteous to students, (8) conducting assessments and evaluation processes and learning outcomes, (9) utilizing the results of assessment and evaluation for the sake of learning, and (10) taking action to improve the quality of reflective learning. Second is the competence of personality. According to Decree No. 16 In 2007, the standard competency of teacher personality include (1) act in accordance with religious norms, legal, social, and national culture of Indonesia, (2) present themselves as personally honest, noble, and role model for students and the community, (3) present themselves as a person that is steady, stable, mature, wise, and dignified, (4) shows the work ethic, high responsibility, a sense of pride to be a teacher, and self-confidence, and (5) uphold the professional code of ethics of teachers. Third, social competence include (1) to be inclusive, to act objectively, and not discriminatory because the consideration of gender, religion, race, physical condition, family background, and socioeconomic status, (2) to communicate effectively, empathetic, and polite with fellow educators, staff, parents, and community, (3) adapt in charge of the entire territory of the Republic of Indonesia which has a socio-cultural diversity, and (4) communicating with the community of their own profession and other professions in writing or other forms. The fourth competency, namely professional competence include (1) master the material, structure, concepts, and scientific mindset that supports the subjects which are being taught, (2) master the standards of competence and basic competences for the subjects being taught, (3) develop learning materials creatively, (4) develop in a sustainable manner with professionalism and reflective action (5) use information and communication technologies to develop themselves. Specifically on the professional competence of teachers of SD / MI as a classroom teacher must master the five areas of the SD's, namely Mathematics, Natural Sciences (IPA), Indonesian, Social Studies (IPS) and Civics education.

About the nature of user satisfaction of graduates, linguistically the word satisfaction or satisfaction in the English language derived from Latin which is *facere* and *satis*. *Satis* means enough / are met, and *facere* means to do or make. Satisfaction can be interpreted as such a state that can give the feeling fulfilled. In economic terms, Kotler & Armstrong (1999) defines satisfaction is a condition in which consumer expectations can be met by the product. According to Evans and Lindsay (2002), satisfaction is meeting or exceeding customer satisfaction begins with hiring the right person. Meanwhile, according to Oliver as quoted by Manulang (2008), satisfaction is consumers' assessment of the features of the product or service that needs to successfully provide a pleasant level either below or above expectations.



Bradshaw (1992), Candy and Credert (1991) and Levenson (2000) as quoted by Richardsan and Kabanoff (2003) state that there is a difference between user perceptions of graduates and academics in terms of generic competencies and work skills. The gap between perceptions will create irrelevancy with the competences of graduates produced by universities. Thus, both perceptions and the competences of graduates need to be met in order to bind the competency required to enter the workforce. The quality of education can be seen from the extent of users' satisfaction. Higher Education as an educational institution must pay attention to things that are considered important by the users so that they bring expectations into reality, or in other words they feel satisfied (Baharuddin, 2002). Alumni survey conducted by the Student Advisor Team Tracer Study Centre (SAC) (2004) concluded that the alumni need additional skills such as foreign language, computers, communication and leadership. So, the selection criteria specified by the personnel manager shows the characteristics of employee's quality desired by users. Juhdi's study et al. (2007) also concluded that most users prefer graduates with ready skills because this will reduce the cost of training and development. In different terminology, Sumarwan (2003) states that satisfaction is the feeling after comparing perceived performance with expectations. Thus, the level of satisfaction is the gap between perceived performances with expectations. If the perceived performance is below expectations, users will be disappointed. Meanwhile, if the performance is in line with the expectations, users will be satisfied.

From the variety of opinions about the concept of satisfaction as defined above, we could conclude that satisfaction is essentially a function of comparative evaluation between expectations and performance. It is the assessment performed by users related to the quality of performance that match or even exceed the expectations. Customer satisfaction related to the three antecedents, to mention the quality of perceived performance, perceived value and users' expectations. In general, users' expectations are estimation and beliefs about what is to be received or perceived when consuming a product/service. Meanwhile, the perceived performance is users' perception of what he/she feels after consuming the product/service. Schematically, the users' satisfaction is described in Figure 1 below.



(Source: adapted from Manulang (2008))

Figure 1. Flowchart of Users' Satisfaction

From Figure 1 above can be seen that the organization offers educational services to meet the needs and desires of the users. Services offered are expected to correspond to the expectations of the users, so they feel satisfied. If the customer is satisfied, then the goal will be achieved because the organization has to offer valuable services for the users. In the context of schooling, primary school teacher education institutions that serve educational personnel



trainer of primary school teachers offers educational services to meet the needs of primary school education. Competencies possessed by elementary school teachers are expected to go in line with the principal's expectation which has the authority to lead, implement and direct the goals of the school. If the actualization of competence of the teacher is in line with expectations and needs of the school principal as a user, then they will feel satisfied. Moreover, the satisfaction of the principal will promote the achievement of school goals.

Various studies on users' satisfaction of graduates give picture of this problem. A study of satisfaction was conducted by Hagan (2001) to the user graduates of Information and Communication Technology (ICT) program at the several universities in Australia. This study stated that there are some reasons that the users have not been hiring new graduates. The reasons were because 35% users haven't needed the graduates yet, 25% was because the business was too small, 14% was because users needed experienced graduates, 8% of the users were using outsourcing ICT jobs, 7% was because the users are unable to employ, 6% of the users preferred other qualifications, and 4 % of the users unable to attract graduates. From these studies, it was known that there were many factors why some graduates of ICT program hadn't been accepted. By knowing the reason, the institution can prepare some strategies to anticipate the situation so that the graduates can meet the requirements needed by the industry.

Other studies were also conducted by Tima from James Madison University (JMU) in 2006. These results indicated that the user of JMU graduates were numerous. From this research it was known that there were five attributes that indicated satisfaction levels of 98% or more. These five attributes are: the ability to define and solve problems, becoming an effective listener, good interpersonal capabilities, speak effectively and the ability to communicate effectively with others.

Research conducted by the Livestock Production Research Team (2002) on "Alumni User Feedback for Improved Livestock Production Curriculum Studies Program at the university's Faculty of Animal Science" concluded that 91.18 percent of users are satisfied with the performance of the alumni. As for the packaging of the curriculum, it refers to the curriculum standards of competence set by the government as has been described above, and also refers to the vision, mission and objectives of *Program S1 PGSD UKSW*, then set the load credits, curriculum structure and course pack. The number of credits to complete the undergraduate program of *PGSD* 158 credits (148 compulsory credits and 10 credits of electives). The distribution of credits in the curriculum structure consists of 17 credits of *Pengembangan Kepribadian (MPK)*, 43 credits of *Matakuliah Keilmuan dan Ketrampilan (MKK)*, 68 credits of *Matakuliah Keahlian Berkarya (MKB)*, 8 credits of *Matakuliah Berkehidupan Bermasyarakat (MBB)* and 22 credits of *Matakuliah Perilaku Berkarya (MPB)*. The whole course is packaged in 55 courses.

METHODOLOGY

In terms of the nature and purpose, this study can be categorized as descriptive research. The descriptive research is describing the circumstances of a phenomenon at the present time are factual and accurate. Based on the concept, the purpose of this research is to obtain a imagination and description in detail, systematically and accurately a phenomenon of actualization of competence and user satisfaction alumni of *Program S1 PGSD UKSW*. The sample of this study refers to Arikunto (2002), conducted by cluster random sampling



technique. Which is determined by two stages, the first, determined areas grouped by the spread of workplace alumni, with a relatively affordable considering the location. The next stage is determining principal as a subject of the research.

Alumni absorbed in various state and private primary schools in 13 districts / cities that return the questionnaire were: Salatiga = 5, Semarang = 3, Boyolali = 15, Klaten = 0, Pati = 0, Kudus = 0, Demak = 0, Jepara = 0, Grobogan = 12, Blora = 2, Temanggung = 5, Wonosobo = 12, and Kebumen = 6. Thus, the sample size in this study is 60 respondents, spread out in 8 districts.

Technique of data collection in this study is using the non test technique that is a questionnaire. Level of user satisfaction questionnaire items included 40 items that are derived based on three factors. First, satisfaction of the professional and pedagogical competence, the second is the satisfaction of personal competence and finally is satisfaction of social competence. Structured of questionnaire consist of four scales / categories, low, medium, high and very high.

Data analysis techniques in this study are using descriptive analysis and the gap analysis. The procedures of the descriptive and the gap analysis done by: 1) provide the level of the user satisfaction score by category chosen by respondents, 2) set the size of the arithmetic mean, standard deviation, maximum, minimum and sizes normality of the data as a whole, 3) set the size of the arithmetic mean, standard deviation, maximum, minimum and the size of the normality of the data for each of these aspects (satisfaction with the actualization of pedagogic and professional competence, personal competence and social competence), 4) compare the score of ideal competence expectations of the user as well as alumni on each competency with a score of empirical actualization of competence, either in whole or individual aspects, 5) establish categories of user satisfaction levels of graduates as a whole and of each aspect, 6) establish categories of each aspect of inequality.

FINDINGS

The computational analysis of descriptive statistics to obtain data on the level of user satisfaction is presented in the Table 01 below. The summary of empirical data of user satisfaction levels of alumni are classified by category Very Dissatisfied (VD), Dissatisfied (D), Simply Satisfied (SS) Satisfied (S), Very Satisfied (VS).

Table 1 shows the level of satisfaction amount of the respondents (60 principals). The level of satisfaction with the category of Very Dissatisfied (VD), Dissatisfied (D), Simply Satisfied (SS) is 0 respondents (0%), Satisfied (S) is 21 respondents (35%) , Very Satisfied (VS) is 39 respondents (65%). It means that all the respondents (the principals) are satisfied (35%) and very satisfied (65%) of the actualization of the competence of the alumni. None of the respondents are dissatisfied with the performance of the alumni.



Table 1. *Classification of Users' Satisfaction Frequency Distribution of the Alumni*

Category	Range of the score	Frequency	Percentage
Very satisfied	161 – 200	39	65 %
Satisfied	121 – 160	21	35 %
Simply satisfied	81 - 120	0	0 %
Dissatisfied	41 - 80	0	0 %
Very dissatisfied	1 - 40	0	0 %
Total		60	100 %
Percentage		100 %	

Descriptive analysis of every aspect

a. Aspects of Pedagogy and Professional Competence Actualization

Table 02 below summarizes the empirical data of user satisfaction levels of alumni, special for pedagogic and professional competencies. That has been classified by categories Very Dissatisfied (VD), Dissatisfied (D), Simply Satisfied (SS) Satisfied (S), and Very Satisfied (VP).

Table 2. *Classification of Users' Satisfaction Frequency Distribution on the aspects of Pedagogy and Professional Competencies*

Category	Range of the score	Frequency	Percentage
Very satisfied	61 – 75	32	53 %
Satisfied	46 - 60	27	45 %
Simply satisfied	31 - 45	1	2 %
Dissatisfied	16 - 30	0	0 %
Very dissatisfied	1 - 15	0	0 %
Total		60	100 %
Percentage		100 %	

Based on the Table 2, it is appears that of all respondents 60 principal amount of research shows the level of satisfaction with the category of Very Dissatisfied (VD) and Dissatisfied (D) both is 0 respondents (0%); Simply Satisfied (SS) is 1 respondent (2%); Satisfied (S) is 27 respondents (45%), and Very Satisfied (VP) is 32 respondents or 53%. That means that almost all respondents (principals) are satisfied (45%) and very satisfied (53%). Only one respondent stated simply satisfaction to the actualization of the competence of the alumni; especially on the pedagogic and professional aspects. None of the respondents are dissatisfied with the performance or competency-actualization of teachers who work in the schools they lead.

b. Aspects of Personal Competence Actualization

As analysis actualization of pedagogic and professional competencies above, Table 03 also summarizes the empirical data of user satisfaction levels of alumni, especially on the aspect of personal competencies. That has been classified by categories Very Dissatisfied (VD), Dissatisfied (D), Simply Satisfied (SS) Satisfied (S), and Very Satisfied (VP).



Table 3. *Frequency distribution of the classification level of satisfaction on the aspects of Personal Competencies*

Category	Range of the score	Frequency	Percentage
Very satisfied	80 - 95	35	58 %
Satisfied	60 - 79	25	42 %
Simply satisfied	40 - 59	0	0 %
Dissatisfied	20 - 39	0	0 %
Very dissatisfied	1 - 19	0	0 %
Total		60	100 %
Percentage		100 %	

Based on the Table 3, it appears that of all respondents (60 principal) shows the level of satisfaction with the category of Very Dissatisfied (VD), Dissatisfied (D), Simply Satisfied (SS) is 0 respondents (0%), Satisfied (S) is 25 respondents (42%) , and Very Satisfied (VP) is 35 respondents (58%). It means that all the respondents (the principals) are satisfied (42%) and very satisfied (58%). None of the respondents are dissatisfied with the actualization of Social Aspects.

c. Actualization of Social Aspects of Competencies

Summary of empirical data of the user satisfaction levels of alumni, especially actualization aspect of social competencies presented in Table 04. That has been classified by categories Very Dissatisfied (VD), Dissatisfied (D), Simply Satisfied (SS), Satisfied (S), and Very Satisfied (VP).

Based on the Table 04, it appears that of all respondents shows the level of satisfaction aspects of social competencies. The category Very Dissatisfied (VD), Dissatisfied (D), and Simply Satisfied (SS) is 0 respondents (0%), Satisfied (S) 9 respondents (15%), Very Satisfied (VS) 51 respondents or 85%. It means that all the respondents (the principals) are satisfied (35%) and very satisfied (65%). None of the respondents are dissatisfied with the performance or competency-actualization of teachers who work in the schools they lead.

Table 4. *Frequency distribution of the classification level of satisfaction on the aspects of the Actualization of Social Competencies*

Category	Range of the score	Frequency	Percentage
Very satisfied	24 - 30	51	85 %
Satisfied	18 - 23	9	15 %
Simply satisfied	12 - 17	0	0 %
Dissatisfied	6 - 11	0	0 %
Very dissatisfied	1 - 5	0	0 %
Total		60	100 %
Percentage		100 %	



The gap analysis

As described before, gap analysis carried out by comparing the score of ideal competence expectations of the user as well as alumni on each competency with a score of empirical actualization of competence, either in whole or individual aspects.

Deficit of competence as a result of teacher competency gap analysis is useful as an input to primary teacher training education program in the review of the course or the structure of the curriculum, course design, and implementation of the lecture as well as guidance to the students. Category gaps that form the basis in determining the extent of the deficit of competence must be immediately followed by the manager of the study program. Category as a percentage of the gap are: 1) the gap "no problem" when in the range of 1-20%, 2) the gap "little problem" when in the range of 21-40%, 3) gap "quite problematic" if the percentage gap be in the range 41-69%, 4) the gap to be "problematic" if it is in the range of 61-80%, and 5) the gap was "very problematic" if it is in the range of 81-100%.

The findings of the data associated with a deficit of competence gap between the ideal competence with actual competence for each competency and each competency cluster can be observed in the following description

a. Pedagogy and Professional Competency's Gaps

Data gaps are a deficit of competence of teachers based on gap analysis carried out by comparing the score of ideal competence expectations of the user as well as alumni on pedagogic and professional competencies with a score of empirical actualization of competence presented in Table 5 below.

Table 5. *Pedagogy and Professional Competencies Gaps*

No	Actualization of alumni competencies	Score		%
		Expectation	Satisfaction	Gaps
	Pedagogy and Professional Competencies	75	59,6	20,5
1	The skill to develop the syllabus and lesson plans	5	4,13	17,4
2	To set the indicators of learning clearly	5	4,1	18
3	The skill to select and organize teaching materials	5	4	20
4	The skills to selecting learning resources	5	4,25	15
5	The skills to choose or developed the learning media	5	4,2	16
6	The skill to select and using the teaching method	5	4,15	17
7	The skill to develop learning outcomes assessment	5	4,11	17,8
8	Mastery of learning materials	5	4,35	13
9	The skill to manage the classroom	5	4,18	16,4
10	The skill to develop teaching and learning interaction	5	4,16	16,8
11	The skill to support the activities of the students	5	4,16	16,8
12	Mastery of foreign languages (eg. English)	5	2,61	47,8
13	Mastery of information and communication technologies	5	4,38	12,4
14	The ability to overcome problems through CAR	5	3,41	31,8
15	The ability to write scientific papers	5	3,41	31,8

(n) = 60

Based on the Table 5, it can be seen that based on the least problematic category of competence gap between ideal and actual competencies are: 1) the average percentage of



pedagogic and professional competence gap is 20.5%, 2) there are 12 items of the competency gaps in the category of "no problem" (number 1 - 11 and 13), 3) there are two items of competence gap in the category of "little problem", which is item number 14 and 15, 4) there is one item that existing competence in the category of "sufficient problem", which is item number 12.

Deficit of competence in the category of "less problematic" and "quite troubled" is the ability to solve problems in the classroom through CAR, the ability to write scientific papers, and mastery of foreign languages (eg. English).

b. Personal Competency's Gaps

Data gaps is the deficit of competence of teachers based on gap analysis carried out by comparing the score of ideal competence expectations of the user as well as alumni on personal competencies with a score of empirical actualization of competence presented in Table 6 below.

Based on the Table 6, it is can be seen that based on the least problematic category of competence gap between ideal and actual competencies are: 1) the average percentage of personal competency gap of 14.6%, 2) there are 18 items that competency gaps in the category of "no problem" (No. 16 - 20 and 22 - 34), 3) there is one item in the category of competence gap "little problem", which is item number 21. Deficit of competence in the category of "little problem" is leadership competence in solving problems.

Table 6. *Personal competency's gaps*

No	Actualization of alumni competencies	Score		%
		Expectation	Satisfaction	Gaps
	Personal competency	95	81,13	14,6
16	Discipline in performing of the duty	5	4,35	13,0
17	Regularity of employment in the presence of	5	4,5	10,0
18	The responsibility of duty	5	4	20,0
19	Honesty carry out the tasks assigned	5	4,53	9,4
20	Leadership of the duty	5	4,06	18,8
21	Leadership in solving the problem of education	5	3,95	21,0
22	The seriousness of the task	5	4,33	13,4
23	Readiness in performing	5	4,2	16,0
24	Confidence in implementing the tasks	5	4,38	12,4
25	Creativity in performing their duties	5	4,15	17,0
26	The motivation in conducting the task	5	4,25	15,0
27	Persistence in task	5	4,16	16,8
28	Integrity / loyalty to the organization / institution	5	4,36	12,8
29	Modeling in attitude and behavior	5	4,21	15,8
30	The will to excel in work	5	4,48	10,4
31	Willingness to enhance career	5	4,43	11,4
32	Productivity in the works	5	4,33	13,4
33	Openness to new / innovative	5	4,46	10,8
34	Sensitive to the social interest	5	4	20,0
(n) = 60				



c. Social Competency's Gaps

Data gaps are a deficit of competence of teachers based on gap analysis carried out by comparing the score of ideal competence expectations of the user as well as alumni on social competencies with a score of empirical actualization of competence presented in Table 7 below.

From Table 7, it can be seen that based on the least problematic category of competence gap between ideal and actual competencies are: 1) the average percentage gap of 15.5% of social competence, 2) all items (6 Item) are at kategori competence gap "no problem" (number 35 - 40).

Table 7. *Social Competency Gaps*

No	Actualization of alumni competencies	Score		% Gaps
		Expectation	Satisfaction	
	Social Competency	30	25,35	15,5
35	Cooperation / communication with the principal	5	4,48	10,4
36	Cooperation / communication with peers	5	4,4	12,0
37	Cooperation / communication with employees	5	4	20,0
38	Cooperation / communication with students	5	4,46	10,8
39	Cooperation / communication with parents	5	4	20,0
40	Cooperation / communication with the community	5	4,01	19,8
	(n) = 60			

DISCUSSION

Related to user satisfaction and the lack of graduates' competencies mentioned above, an interesting phenomenon that needs to be examined by the graduates in Indonesia in general is the inability of the graduate to quickly adapt to the needs of the modern school (Vincent, 2001). Therefore, each *LPTK* need to build and bring in the profile of its graduates.

The profile to be achieved by Primary Teacher Training Study program is the figure of a whole elementary school teacher with pedagogical competence, professional, personal and social development. In a result, the teacher can actualize the four basic skills as a school teacher, namely (a) to know in depth the elementary students who want to be served, (b) instructional materials covering the five basic subjects of primary school, (c) capable of carrying out meaningful learning, (d) develop professional skills on an ongoing basis.

This study found that all respondents said they were satisfied (35%) and very satisfied (65%) towards the actualization of the competence of primary school teachers who were graduated from Primary School Teacher Training of SWCU. None of the respondents are dissatisfied with the performance or competency-actualization of teachers who work in the schools they lead. The finding above shows that the overall graduates master the technical skills and soft skills. This finding is contrasted with a study of graduates in Malaysia. It was said that the problems faced by users of graduates is not on technical skills but on the soft skills of the



alumni. The graduates are qualified in technical field such as control and mastery of information and communication technologies (Information and Communication Technology), management, technical (engineering) and good marketing. On the other hand, the graduates have low ability in communication skills, leadership, and adaptability to the job and the environment, ability to work in teams and problem solving skills.

Partially, if it is seen from the actualization of pedagogic and professional competence, also personal competence and social competence, the level of user satisfaction of the graduate is as below: a) almost all respondents said they were satisfied (45%) and very satisfied (53%). Only one respondent (2%) stated they were quite happy just to the actualization of pedagogic and professional competence. None of the respondents are dissatisfied with the performance or competency-actualization of teachers who work in the schools they lead. b) All of the respondents (the principals) are satisfied (42%) and very satisfied (58%) towards the actualization of personal / personality. None of the respondents are dissatisfied with the performance or competency-actualization of teachers who work in the schools they lead. c) All of the respondents expressed satisfaction (35%) and very satisfied (65%) towards the actualization of the social competence of primary school teachers. None of the respondents are dissatisfied with the performance or the actualization of the social competence of teachers. The findings of this study indicate that according to the principals, the performance of graduates of primary school teachers has been met with the standard competency set by the government through Decree No.16 of 2007 on Qualifications and Competency Standards. The findings of this study have also been able to describe the profile of set by the program of study that has been stated above, that is able to actualize the four basic skills as a school teacher, namely (a) to know in depth the primary students who want to be served, (b) materials covering the five areas of the subject for primary school, (c) capable of carrying out an educational learning (d) develop professional skills on an ongoing basis.

Judging from the user's graduates, the findings of this study as a whole or partially to the idea that the performance of the graduates has met the expectations of the principals, will support the achievement of school goals. This is consistent with the proposed construct Manulang (2008), Evans and Lindsay (2002) and Sumarwan (2003) which states that the satisfaction of the user / customer is a satisfied feeling after comparing the level of perceived performance with expectations. This finding is in line with the results of research conducted by the Livestock Production Course Team (2002) on "alumni user feedback for improved livestock production curriculum studies program at the university's faculty of animal science" concluded that 91.18 percent of users are satisfied with the performance of the alumni.

However, analysis of the gap (gap analysis) which is performed to score the actualization of the competence of teachers there still has gaps in the deficits than the competence that need to be anticipated by the institution.

Deficit of competence as a result of teacher competency gap analysis is useful as an input to the Studies Program in the review course in the curriculum structure of the study program, course design, implementation of the lecture as well as guidance to the students. Category gaps that form the basis in determining the extent of the deficit of competence must be immediately followed by the institution.

Based on the category as a percentage of the gap as described in the research methodology, namely: 1) there is no gap when in the range 1-20%, 2) the gap is little when the range is 21-



40%, 3) the gap is "quite problematic" if the percentage gap in the range 41-69%, 4) the gap is "problematic" if it is in the range of 61-80%, and 5) the gap is "very problematic" if it is in the range 81-100%; following consecutive gaps discussed on the findings in this study.

The findings of the data associated with the deficit of competence gap between the ideal competence with the actual competence for each competency cluster has been presented in Tables 05, 06, and 07 above. The gap between the ideal competence with actual competence and professional pedagogic competence found that: a) the average percentage gap of 20.5%, b) there are 12 items which the gap is including in the category of "no problem" (number 1 s / d 11 and 13), c) there are two items in the category of "little problem" in the competence gap, which is item number 14 and 15, d) there is one item that exist in the category "quite problematic" for the competence gap, which is item number 12. Deficit of competence in the category of "less problematic" and "quite troubled" is the ability to solve problems in the classroom through Class Action Research (CAR), the ability to write scientific papers, and mastery of foreign languages (eg English).

Table 06 presents the findings of the competence gap between the ideal and the actual competence on the cluster of personal competence, namely a) the average percentage of the gap which is 14.6%, b) there are 18 items that is in the category of "no problem" in the competence gap (No. 16 s / d 20 and 22 s / d 34), c) there is one item in the category of "little problem" in competence gap, which is item number 21. Deficit of competence in the category of "little problem" is leadership competence in solving problems.

Table 07 presents the findings of the competence gap between the ideal and the actual competence, especially social competence, namely a) the average percentage gap of 15.5%, b) all items (6 items) are at the category of the competence gaps of "no problem" (number 35 / d 40).

Overall, the findings of a deficit of competence which input materials for Program S1 PGSD UKSW, and of course become the priority in structuring course curriculum are: a) the ability to overcome problems in the classroom through CAR, b) the ability to write scientific papers, c) mastery of language foreign (eg English), and d) leadership ability in solving the problems.

The findings of a deficit of competence in this study seem in line with the alumni survey conducted by the Student Advisor Team Tracer Study Centre or SAC (2004) concluded that the alumni need additional skills and foreign language curriculum, computers, communication and leadership. So, the selection criteria specified by the personnel manager shows the characteristics desired by the user (the user). Juhdi et al. (2007) also concluded that most users prefer graduates with ready skills because this will reduce the cost of training and development.

Perhaps, Bradshaw (1992), Candy and Credert (1991) and Levenson (2000) in Richardson and Kabanoff (2003)'s suggestions should be considered. According to them, there are differences in perception between users and academics in terms of generic skills and work skills. This will make a difference in perception is irrelevant between the skills needed by the user with the competence of graduates produced by universities. Thus, both of the user and university need to be met to decide the requirements of the graduates which are agreed by them.



CONCLUSION AND RECOMMENDATIONS

Based on the findings of this research, the following conclusions can be drawn: 1) the overall satisfaction with the performance of the alumni of the *SI PGSD FKIP UKSW* Salatiga is in the category of very satisfied, 2) the competence to be developed through the planning and structuring the curriculum / subject is a competence to select and organize material of teaching, solve problems in the classroom through CAR, write scientific papers, and master English, as well as leadership competence in solving educational problems

Recommendations relating to the practical implications of structuring the curriculum, is: 1) Primary teacher training education program need to review the curriculum, especially the packaging arrangement subject to the functioning of developing competence and professional pedagogic alumni can be improved, 2) specifically review arrangements Classroom Action Research in terms of planning and the lecture so that the alumni have sufficient competence, 3) to consider packing a new course or modify the substance of the existing course, in order to improve the competence of writing scientific papers, 4) rearranging the substance and models of learning subjects in English, to be able to raise the competency in English language acquisition, and 5) put pressure on the course that contains the problem-solving skills in educational management.

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The Role of Indonesian in Teaching English in RSBI SMAN 1 Salatiga: Teachers' Perspectives

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Abstract

The use of the first language (L1) in foreign language classrooms has been debated recently. This controversy on the implementation of the Pioneering International Standard School (RSBI) with regard to the use of Indonesian in teaching English in RSBI also occurred in Indonesia. This research was conducted to explore English teachers' perspectives of using Indonesian in teaching English in RSBI SMAN 1 Salatiga. The method used in this study was descriptive method. Observations and interviews were conducted to obtain data about the English teachers' perspectives of using Indonesian in teaching English. The findings of the research show that Indonesian was needed in teaching English in the school. However, Indonesian should be used appropriately for the particular purposes in particular situations.

Key words: *the role of Indonesian, teaching English, teachers' perspectives, RSBI*

INTRODUCTION

The controversy of using the first language in the second or foreign language classrooms has become a hot topic among researchers for recent years. The controversy began when the importance of the first language interference was questioned at the beginning of 1970s. Before that, the first language was rejected to be used in the language classroom. But then, the use of the first language reappraised and began to be analyzed and reassessed. However, there are some researchers who believe that teachers should minimize the use of the first language so that the students will get more exposure to the target language. Butzkamm (2003) suggested that the mother tongue is generally regarded as being an evasive maneuver which is to be used only in emergencies. In the other hand, there are some researchers who believe that acquiring a foreign language cannot be separated from the use of the first language. Schweers (1999) said that a second language can be learned through raising awareness to the similarities and differences between the first language and second language. So, there is still a debate about the use of first language in second or foreign language learning.

In the beginning, the use of the first language was considered as a negative interference to the students' learning of the second language. According to Ellis (1982), there is also a popular belief that the role of the first language is a negative one. It interferes with the learning of the second language. Besides, Marton (1981) also argued that "there was never peaceful coexistence between 2 language systems in the learner, but rather constant warfare." It means that the use of the first language in the second language learning should be minimized in order to avoid the interference of L1 to L2. Some teachers may agree with the idea that the use of the target language in this case is English, is maximized so that the students' will get more exposure to the target language. So, the use of the first language is considered to give disadvantages in the students' learning process.

As the opposite, the first language also gives benefits in the foreign language learning. There are also several studies, as cited from Haifa (2010), found that the first language is very helpful in explaining new words. Several studies related to this aspect are Khurma and Hajjaj



(1989) whose result of the study found that 71% of English teachers use the first language in explaining new words; and Franklin (1990) found that 39% of English teachers use the first language to teach new words. By explaining the new words using the students' first language, they will understand the words easily compared to the explanation using the target language and the students will be able to acquire the target language better.

Besides, the first language is also beneficial to transfer students' thought when they cannot say the words in English. This strategy is known as an effective way to save the time when teaching English. Besides, the use of Indonesian for this purpose can help the teacher give better input for the students. Auerbach (1993) found:

"Similarly, teachers at Centro Presente report that use of the L1 naturally gives way to increasing use of English. Their students often say, 'I can't say this in English, but I really want to say it'; once they have expressed their ideas in Spanish, the group helps them express them in English."

Another beneficial of using Indonesian in teaching English is to create a relaxed atmosphere and get contact with the students during the teaching learning process in the classroom. Cook (2001) suggested that *"The main benefit of the L1 for personal contact is naturalness. The teacher is treating the students as their real selves rather than dealing with assumed L2 personas."* Using Indonesian in teaching English for this purpose is known to be able to help the students feel comfortable in learning English and to reduce their stress. So, they will be able to acquire English well without any pressure from the teacher.

In Indonesian context, however, English is considered as a compulsory subject in Indonesian schools from junior to senior high school. Nowadays, the government has been developing an educational system that is called "International Standard School" (SBI). In order to become SBI, the schools need to be prepared and they have to pass one step to become SBI from "Sekolah Berstandar Nasional" (SBN) that is to become "Rintisan Sekolah Bertaraf Internasional" (RSBI). RSBI is one of government's projects to create SBI. As described in the government regulation, UU No. 20/ 2003 (Sistem Pendidikan Nasional) pasal 50 ayat 3: "Pemerintah dan/atau pemerintah daerah menyelenggarakan sekurang-kurangnya satu satuan pendidikan pada semua jenjang pendidikan untuk dikembangkan menjadi satuan pendidikan yang bertaraf Internasional," it means that each country must have one RSBI on each level (elementary school, junior high school, and senior high school).

The implementation of RSBI also brings controversy among the educators. One of the requirements to become an International Standard School, the school must use English as a medium of instruction, especially for Science, Social, Technology, and also English. In the Minister of Nasional Education Regulation No. 78 year 2009 about the Implementation of International Standard School for Elementary and Secondary level, pasal 5 ayat 3: "SBI dapat menggunakan bahasa pengantar bahasa Inggris dan/atau bahasa asing lainnya yang digunakan dalam forum internasional bagi mata pelajaran tertentu." As RSBI, the schools are supposed to use English in teaching particular subject. In English subject, the teachers should use English to deliver the materials to the students. However, the students still need Indonesian, as their first language, to help them learning English, as their foreign language.

By seeing the controversy of using the first language in the foreign language classroom, I feel challenged to discover the teachers' perspectives toward the role of the first language, Indonesian, in learning English as foreign language in Indonesian context, especially in RSBI SMA Negeri 1 Salatiga. Since teachers play an important role in the classroom (Macaro, 1997) and are the key factors that affect students' achievement in their learning, they should have high understanding toward the teaching strategies that they use in the learning process.



In addition, teachers' understanding toward the role of Indonesian as the first language in learning English as foreign language is very important since it will enable them to improve their teaching strategies in teaching English especially for senior high school students. In short, this study will be guided by the following research question: "What are the English teachers' perspectives toward the role of Indonesian in teaching English in RSBI SMA Negeri 1 Salatiga?"

For the English teachers, especially those in SMA Negeri 1 Salatiga, this strategy can help them to see Indonesian as not only the "negative" effect that "interferes the learning of second language" (Burt, 1982) but also the "positive" one. Since SMA Negeri 1 Salatiga is one of RSBI (Rintisan Sekolah Bertaraf Internasional) in Indonesia, hopefully this research will give contribution to the English teachers' acknowledgement toward the role of Indonesian in teaching English in SMA Negeri 1 Salatiga, generally for RSBI in Indonesia.

METHODOLOGY

The study was carried out to English teachers in SMA Negeri 1 Salatiga. The reason I chose SMA Negeri 1 Salatiga was because I had a teaching practice (PPL) in SMA Negeri 1 Salatiga so that I had recognized the English teachers in that school. This reason led me to use "a sample of convenience" as the technique in choosing the participant because the participants were easily accessed. Besides, since SMA Negeri 1 Salatiga is an RSBI (Rintisan Sekolah Bertaraf Internasional), I would like to know how English is taught, whether the teachers use not only English but Bahasa Indonesia as well.

In attempt to answer the research question, the methodology that I used was observations and interviews. The aim of the observation was to describe or provide rich and complete descriptions of what happened in the classroom in order to know how English was taught. So, I observed 6 English teachers one by one. Although there were 7 English teachers in SMAN 1 Salatiga, only 6 English teachers were willing to be the participants. Due to an unknown reason, one of the English teachers turned down my offer to take part in this research. So, I decided to include the 6 English teachers as my participants. Then, the observation data was collected using video-tape. This technique of recording gave benefits on capturing data that could not be captured using audio-tape. Since the focus of this research was on the teachers so I shot the teachers only in order to be more focus and analyze the data easily.

Then, based on the observation data, the interviews were conducted to explore more about the English teachers' perspectives about the role of Indonesian in teaching English. I conducted semi-structured interview which is a technique designed to elicit a vivid picture of the participant's perspective on the research topic using similar questions with different order. In semi-structured interview, I interviewed the participants one by one in order to get more data and to explore more on the individuals' perspectives towards the use of Indonesian in teaching English in RSBI SMAN 1 Salatiga. The interview data were collected using tape recorder to make it easy to analyze.

This study employed one approach of qualitative data analysis. The observation data were used as a "bridge" to elicit the information about the way the participants taught English. After I got the data, I watched the video recording to create some questions that would be asked in the interview session. Then, the interview data that I got were in a form of recording so I transcribed the data using "clean transcription" in which the focus was on the content of the interview. From the transcription, I found the emerging themes related to the teachers'



perspectives towards the role of Indonesian in teaching English and answered the research question.

DISCUSSION

Before I came to the data analysis, I would like to give the general information about the personal background of the participants. I arranged the participants based on their seniority. The seniority here means how long they have been teaching English from the beginning. So, it is easier to classify the participants.

Table 1 *Personal Background of Participants*

NO.	PSEUDONYMS	GENDER	AGE	TEACHING EXPERIENCE	LANGUAGE SPOKEN
1.	Mrs. Dika	F	32	9 years	Javanese Indonesian English
2.	Mrs. Tyas	F	36	10,5 years	Javanese Indonesian English
3.	Mrs. There	F	45	21 years	Javanese Indonesian English
4.	Mrs. Rani	F	49	25 years	Javanese Indonesian English
5.	Mrs. Yani	M	53	25 years	Javanese Indonesian English
6.	Mr. Boy	F	50	27 years	Javanese Indonesian English

All of the participants were the English teachers in SMAN 1 Salatiga and they have acquired the same languages which were Javanese, Indonesian, and English. They taught different levels of students. Two of them, Mrs. Rani and Mrs. Yani, taught the first graders, while the others, Mr. Boy, Mrs. Tyas, and Mrs. Dika, taught the second graders. Since the third graders were preparing on their national exam, I could not observe how the English teachers taught them.

Since this study is aimed to find the English teachers' perspectives toward the use of Indonesian in teaching English especially in SMAN 1 Salatiga, there were 3 themes that I found after I collected the data. These themes were based on the interview results and supported by the observation that I had done in the English classes.

Teachers' opinions on whether or not to use Indonesian in EFL Classroom

Due to the important roles of the teachers in the classrooms, it is very important to know how they are going to teach, what teaching methods they will apply, and what languages they will use, especially in English classes. Ideally, as said by all of the English teachers in SMAN 1



Salatiga, teachers should use English in the classroom. Cook (2001) stated that “*Clearly the learner needs to encounter the language in order to learn it.*” However, according to all of the SMAN 1 Salatiga English teachers’ opinions, regarding the fact that English is foreign language in Indonesia; to use 100% English in the class was very hard. As the result, Indonesian as the first language may be used in the English classes. The debate about whether or not to use Indonesian in EFL Classroom grabbed my attention in order to explore the English teachers’ opinions about this issue.

In order to explore the English teachers’ opinion about this issue, I conducted the interviews for the English teachers in SMAN 1 Salatiga which were strengthened by the observations that I had done before the interviews. The interviews were conducted using Indonesian in order to get more data and reduce misunderstanding if they were conducted using English. Yet, in this discussion I translated the interview results into English to make it easy to follow the discussion. The interview results showed that all of the English teachers agreed that Indonesian might be used in teaching English. Interestingly, those who did not use Indonesian during the time they taught English and the same time I observed them also agreed that Indonesian might be needed in particular situations. The following were the statements stated by the teachers in the interview:

Extract 1: Interview with Mrs. Dika (February 1, 2012)

“*For some reason, I agree to use Indonesian in teaching English because not all of the students are good at English, their listening skills are not good yet.*”

Extract 2: Interview with Mrs. Tyas (January 27, 2012) who also agreed that Indonesian should be used in teaching English

“*Indonesian, I agree with the use of Indonesian in teaching English because actually English is not our second language but our first language, so Indonesian is still needed in teaching English I think.*”

Extract 3: Interview with Mr. Boy (January 27, 2012) who did not use Indonesian during his teaching English also gave the same opinion as Mrs. Dika and Mrs. Tyas that Indonesian might be needed in teaching English

“*I agree with the use of Indonesian in teaching English. If there is something that hinders the learning process, especially in the instructional matter, I will use Indonesian just to clarify the materials.*”

In conclusion, from the SMAN 1 Salatiga English teachers’ opinions Indonesian was still needed in English classes, especially in SMAN 1 Salatiga, because English was still foreign for Indonesian learners. Although the English teachers agreed to use Indonesian in teaching English, it did not mean that they used Indonesian all the time. Their using Indonesian in teaching English had different purpose from each of the English teachers and depended on the situation when it was necessary.

The purpose of using Indonesian in EFL Classroom

Teaching English as foreign language to the Indonesian learners needed a lot of efforts and appropriate teaching strategies in order to give better input for the students, especially senior high school students. The difficulty level of English in senior high school was quite high, so better strategies were needed. One of the strategies was by making use of the first language which was Indonesian in teaching English. Cook (2001) said “*Bringing the L1 back from exile may lead not only to the improvement of existing teaching methods but also to innovations in methodology.*” The interview resulted that the English teachers in SMAN 1 Salatiga used Indonesian for different purposes. From the interview with Mrs. There, I found that she used Indonesian for explaining the meaning of difficult words when she taught reading.

Extract 4: Interview with Mrs. There (February 6, 2012)

“*In reading, I have to discuss vocabulary. In discussing the vocabulary, if there are difficult words which are hard for the students to understand their meanings, I will explain their meanings using Indonesian even though I have given the definition in English first.*”



Tang (2002) in Morahan (n.d.) found that teachers often use L1 in beginning and intermediate classes to: give instructions, explain meanings of words, explain complex ideas, and explain complex grammar points. Similar to Tang, from the interview, I found that Mrs. There's using of Indonesian in teaching English for explaining the meaning of difficult words was known as efficient way to help the students understand English words well, especially in reading activity. The use of Indonesian for this purpose helped the students to understand the idea of the text by understanding the difficult words. For example, as I observed Mrs. There, she used Indonesian to explain the word *addressee* when she had discussion about *Hortatory Exposition* text. She explained that the word *addressee* meant *yang dituju atau si penerima*. So, based on the evidences, Indonesian was very beneficial to explain the difficult words, especially in reading text.

Beside to explain the meaning of difficult words, another purpose of using Indonesian in teaching English that I found was to help the students transfer their thoughts when they did not know what to say in English. Auerbach (1993) found:

"Similarly, teachers at Centro Presente report that use of the L1 naturally gives way to increasing use of English. Their students often say, "I can't say this in English, but I really want to say it"; once they have expressed their ideas in Spanish, the group helps them express them in English."

It was similar to Mr. Boy's opinion when I asked him for what purpose he used Indonesian when teaching English. He said that when a student could not find the English words for what she wanted to say, he told her to say it in Indonesian and then their friends or he would help her. From his explanation, I found that Indonesian was needed to encourage the students to share their thoughts when they could not say it in English. Besides, I also found that it could be used to save the time as well. So that the teacher could use the time efficiently and did not hinder the teaching and learning process because of waiting one student think about what she should say in English.

The last purpose of using Indonesian that I found from the research was that Indonesian could be use to create a relaxed atmosphere and get contact with the students during the teaching learning of English in the classroom. As I observed Mrs. Dika, she said to her students, *"Since Yosua is the only one you point out, he'll be the one who will be graded."* She said it using Indonesian when she responded to the students when they pointed one of their friends to read the text voluntarily. Moreover, from the interview that I had conducted, Mrs. Dika also said that Indonesian was used more to brightened up the situation.

In addition to the use of Indonesian for explaining the meaning of difficult words and transferring students' thoughts when they did not know how to say it in English, Indonesian could also be used to create a relaxed atmosphere in the classroom and get contact with the students so that the students would feel more comfortable during the lesson. Cook (2001) suggested that *"The main benefit of the L1 for personal contact is naturalness. The teacher is treating the students as their real selves rather than dealing with assumed L2 personas."*

The controversy of using Indonesian in EFL Classroom in RSBI SMAN 1 Salatiga

The important point to remember was that this research was aimed to figure out the English teachers perspectives toward the use of Indonesian in teaching English especially in RSBI. Since the implementation of RSBI has been bringing controversy especially on the use of English as the medium of instruction, the use of Indonesian has been reduced recently. In the Minister of National Education Regulation No. 78 year 2009 about the Implementation of International Standard School for Elementary and Secondary level, pasal 5 ayat 3:



“International Standard School is allowed to use English as the medium language and/ or other foreign languages which is used internationally for specific lessons.” (*SBI dapat menggunakan bahasa pengantar bahasa Inggris dan/atau bahasa asing lainnya yang digunakan dalam forum internasional bagi mata pelajaran tertentu.*) It meant that the teachers should teach in English. On the other hand, it had been criticized that the use of English as the medium of instruction in RSBI was ineffective. So, Indonesian was used instead of English, even in teaching English as well.

From the interview with the English teachers in RSBI SMAN 1 Salatiga, I found that Indonesian was still needed in RSBI, even in teaching English. There were several reasons why Indonesian was still needed in teaching English in a school labeled as RSBI. Based on the interview, all of the English teachers emphasized that the common understanding about RSBI which was English-minded was incorrect since the main point of RSBI was the quality of the students not the use of language. That’s why teachers were allowed to use Indonesian in teaching English. The interview results could be shown as follows:

Extract 12: Interview with Mrs. Dika (February 1, 2012)

“People only know that RSBI must use English, or English-minded. But, actually English is not the main idea. What we expect from RSBI is the quality not the language used in the class.”

Extract 13: interview with Mrs. Tyas (January 27, 2012)

“In my opinion, Indonesian has still to be used in RSBI to teach not only other subjects but English as well.”

Another reason why Indonesian was still needed in teaching English in RSBI was stated by Mrs. Tyas that there were also slow learners in RSBI. She stated that *“There were also slow learners; even they don’t understand the explanation in Indonesia. What if I explain it in English? So, Indonesian was still needed, even in RSBI.”* It was also supported by Hendarman (n.d.) who argued that *“Most of Indonesian has low English literacy. One of the indicator is their low ability to communicate using English either orally or written and either passive or active. This condition indicates that English teaching in Indonesian schools is unsuccessful.”*

Meanwhile, from the interview I also found that two teachers believed that the use of Indonesian in teaching English in RSBI, especially in SMAN 1 Salatiga, had to be reduced, so English was used more instead of Indonesian. Mrs. There stated that *“In English subject, it’s sure that we develop English skills so we can use English as much as possible.”* Besides, Mrs. Yani also agreed with the idea that English should be used more than Indonesian in teaching English. She stated that:

Extract 14: Interview with Mrs. Yani (January 30, 2012)

“Personally, English is important. Ideally, every teacher has to be able to use English, teach in English. I think English should be used to teach not only Science and Math but others as well. So, it is started by English teacher, teaching in English.”

Mrs. There’s and Mrs. Yani’s arguments were supported by Krashen (1981) who argued that *“Learners acquire foreign languages following basically the same path they acquire their mother tongue and the use of the mother tongue in learning process should be minimize.”* In other words, English teachers should use English in teaching English as foreign language so that the students would be able to acquire English well.

In conclusion, from the evidences above, teachers would give more exposure of English to the students so that they could practice it more. However, they also believed that Indonesian could not just be put aside because it might give significant contribution to English teaching. As Mrs. Tyas said, since English was still considered as foreign language for Indonesian learners, it would be quite hard for them to acquire it without any help from their first



language, Indonesian. In short, as long as Indonesian was used appropriately, the teachers believed that it would be beneficial as well.

CONCLUSION

Since there has been a controversy on whether or not the first language was still allowed to be used in the foreign language classroom, I investigated the use of Indonesian as the first language in teaching English as foreign language in RSBI SMAN 1 Salatiga. The purpose of the study was to find out or to explore the English teachers' perspectives toward the use of Indonesian in teaching English in RSBI SMAN 1 Salatiga. So, in attempt to answer the research question, I conducted observations and interviews with the English teachers in RSBI SMAN 1 Salatiga.

In this study, the results showed that all of the English teachers agreed with the use of Indonesian in teaching English in RSBI SMAN 1 Salatiga. They believed that Indonesian was still needed in teaching English even in RSBI, especially RSBI SMAN 1 Salatiga. By making use of Indonesian, they believed that the students would understand the lesson better and able to master it. In several conditions, Indonesian was very beneficial in teaching English, such as: to explain the meaning of difficult words in teaching reading, to transfer students' thought whenever they could not express it in English, and sometimes to create relaxing atmosphere in the classroom. So, the students would be able to understand the material better and feel comfortable in learning English. However, the use of Indonesian in teaching English needed a great deal of attention. Since the students needed more exposure to learn English and they only had chance in the classroom, Indonesian was used to help them learn English well.

From this study, I hope that the English teachers especially senior high school teachers in RSBI will be more aware of the benefits of using Indonesian in teaching English instead of putting it aside without any consideration. Besides, from this research I also hope that the English teachers will be able to apply better strategy in teaching English so that they will be able to provide better input for the students and be a good role model for the students. Hopefully this research will give contribution to the English teachers' acknowledgement about the role of Indonesian in teaching English in SMA Negeri 1 Salatiga particularly and in Indonesian RSBI in general. In conclusion, the results of the study have implication to the education development, especially in the teaching-learning strategy in teaching English.

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The Impacts of School Schedule for Students Learning

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Abstract

The discussion about the relationship between school schedule and students learning remains unsettled both at the theoretical and empirical levels. Does the timing of activities affect the quality of learning? Can the school schedule be modified to produce different levels of learning outcomes? This study reviews twelve journal articles about the nexus between school schedule and learning outcomes. Students' learning outcomes are influenced by the fluctuation of time, achievement, motivation, sleep-wake schedule, and innate ability. In turn, various researchers recommend that school administrators consider the school start time, students preferred learning time, length of each class, how many times the same subject is taught per week, the need to be mobile rather than stationary when learning, and school temperature to create a well-designed school schedule. On the basis of these insights, the present dissertation reveals that the historic debate about school schedules and learning outcome is essentialist. The future research should explain the links between the timetabling contemplates and extended to instructional time, curriculum, and human circadian rhythms.

Key words: School schedule, students, and learning time

INTRODUCTION

The school system in Indonesia has many problems; one of which is the lack of school buildings and basic utilities to support students' learning (tables, chairs, school supplies, etc). This leads to another problem: school scheduling. Because one school building has to be shared with more than one school, each school has to run in a half-day format: one school in the morning and the other in the afternoon. The next week, they switch. The condition is getting worse since the administrators do not have good guidance to assist them in making the system run properly (World Bank Indonesia, 2010). School schedules, for example, have significant influence for student learning conditions; however, school administrators often pay little attention to this influence.

The administrators develop the school schedules to accommodate important subjects such as mathematics and sciences, first, and then the other subjects are squeezed in based on what time remains. The research about the students' condition, attention, and other psychological conditions has little weight in influencing the construction of the school schedule. Therefore, the impact of school scheduling on student learning will be emphasized and explored further in this research, so as to better assist school administrators when creating and implementing a school schedule.

The research about school schedule affecting students' achievement began in the early 20th century, with a study conducted by Gates (Klein, 2001). However, the development in this field research has not progressed because the school policy makers tend to overlook this factor in consideration to students learning condition. Folkard, Monk, Bradbury, and Rosenthal (1977) started their research to provide information about the relations of time-of-day with student's memory. Then Biggers (1980) conducted a study that demonstrates students' condition of learning during morning hours and afternoon hours based on students'



report in relation to their achievement in school. Davis (1981) and Klein (2001) conducted similar research and found the same result as Biggers (1980). Another result of Davis' (1981) research supports the Folkard's (1977) results that students' short-term memory (STM) performance was better during morning hours and their long-term memory (LTM) performance was better during afternoon hours. Klein's (2004) more recent research tried to illustrate the impact of time-of-day on students' performance in classes; therefore, in this research he explained students' condition in every hour during school day.

In 1977, Folkard et al. constructed a research study to find out the effect of time-of-day on school children's immediate and delayed recall of meaningful material. The researcher administered the experiment to a group of students averaging in age from 12.5 to 13.4. The researchers recorded a short story and played it for two different student groups; one group at 9:00 in the morning and the other group were at 15:00 in the afternoon. They split each group into sub group. One sub group did the test right after they listened to the short story, and the other took the test one week later. In their findings, the researchers explained that in the morning hours, the brain's left hemisphere is more active; this impacts the processing of acoustic data, short-term memory, and routine activities. According to the researchers, the right hemisphere, on the other hand, is responsible for the processing of visual information, perceptual tasks, organizational transformation of information and long-term memory, and is more active during afternoon hours.

In his research, Biggers (1980) added other variables such as students' academic achievement and age. He investigated the differences in Grade Point Average (GPA) in secondary students who were most alert in the morning or later in the day. The students in grade 7-12 had to fill out a questionnaire about the time they are most alert, sluggishness, the time they perform best in school, and their GPA. The results were that younger students tended to be alert in the afternoon while older students were alert in the morning. The younger students tended to be more sluggish in the morning, and the older students were more sluggish in the afternoon hours. However, the result revealed that students, older and younger, that were more alert in the morning had a higher GPA than the group of students that were more alert during other times of the day.

In the same year, Davis (1981) conducted a study about the effects of time-of-day on students' reading achievement. In this research, Davis (1981) tried to ascertain whether time-of-day of reading instruction might influence pupils in the elementary reading development, and whether pupils' relative reading ability was a plausible factor in differential reading development as a function of time-of-day instruction. One hundred first grade pupils from a California School District who had reading instruction provided during their first period or last period became part of her experiment. The result, comparable with Biggers (1980) and Klein (2001), showed that the beginners who receive instruction in afternoon hours read better. The analysis of the memory performance of students produced similar result as Folkard's study (1977): short-term memory (STM) performance was better in the morning, and the Long-term memory (LTM) performance was better in the late afternoon.

About two decades later, Joseph Klein (2001) a researcher from Bar-Ilan University, conducted a study to ascertain the opinion that pupils with poor to superior mathematical skills have variation in the attention level that relates to the effect on timing of mathematics lessons. In his research, Klein collected data from fifth graders and tenth graders who attended a long school day, starting at 08:00 am and ending at 14:30. He ran a correlation



between the answers provided on questionnaires from the students and their mathematics examination scores. Klein's results confirmed Biggers' (1980) earlier findings that the younger students' attention and achievement in mathematics rise from morning hours to afternoon hours, while the adolescents show a higher score in the morning and lower score later in the afternoon.

Klein (2004) conducted further research about the effect of time on students' achievement, but in his new research, he asserted the influence of time for students in middle school emphasizing intensive reading, history, and social science classes. His research question explored the relationship between time of learning and scholastic attainment by investigating the changes in achievement hour-by-hour during the day. The subjects were grade 7 to 9 students from twenty-five classes that required intensive reading in literature and history. In this research, Klein only used the schools that began at 08:00 and finished at 14:30. The schools did not provide time for a lunch break; however, they did provide 5-10 minutes recesses between classes and one snack and activity break at 10:00. The results showed that for the lesson given immediately after snack break, there was a significant decrease in students' performance in comparison with the students' means score during the hours before break. However, the students' score during class between 11:00 and 12:00 was the highest of the day, exceeding their performance in tests conducted during all other times of the day. During the period between 12:00-13:00, student performance was the lowest. This effect was not because of lunchtime because there was no lunch break in this school day. An increase of mean score was reported during 13:00 and 14:00.

DISCUSSION

This section tries to distill the main insights from previous studies in order to answer two main questions: how does the school schedule affect students' psychological condition? And how does the students' mental performance affect their condition to learn?

These questions are closely related because the purpose is to find out the human learning performance during day. However, responding to each requires different inferences to be made from the evidence. A school schedule that prevents sufficient sleep is strongly correlated with students' mental and emotional problems.

Ineffective school schedules impact students' level of concentration, cognitive and emotional function, motivation and logical reasoning (Miller et al, 2008; Mena-Barreto and Wey, 2008; Martin Herz-Smith et. al, 1999; and Valdez et. al, 2008).

Therefore, although there are no systematic studies that compare the performance of students who have had little sleep and those who have obtained adequate sleep, it is reasonable to infer that understanding of sleep deprivation is needed for effective academic work because loss of sleep has equal impact on consciousness as drunkenness (Miller et al, 2008). School schedules that require students to come to school before 08:25 AM, for example, have negative impact on their performance while learning (Bergin and Bergin, 2010). The plausible explanation is that students have to wake up early and lose some of their time to sleep, the loss of sleep has been shown time and time again to impact negatively on cognition processes such as attention, working memory, and executive function (Miller et. al, 2008). Sleep deprivation also leads to increased tiredness and physical pain such as headaches, stomachaches, and backaches (Martin-Herz et. al, 1999 and Valdez et. al, 2008). Students that



lose sleep time during weekdays tend to substitute their sleep time by having an extended wake-up time during weekends or to take post-lunch naps when they do not have class in the afternoon.

Indonesia's current school conditions could be used to illustrate the forgoing argument. Under this 'shift system', some students attend school very early and finish around midday. Then, a second 'batch' of students begins their school day in the afternoon and finish late at night. This arrangement is on a rotational basis to enable students to have both 'worlds' – morning and afternoon shifts from time to time. There, schools usually start at 07:30 AM for the morning shift. Some do try to make up for the little sleep that they get by napping, but that does not seem to be a good substitute, because next week this habit will make them difficult to adjust for afternoon shift schedule. A more serious problem is that because they have to return to an afternoon shift, some students who have got used to taking a nap in the afternoon feel sleepy during afternoon lessons the following week.

This personal anecdotal evidence complements the more systematic studies, suggesting that the first consideration in improving students' performance is, planning the school schedules. A good schedule must start at 08:25 AM at the earliest, as established by several of the studies summarized in Table 3.

The researchers during these two decades have the same results: students learn best at noon and during early afternoon (Folkard et. al, 1977; Biggers, 1980; Carbo et. al, 1986; and Klein, 2001). Students that learn during this range of time show a better recollection for the materials that they learn (Folkard, 1977; Davis, 1981). Some students can learn best during afternoon hours because the left hemisphere of the brain that controls short-term memory and routine activities is more active during morning hours, while the right hemisphere of the brain that control long-term memory and visual memory processes is more active during afternoon hours. However, Klein (2001) found that a slight difference between higher achieving tenth grade students, they were more attentive during morning hours, while the low achieving tenth graders and fifth graders were more attentive during afternoon hours. Klein's (2001) conclusion emphasizes the Biggers (1980) finding that students are more alert in the morning have the higher grades, because the school administrator is liable to put the important material during early morning hours. Klein (2004) findings proved that students best time for learning are during 11:00-12.00 and from 13:00-14.00; while the most sluggish period was occurred during 12:00-13:00. Therefore school administrators can use this range time to put the important subjects for students to learn, such as mathematics, science, or language and put the material that help students move and play during the period where their performance is lowest (Jensen, 2005).

In conclusion, the school schedule has a strong effect on students' physical and psychological conditions that, in turn, impacts their learning condition. The school administrators have to consider some of these factors in the school schedule, which can affect students' learning condition. First, the schools start time: there is an increase in students' tiredness, pain and psychological problems, when the school started too early because students brain need adequate sleep time for rest and generates. The school that started before 08:25 am could lead students to school deprivation and slow their learning progress. Second, ideal subject performance during school day: there are modulation of time-of-day, it would be good for administrator to put the right subjects at the right time such as subjects that need more concentration during late morning, noon, and early afternoon, then put the subjects that



provide move and play in the lesson during the period of time that students attention decreased.

There are limitations of this study; because the journals that provided the relation of school schedule and students learning condition were limited, therefore in this study the journals that I used have a variance range of sample, from pre-kindergarten to college students. More work is needed, particularly on the relationship between time, teachers' productivity, classroom instructional time, and students' circadian rhythm.

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Students' Achievement in Mathematics Using Interactive CD on Learning Function - Case Study in SMK PGRI 02 Salatiga

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Abstract

Mathematics learning in high and vocational schools is still dominated by teacher-centered model, with students spend most of their time taking notes and doing exercises. This is due to the increasing difficulties of mathematics subjects and its abstract objects. The above method in mathematics education causes lack of motivations in students and leads to low academic achievement. These needs to be solved through utilization of educational technology that is attractive to students. Learning using Interactive CD is one of the solutions.

The purpose of this research is to measure significant difference of student's achievement between students learning using Interactive CD and modules. This research uses experimental methodology and conducted in SMK PGRI 02 Salatiga. T – test is conducted to measure significance of difference between experimental and control group. Results show significant difference in student's achievement between students learning using Interactive CD and Modul. Those learning using Interactive CD show better student's achievement.

Keywords: students' achievement, Interactive CD

INTRODUCTION

Mathematics is one of basic courses whose subjects and practical use develop rapidly, and taught at every educational level in Indonesia, from elementary through senior high schools (Soedjadi, 2000: 3). But we're confronted with the fact that abstract objects in mathematics prove to be difficult for students to understand. This leads to low student's achievement in mathematics (Uno dan Lamatenggo, 2010: 140).

Purnama (2009: 93) suggests that failing achievement have students' internal and external factors as its causes. Students' external factors are determined by teacher's role and strategy in teaching using still-conventional method, mathematics teaching dominated by overwhelming lectures that exclude students' active participation leading to monotony and tedium, and meager or even absent use of educational medias.

To keep pace with global developments, educational activities are directed to tapping to science-and-technology-based medias so that educational objectives accomplishment is ensured. One of these medias is Interactive Compact Disc aimed at helping students' independent learning by using computer technology. These Interactive CD present materials on human interactions, reality, displays moving or still pictures, recorded writings and sounds (Purnama, 2009: 94).

Al-Seghayer (2001), Hung, dkk. (2002), Pramono (2009), Prasetya & Sugiharti (2011) discovers a better achievement to students learning using Interactive CD compared to moduls. Spencer (2006) and Winarsih (2011) discovered better achievement average to students learning using moduls. While Liu (2010) and Agastya (2011) have found no differences between learning using moduls and Interactive CD.



REVIEW OF LITERATURE

Achievement

Achievement is the result achieved by students during their participation in courses, assignment completion and educational activities at school. This achievement is evaluated from its cognitive aspects because it correlates to students' capabilities. Achievement is also proved out and demonstrated by teacher's evaluation grades upon assignments and examinations (e.g. daily quizzes, end-of-term examination, report etc.) (Tu'u, 2004: 75).

There are internal and external factors affecting students' academic achievement. External factors affecting academic achievement are still-conventional model applied in courses, overwhelming lectures that excludes students' active participation in learning activity leading to monotony and tedium, meager or even absent use of media.

Learning Media

Suherman (2009: 65) proposes the definition of learning media as educational aids used in in-class or out-class activities, in order to establish communication and interactions between teacher and students in learning activities. In physical sense, learning media are recognized as hardwares, that is perceivable objects. The non-physical concept of learning media is softwares, that is the messages contained in the hardwares intended for learning activities.

Through learning media, we can present messages to mass (i.e. radio, television), large and small groups (e.g. film, *slide*, video, OHP), or individual (e.g. moduls, computers, radio tape/cassette, video recorder) audience. Medias make learning activities more attractive and are associated with attracting attention and making students stay focused. The clarity and orderly sequence of messages, the appeal of changing images, special effects that provoke curiosity; all of these show motivating and interest enhancing aspects of the media.

Interactive Compact Disc

Warsita (2008: 153) suggests that Interactive CD are interactive multimedia program designed as learning media. Learning interactive CD can be defined as a combination of diverse media packed (programmed) integratedly and interactively to transfer certain educational messages in a form of CD run by computer. Developments in computer capabilities also balanced by developments in softwares to help facilitate the combining of texts, videos, graphics, and animation to form a multimedia. Compared to another medias, Interactive CD have comparative advantages of flexibility, self-packing, richness in content, interactivity and individuality.

Flexibility as manifested in providing students' the opportunities to choose the subjects of every course and its variations and points of access. Flexibility is also typified by its availability for inclass learning activities, use by individuals or small groups. Manageable presentation-time in learning activities is also a salient feature of Interactive CD that will suit every student.

Self-packing means Interactive CD suit each students' learning pace that depends on each individual's abilities and preparedness. Students with quick learning pace are given



opportunities to maximize their learning capabilities while students with slower pace are given more opportunities to iterate and study their lessons.

Richness in contents means the program provides rich information, including supplemented and enhanced materials, and detailed materials or elaboration on materials for students with specific interest or students aiming at more advanced learning. Richness in contents of multimedia program is supported by various forms of information presentation presented through medias.

Interactivity means Interactive CD have two-way communication as its characteristic in such a way that it gives opportunities to students to give responses and do their activities, that is eventually processed by multimedia programmes, that in turn give out feedbacks. Interactivity is the most salient feature of the media.

Individuality or service for each individual's learning pace, means the medias are programmed and provided to serve each individual's interest and learning needs (Warsita, 2008: 153). Improvement in computer capabilities is entailed by software developments that help facilitate the combining of texts, videos, graphics and animation, resulting in a multimedia program.

METHODOLOGY

This research uses experimental research methodology and *Pretest-Posttest Equivalent-Group Design* as a research design. The independent variable in this research is educational media and the dependent measure is academic achievement. Sampling technique used in this research is cluster random sampling technique. Population in this research is tenth-grade students of SMK PGRI 02 Salatiga. Experimental group in this research is the entire thirty two students of class X.E SMK PGRI 02 Salatiga and the control group is the entire thirty three students of class X.F SMK PGRI 02 Salatiga.

Data are collected using written tests and observation. Written tests are given to students to evaluate the cognitive learning results and composed of initial test (pretest) and final test (posttest). Observation is performed to recognize the effects educational process using both media.

RESULTS AND DISCUSSION

Both initial data and final data analysis is conducted using SPSS version 16.00. Pretest and posttest data description for experimental and control group is shown in Table 1.

Table 1. *Initial and Final Data Description of Control and Experimental Group Descriptive Statistics*

<i>Pretest (Initial Test)</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Experimental Group	33	25.00	75.00	53.5985	12.20655
Control Group	32	18.75	75.00	50.3906	14.80191
<i>Posttest (Final Test)</i>	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Experimental Group	30	45.00	80.00	68.0000	7.38124
Control Group	31	15.00	65.00	46.1290	9.37280



Normality test of experimental and control group indicates that data are distributed normally represented by pretest significance score that is greater than 0.05. Normality test results are shown in Table 2.

Table 2. *Normality Test of Pretest (Initial Test)*
One-Sample Kolmogorov-Smirnov Test

	kelas eksperimen	Kelas kontrol
Kolmogorov-Smirnov Z	.755	.776
Asymp. Sig. (2-tailed)	.619	.584

Homogeneity Test results are shown in Table 3. Levene's f-test yields 1.109 with significance probability $0.296 > 0.05$, which means both populations have equal variances. In other words, both populations are homogeneous.

Table 3. *Homogeneity Test of Control and Experimental Group*

	Levene's Test for Equality of Variances	
	F	Sig
Echievement Equal variances assumed	1.109	.296
Equal variances not assumed		

Analysis of posttest scores results in normal distribution of both groups as shown by greater than 0.05 posttest significance scores. Posttest normality test results are shown in Table 4.

Tabel 4. *Normality Test of Posttest (Final Test)*
One-Sample Kolmogorov-Smirnov Test

	Experimental Group	Control Group
Kolmogorov-Smirnov Z	1.315	.890
Asymp. Sig. (2-tailed)	.063	.407

T-test is performed to measure difference in learning results of both groups. Levene's F-test yields 1.169 with probability $0.284 > 0.05$ which means both populations have equal variances. Thus, we use equal variances assumed to look up the t-test results. t-count yields 10.103 with significance value $0.000 < 0.05$ which means average score of experimental group differs from control group. Experimental group shows better average academic achievement compared to control group as shown by difference of means 21.87 between both groups. Posttest average score of experimental group is 68.000 compared with 46.129 of control group. Difference of means test analysis for posttest is shown in Table 5.

Results of this research are in agreement with Al-Seghayer (2001), Hung, dkk. (2002), Pramono (2009), Prasetya (2011), and Sugiharti (2011), recognizing the positive effects of Interactive CDs use on academic achievement as represented by posttest scores of experimental and control groups.



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Skill Improvement of Learning Material Understanding by Student Based Bintang Reportase Method - A Study of Civics in SMA Negeri 1 Pabelan Kabupaten Semarang

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Abstract

The most common problem appears on teaching learning is related to abstract materials in almost every subject, thus students are less enthusiastic and motivated during the learning process. As an effort to fix and improve the learning outcomes of certain learning process, teachers need to conduct an interactive, excited, enjoyable, effective, innovative learning process. student's based Bintang Reportase method is used to develop student understanding. Students can learn, find, and process the material as the basic of material development, followed by observation, interview about the material relevance learnt. The interview is recorded, discussed, summarized, concluded and the result is presented as a report. This research aims to help students to produce optimal result in learning Civics. This research is conducted to the eleventh grade of Science students of SMA Negeri 1 Pabelan Kabupaten Semarang Term I Academic year 2011/2012. The research of Bintang Reportase method proves that the Civics learning outcome continually improves. The early condition shows that conventional learning method presents 60.71% of completeness, however after the use of Bintang Reportase method, it achieves 78.57% in the first phase then 92.87% in the second phase. This data shows that there's a significant result, 32.25% in the end of second phase.

Keywords: improvement, learning outcome, bintang reportase, and student-based.

INTRODUCTION

UU no 20 / 2003 about National Education System mandates all teachers and education employees to create an education atmosphere that meaningful, fun, creative, dynamic, and dialogical, and professionally committed to improve educational quality and provide an example and also keep the institution reputation, profession, and position in accordance with the trust given. Along with the mandate, the efforts for quality improvement and education relevance to the national development needs are actually the development main goal in Indonesia.

Related to the National Education System mandate, as one part of learning presentation from the applied curriculum, Civics is one of the subjects that support national development progress. Civics includes the dimensions of knowledge, skills, and value. The basic idea of Civics is to form an ideal citizen who has the faith and piety towards God the Almighty, knowledge, skills, and moral in accordance with the concepts and principles of citizenship. To understand the structure of civics, the author describes it in the graph below:



Figure 1 Graph of Civics Structure

As one of the national curriculum which presented at all educational levels, Civics is directed to achieve two main goals. The first is improving the students' knowledge and skills on ethics, morals, and principles for living. The second is building attitudes, behaviors, and personality in accordance with the values of Pancasila. Both goals should be achieved simultaneously, so that students are not only able to understand the ethics and moral knowledge, but the most important is they are able to do it in their daily life. At the same time, each student will be able to put themselves in the correct position in this global era.

To achieve the above objectives, Civics is not only presented in the classroom, but the important thing is how schools and students socialize and practice proper ethical values and moral of Pancasila in everyday school life. Values Socialization Progression requires a regular and continuous process, carried out discipline and need a concrete example in the implementation. Therefore, the socialization effort values can be done through the creation of learning methods that are relevant and appropriate to the needs of the students. Teaching methods have attempted to have values which are educative, intellectual and fun.

In contrary, in learning process students show that they are less courage and less motivated to learn, that makes passive or even no interaction between students and teachers. Finally, it leads the students to get bad result of Civics. The evaluation and assessment shows the low quality of Civics learning result, especially in cognitive aspect. The competency test result before treatment which reaches the completeness of 70 is about 7 students (60,71%), whereas those who fail to fulfill the target are about 11 students (39,29%) out of 28 students.

Consider with the fact above, if there is no action taken, students will less understand or even won't understand the meaning of a concept. So, teacher as educated human being who concern with the improvement of education quality and learning outcomes, requires performing the evaluation, introspection and changes in the carrying out learning activities. According to Nana Sudjana (2000: 34-40), student learning outcomes can be influenced by internal factors and external factors. Internal factors include: motivation factor, the interest and attention of students towards learning, attitudes, and students learning habits, student persistence, parental socioeconomic circumstances, physical factors and students psychological factors. The external factors include the teaching quality factors, such as: the ability of the teacher, classes characteristic, and school characteristics.

Based on the reason above, this paper will discuss about skill improvement of learning material understanding by student based Bintang Reportase Methods (A Study of Civics in



SMA Negeri 1 Pabelan Kabupaten Semarang). Bintang Reportase was selected as an independent variable, because the use of bintang reportase method is still a new, even it becomes one of the interesting choice of learning methods to improve the Civics mastery with the process / stages of reading, searching, receiving, interviewing, discussing, socializing, arguing, making report and presentation in the classroom as the reflection. By applying this method, students can realize and appreciate how knowledge is gained by a struggle, work hard and long process, so that knowledge which is gained, can be accounted scientifically, in addition to acculturate to think actively, creatively and innovatively.

Based on the background of the problems above, the problem formulation is presented whether the use of student based bintang reportase method can improve the students' mastery of Civics grade XI IPA Term I (one) Academic Year 2011/2012, SMA Negeri 1 Pabelan Semarang District. This study is aims to determine the increasing of civic learning outcomes through student-based bintang reportase method.

The benefits of this research are that students can increase the excitement, interest, motivation, creativity, and learning activities in Civics. It will also increase the students understanding of concepts and achievement. On the other hand, teachers can improve learning skills, discover innovative teaching methods, to be creative and improve their quality in preparing, presenting, and assessing the learning program, so that learning becomes more interesting, educating, and pleasant, it also provides concrete information on the effectiveness of the use of student based bintang reportase method in learning activities and as a source in the school library documentation.

DISCUSSION

a. Theoretical Foundation

Learning occurs when a stimulus along with the contents of memory affect the students' actions in such a way that the changes happen before he hasn't had the situation to the time when he experienced the situation. Learning is any change of behavior that occur as a result of training or experience (Purwanto 1997: 84).

Learning is the core of the educational process that the teacher holds the major role. Teachers have a crucial role in determining the quality and quantity of instruction execution. Therefore, teachers should think and plan carefully to improve the learning opportunities for their students and improve their own teaching quality. To enhance good teaching and learning activities, teachers and students should be active so that learning will not be boring.

Teachers are the key and strategic figures in the process of teaching the students at the school; teachers are not only able to present the subject effectively, particularly Civics teacher should be able to give examples of how to practice ethical values and morals in school. Civics teachers should also be able to improve its ability in the learning process, both related to materials, methods, and evaluation of learning systems. So that the following foundations are important to be the stepped in order to do a better learning,

First, the subject matter is a substance that must be mastered by teachers in teaching Civics. Therefore, teachers must be able to explore, analyze, and select appropriate learning materials to the development, abilities, and environment of students. This is important that the material development effort have to be in accordance with the conditions of the local school.



Second, Civics material delivery methods should be studied in depth, in order to obtain the most effective method to implant ethical values and moral of Pancasila. In this study, presenting a varied system needs to be considered in civics learning as an appropriate strategy to avoid the dominance of the use of certain methods, such as lecturing, the students tend to be bored.

Third, learning evaluation system should be discussed carefully, considering the aspects that are emphasized on the affective domain (attitudes and behavior), besides the cognitive (knowledge). So, we need to study whether the current evaluation system has the right to assess Civics learning outcomes accompanied by other considerations to develop in the future.

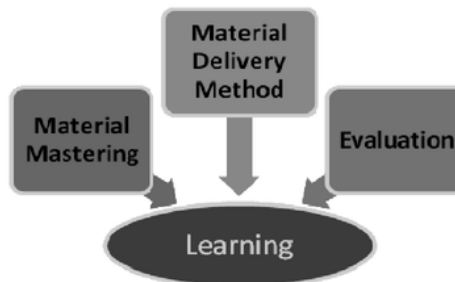


Figure 2. Base of Doing Good Learning

b. Mind Mapping

By doing a study of three aspects of learning, we all certainly hope to all teachers, especially Civics teachers, can increase the knowledge and ability and be able to develop it in accordance with the conditions and the situation which is fast changing. To get the learning as described above, in addition to mastery of the material and class domination, action or behavior expected by teachers everyday becomes an example of a role model for students. This is consistent with educational theory by Albert Bandura, one of the leaders in the cognitive psychology field that suggests how to learn by "modeling". Similarly, community behavior, especially the community leaders may influence others behaviour. Of course, there are many ways and learning methods that can be used by teachers. But whatever the means and the methods used, it must in accordance with three things: empowering (authorized), the dialogue (both must be in), and learning paradigm (pattern / model of learning).

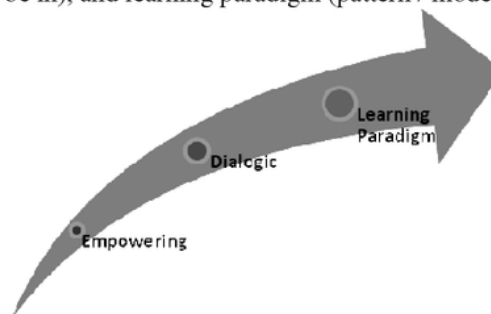


Figure 3. Three Bases of Applying Learning Method

Student based bintang reportase method is one of the methods that is effective for Civics learning, as a way to provide an educational, fun, and intellectual learning. Students (both



individuals and groups) are invited and directed to master the material by receiving knowledge from the surrounding environment of learning through reading material, making inquiries, interviewing, recording things related to the material, discussing, summarizing the discussions, concluding, reporting the results of discussions, and presenting which is concluded with constructive evaluation and reflection from the learners and teachers. It can be divided into three parts:

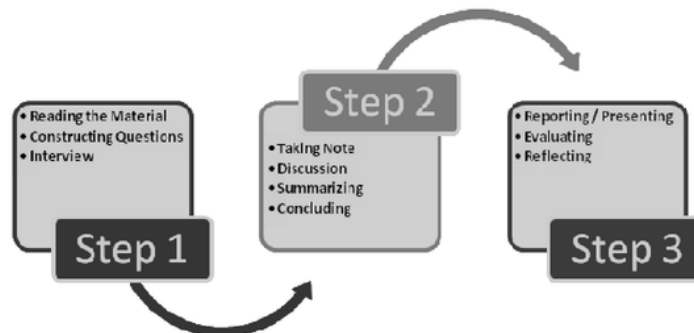


Figure 4 Student Based Bintang Reportase Method Cycle

c. Hypothesis

Based on the theoretical foundation and mind mapping, the authors proposed the following hypothesis:

1. The Application of Student Based Bintang Reportase Method could improve the skills mastery of Civics in Grade XI Science SMA Negeri 1 Pabelan Semarang Regency.
2. The Application of Student Based Bintang Reportase Method could improve the motivation of learners.
3. The Application of Student Based Bintang Reportase Method could improve the activity and creative power of student learning.

METHODOLOGY

a. Setting and Research Subject

This research was conducted in SMA Negeri 1 Pabelan Kabupaten Semarang, Term 1 Academic Year 2011/2012, on July until September 2011. The research subjects were students of Grade XI of science, about 28 students which consisted of 17 female dan 11 male.

b. Data Resources and Data Collecting Method

In this research, the data resources were collected from the result of competency test, which was conducted after the learning activity. This research used written test instrument about 40 objective questions for collecting the data.

Validation, Data Analysis, and Performance Indicators

The Data Validation was conducted by peer assessment with other Civics teachers in XI grade. This research applied the comparative analysis which comparing the amount of students who had completely learned the competency test before applying Student Based



Bintang Reportase Method with the amount of the students who had completely learned the competency test in the first and second cycles. The performance indicators were collected from the assessment of learning result by completing the written test which was provided as the competency test. The test consisted of 40 objective questions which was accomplished individually with the learning completeness target individual performance indicators of 70; the classical learning completeness who got 70 was 60,71% (KKM PKn SMA Negeri 1 Pabelan Kabupaten Semarang is 70), and the learning outcome assessment average in the end of the phase reached 85,72%.

The Research Procedure

This research was conducted by “*Penelitian Tindakan Kelas (PTK)*” Method which consisted of 2 cycles. Each cycle had the same steps, i.e. planning, acting, observing, and reflecting.

Steps of Cycle I

Cycle I allocated for twice meeting (4 learning hours x 45 minutes), that discussed “*Political Culture in Indonesia*”. The time allocation included the learning activity.

The steps of cycle I were as follow:

Planning

This stage covered the developing of the learning implementation draft, semester program, and syllabus. It also developed the learning scenario which applied Student Based Bintang Reportase Method, identified problem based on the interview result as the group discussion matter, constructed the report developing plan and the report presentation, and also created the students worksheet and competency test.

Acting

This stage covered some steps, including: forming learning group which consisted of 4 students, conducting learning with *Bintang Reportase Method*, conducting group discussion, developing report, simulating presentation, presenting the report, accomplishing the students’ worksheet and the competency test.

Observing

The learning implementation observation conducted collaboratively with other Civics teachers by using monitoring tools, i.e. some instruments which were planned.

Reflecting

This stage covered both qualitative and quantitative data analysis of the competence test result. The analysis result was applied to determine the positive and negative result of the treatment, so that the follow-up action for the next cycle could be established.

Steps of Cycle II

Replanning



This stage covered the problem identification of cycle I and improvement plan, development the learning scenario which applied Student Based Bintang Reportase Method, identification problem based on the interview result as the group discussion matter, constructing the report developing plan and the report presentation, and also creating the students worksheet and competency test.

Acting

Learning activities at this cycle were similar to the phase I. It was the improvement of cycle I. Weaknesses that appears during the implementation of phase I were repaired on the second phase. This improvement was intended to grow the learning actively and creatively.

Observing

This stage was similar to the same stage in cycle I, the data was considered important such as the data of the student learning outcomes progress and student learning activity, that were monitored by other Civics teachers through the results of the competency test and through the class observation sheet. Teachers checked students' notes, interview results, group discussions, reports, and student work.

Reflecting

The reflections in the second cycle were focused on the experience gained in cycle I. It reassessed the improvement targets.

RESULTS AND DISCUSSION

Initial Condition Description / Pre Cycle

The research was conducted in Grade XI Science Term 1 Academic Year 2011/2012 SMA Negeri 1 Pabelan Semarang Regency. Civics in this grade was taught once in a week and each session consisted of two hour lesson (2 X 45 minutes). In the initial condition/pre cycle, learning was implemented using the lecturing method. The subject matter in this cycle was about "Political Culture in Indonesia". The results obtained from the observation and competency test values which held before the treatment, measured as follows:

Table 1. Competency Test Result before Treatment

No	Result	Number of Students	Percentage	KKM Result of Civics SMA Negeri 1 Pabelan, Semarang District
1	Less than 70	11	39,29%	70
2	70 - 100	17	60,71%	
		28	100%	

From the table above, it is known that students in grade XI Science Lessons Year Semester 1 2011/2012 SMA Negeri 1 Pabelan Semarang regency during follow competency test prior to the action carried out, which had reached the completeness of only 17 students (60.71%), moderate students who have not reached the limit of completeness as many as 11 students (39.29%).



Research Result

Cycle I Result Description

The result of the first competency test in cycle I Term 1 Academic Year 2011/2012 obtained as follows:

No	Result	Number of Students	Percentage	KKM Result of Civics SMA Negeri 1 Pabelan, Semarang District
1	Less than 70	6	21,43%	70
2	70 - 100	22	78,57%	
		28	100%	

Table 2. The First Competency Test Result in the First Cycle

From the table above, it is known that students in grade XI IPA Term 1 Academic Year 2011/2012, SMA Negeri 1 Pabelan Semarang Regency, who had reached the limit of completeness (KKM Civics subjects = 70) were 22 students (78.57%), while students who have not reached the limit of completeness were 6 students (21.43%).

Based on the competency test results data from the cycle I above, 22 students (78.57%) had been completed, while 6 students (21.43%) were not completed. When it was compared to the previous result, before applying the student based bintang reportase method, only 17 students (60.71%) were already completed, while 11 students (39.29%) were not. It meant that there was a rise in the number of students who experienced the completeness that 5 students (17.86%) completed.

Based on the competency test results data in a cycle I (reflections) above, students who obtained 70 were 78.57%. The complete target of classical learning with 70 point was 85%, it meant that it did not reach the target and there were still some weaknesses in the cycle I, such as: there were some students who did not use time efficiently since they liked arguing during discussion. Moreover the discussion did not focus on the context, student's basic understanding and the way presenting the material needed to be improved. There were still some weaknesses in the reporting, such as the disorder report, inconsistent report, unfocused report, and unconfident students in presenting. Based on those facts, it was necessary to proceed to the second cycle activity.

Cycle II Result Description

The result of the second competency test in cycle II Term 1 Academic Year 2011/2012 obtained as follows:

Table 3. The Second Competency Test Result in the Second Cycle

No	Result	Number of Students	Percentage	KKM Result Civics SMA Negeri 1 Pabelan, Semarang District
1	Less than 70	2	7,14%	70
2	70 - 100	26	92,86%	
		28	100%	

From the table above, it was shown that students of grade XI IPA Term 1 Academic Year 2011/2012, SMA Negeri 1 Pabelan Semarang Regency, who had reached the limit of completeness (KKM Civics subjects = 70) were 26 students (92.86%), while students who have not reached the limit of completeness were 2 students (7.14%).



Based on the competency test results data in a cycle II above, 26 students (92.86%) had been completed, while 2 students (7.14%) were not. When it was compared to the cycle I, 22 students (78.57%) were already completed, while 6 students (21.43%) were not. It meant that there was a rise in the number of students who experienced the completeness that 4 students (14.29%) completed.

RESEARCH DISCUSSION

After conducting the research as much as 2 (two) cycles in approximately 2 months, it could be obtained the students' learning result from the initial condition / pre-cycle (before the treatment implemented) until the end of the second cycle conditions.

From the analysis of the competency test conducted by other Civics teachers, we got important data which was presented in this following table and diagram:

Table 4. *The Competency Test Completeness Percentage in Cycle I and II*

No	Grade	Percentage	Completeness	Learning	Average Cycle I and II
		Initial Condition (before treatment)	Cycle I	Cycle II	
1	XI IPA	60,71%	78,57%	92,86%	85,72%

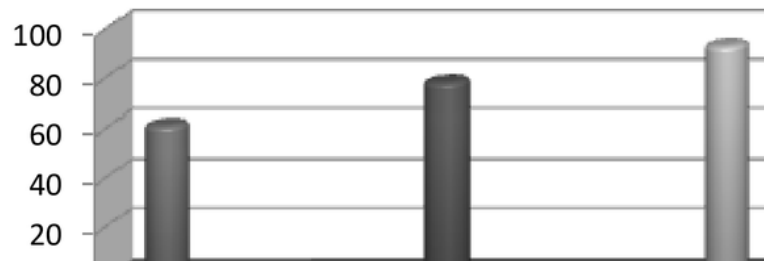


Figure 5. The Result of Initial Condition, Cycle I, Cycle II, and the Average Cycle of the Competency Test Diagram

Based on the calculations of the data above, it can be obtained that the learning result for Civics of students of Grade XI science SMA Negeri 1 Pabelan Semarang District, Central Java, in Term 1 Academic Year 2011/2012, gradually increased. This was proven that the initial condition / pre-cycle at learning process still applied conventional learning liked lectures, questions and answers and discussion. Competency test values obtained with the percentage of students who reached the completeness was only 60.71%, but after using student based bintang reportase method, it increased, and that was 78.557% students who had reached the completeness in cycle I and it became 92.86% in the second cycle. These data showed that there was an improvement in Civics learning outcomes, about 32.15% from 60.71% of the initial conditions to 92.86% at the end of the second cycle.



CONCLUSION

From the research which was conducted on the students of the Grade XI Science Term 1 Academic Year 2011/2012 SMA Negeri 1 Pabelan Semarang District, it can be concluded that: it was proven; civic learning outcomes increased through the use of student based bintang reportase method. It could be seen from the results of the competency test before applying the student based bintang reportase method on learning Civics, student who had learning completeness was about 60.71% (17 students completed), while after using the student based bintang reportase method, it increased. Based on the result of the competency test on cycle I, student who had learning completeness reached 78.57% (22 students completed) and the competency test result on the second cycle showed that student who had learning completeness reached 92.86% (26 students completed).

Based on these data, the hypothesis that had been formulated were proven, the observation results showed that student learning outcomes increased not only in cognitive but also affective and psychomotor aspects, and could enhance the learning process since the students' attention could be focused on learning. The application of student based bintang reportase method in learning Civics was very suitable to deliver abstract materials to be more concrete, enable teachers to deliver the material verbally or with a conventional learning method which was very difficult to be understood by students, so it could create the learning atmosphere became active, effective, creative, interesting, educational, intellectual and fun. So that the student learning interest and motivation increased and facilitated students in learning and mastering the materials that was abstract to be more concrete.

Results of the study "Skill Improvement of Learning Material Understanding by Student Based Bintang Reportase Method" had implicated in the brain systems understanding and work organization both teachers and learners, as follows:

Table 5 *The Difference between Learning Process in Brain Work System and Former & Initiate Work Structure Understanding*

No	Aspect	Brain Work System & Former Work Structure Understanding	Brain Work System & Initiate Work Structure Understanding
1	Material Presenting	Constructed in theme and sub theme	Constructed in problem, theme, and integration
2	Outcome	Strong cognitive aspect, weak affective aspect	Cognitive and affective aspects, especially cooperative aspect and social competency
3	Teacher	Individual	Team teaching
4	Student	Passive	Active and creative
5	Procedure	Rigid	Fleksibel
6	Target	Concept understanding	Concept understanding. Relationship and connection.
7	Learning model principle	Individual learning	Cooperative learning
8	Evaluation Target	Individual	Individual and group
9	Learning pattern	Seminar and discussion	Seminar, discussion and presentation



Suggestion

There are some suggestions based on the above description and the results of the research. Teachers need to prepare for Learning Implementation Plan (RPP), so that the implementation of learning can be accomplished effectively and efficiently. Since Civics material or concepts are abstract and verbal, teachers have to apply varied and innovative methods, one of the methods is students based bintang reportase method.

In order that teachers' ability to plan, create and apply the student based bintang reportase method can be better, it needs more varied and innovative learning methods' training and simulation, since it helps teachers in learning activity, especially for the abstract and verbal material. So that the student based bintang reportase method can be used as an alternative method of learning in all subjects.

For appreciating the students' hard work till constructing a presentation, the teacher needs to give rewards to students /groups. The reward has to be in accordance with the scope of education; here the author gives a "star" and a book or stationery that supports students' learning activities.

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The Effectiveness of Written Expression Method and Visual Expression Method in Creative and Productive Model on Students' Academic Achievement of Short Story Appreciation and Creative Writing in the Interaction with Students' Interest in Literary Works

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Abstract

This research aims to show the effectiveness of Written Expression Method and Visual Expression Method in Creative Productive Model on students' academic achievement of short story appreciation and creative writing in Indonesian class. This research is also intended to investigate that whether or not students' interest in literary works interact with those academic achievements especially in Junior High School students.

This research was a quasi-experimental study on two different intact groups of the seventh graders in Junior High Schools. The statistical analysis used were T-test to see the different effect of Written Expression and Visual Expression Method on academic achievement, and MANCOVA to prove whether or not students' interest in literary works interact with the academic achievements on both groups.

The findings by T-test showed that Written Expression Method proved to be more effective on both groups of students who have high and low interest in literary works compared to the Visual Expression Method. The test of MANCOVA showed that the methods were significantly influence the improvement of academic achievement. However, it was also proved that students' interest in literary works as the covariate didn't interact with the academic achievement of short story appreciation and creative writing.

Keywords: written expression method, visual expression method, creative-productive model, short story appreciation, creative writing, students' interest in literary works

INTRODUCTION

Literature is authentic material (Collie and Slater, 2009). Various phenomena of human issues in our daily life could be seen through literature works. They don't merely aim to have any specific purpose to teach language, but also to allow the reader to feel what the writer does feel towards life reflected from genuine and real language. Students are able to gain their language proficiency and become familiar with diverse language uses and forms as well as be able to discover people's thoughts and feelings. Learning about literature is learning how to appreciate human and their values (Depdiknas, 2004). Using proper literary texts which are rich with positive values and customs enable students to recognize, internalize, and implement those values in their life.

One effective approach to get to know literary works in the classroom is by doing literary appreciation. Aminuddin states that literary appreciation is beneficial to provide the students with information related to values, customs, insights and knowledge of daily life as one way to experience and have meaningful living values of humanity (2004). Thus, literary appreciation in the classroom can play the role as moral or character builder to the students. It is valuable because unlike preaching, it goes smoothly, creates no pressure or fear and does



not force the students to do certain acts directly. By doing appreciation, the students are exposed to various points of views, the goods and the bads and are asked to evaluate and analyze the consequences. It is enduring rather than ephemeral because the students truly and intensively get involved with the issues in the literary works. Specifically, this research is focused more on short story appreciation. Short story is chosen because it is simple yet full of messages and moral. It is not time-consuming when the student read it and it can be done in the classroom during the teaching and learning process. Story is one of the perfect cognition tools for students for it forms real world condition which is the greatest value of teaching and learning process (Egan, 2009). In addition, it can form our emotional understanding towards what happen in the story and relate it with our daily life.

Unfortunately, in the reality, short story appreciation in classroom tends to be boring and unpleasant. The result is the students are only memorizing various poets or writers and their noted masterpiece without even giving assessment, evaluation, opinion or other responses towards the short story. In relation to the short story appreciation, students are often asked to analyze the elements of short story without even doing interpretation and evaluation as the nature of appreciation itself. Literary appreciation in classroom becomes “dry” (Kavalera, 2009). It lacks of the enjoyable moment for the students. Thus, students become reluctant to share their ideas or opinion as the result of appreciation because they’ve never given the opportunity to do so. Effective methods and model of teaching are very required in short story appreciation in the classroom.

Effendi (1974) said that literary appreciation in the classroom can be completed with creative activity as the result of the appreciation. One of creative activities which is applicable in the classroom is creative writing. Through writing, students could express their ideas related to the literary works they are up to. In other words, after they are doing short story appreciation, they can continue on by creating written expression based on the story. Teacher can easily observe and assess students’ work if there is concrete product of appreciation. Moreover, teaching and learning process won’t be boring because they are actively engaged in the process by creating certain products. In order to meet those requirements to go in line with the nature of literary works appreciation and creative writing, the innovative methods and model of teaching are needed. Written expression method and visual expression method in creative and productive model are considered the proper method and model to cope with the issues of literary appreciation. After the students are doing the short story appreciation, they are asked to write poem (Written expression method) and write poster (visual expression method) related to the short story being read.

Related to students’ interest in literary works, this research focuses on students’ academic achievement based on whether they have high or low interest towards literary works. It is expected that students’ interest interacts with the methods and model of teaching so that the academic achievement of short story appreciation and creative writing will be improved. Possessing high interest in literary works resulted in the better verbal literacy such as reading and writing, it is expected that the students feel encouraged in doing appreciation and creative writing and improve their academic achievement.

Short Story Appreciation and Creative Writing

The nature of appreciation is giving value (Aminuddin, 2004). Squire dan Taba explained that literary appreciation involves three main traits (Aminuddin, 2004), such as:



- 1) Cognitive aspects which relates to the intellectual ability of the reader in order to comprehend the intrinsic and extrinsic elements of a literary work.
- 2) Emotive aspects which relates to reader's emotion and feeling towards the content of a literary work
- 3) Evaluative aspects which relates to assessment and evaluation towards a literary work

Other opinion is stated by Hornby that appreciation means proper understanding, recognition, judgment and evaluation (Via Atmazaki, 1993). Atmazaki concluded Hornby's definition into the complex definition which states that appreciation is the act of responding towards certain thing, in this case literary works (1993).

Based on the definition above, short story appreciation is the activity to respond by giving values of a short story which involves the recognition of elements of short story, interpretation and evaluation. Appreciation can be completed with creative activity to make it more meaningful (Effendi, 1974). One of the real activities which can be done in the classroom is creative writing.

Writing is one of four language proficiencies which can be used to communicate indirectly by using written expression. It is a productive and expressive activity (Tarigan, 1994). It is the way to express what we see, feel and think through written code. Creative writing is the process how a specific idea is generated by a writer into a written form as a result of his/her thought and feeling (Komaidi, 2011). Creative writing in this research enables students to express their thought and feeling of the short story they read. Students are asked to write poem and poster as their creative writing project.

Creative-Productive Model of Teaching

Creative and Productive Model is actually a modified model which is adapted from a strategy in teaching literature called Stratta (Wardani via Rohmadi and Sugiyantoro, 2011). This strategy was founded by Leslie Stratta. There are three steps the students will encounter in this model (2011):

- 1) Exploration
Students are asked to explore and comprehend a literary work. It can be done by reading poem, novel or short story, listening to a story, watching plays, etc.
- 2) Interpretation
This second step requires students to do interpretation of a literary work. It can be done through discussion, group presentation, or written analysis submission.
- 3) Re-creation
This step requires students to re-create the literary works they have been exposed to. It can be done by expressing their thought and feeling through writing poem, drama script, or prose adapted from the previous literary works.

In its application on this research, teacher asked the students to read certain short story, analyze and interpret it and then re-create it. The re-creation process will be done differently between two groups. Written expression method in re-creation process will be conducted by the first group and the visual expression method will be done by the second group.

This model is very meaningful and valuable for the students because it is a model that requires students to be very creative and productive in the classroom. It goes in sync with short story appreciation and creative writing class because imagination and creative attitude to



produce something is absolutely needed. Students should be actively engaged in every activity in the class so that they can do the assigned project well. The atmospheres of the class if the teacher conducts this model is active, energetic, hard-working, democratic, appreciative, fair, and many more. Below are the instructional effects and nurture effects of this model as shown on the following Figure 1.

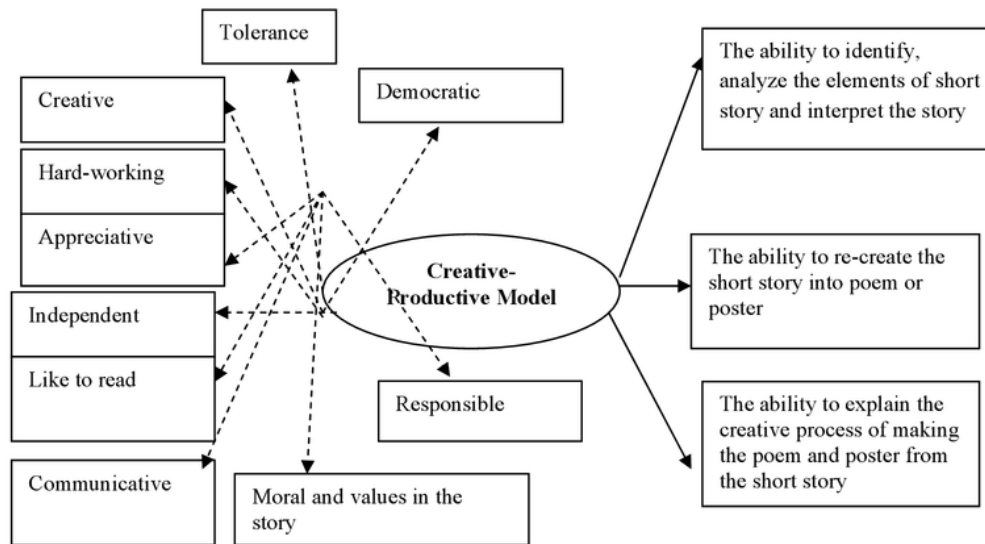


Figure 1. The Instructional and Nurture Effects of Creative-Productive Model

Note :
 Instructional effects —————→
 Nurture effects - - - - -→

Written Expression Method and Visual Expression Method

Written expression method and visual expression method are founded by Tarigan (1994). Both methods require students to be expressive through the making of written or visual media in the classroom. Students are also encouraged to share ideas, opinions or suggestions. There are several steps in these methods. Written expression method in short story appreciation and creative writing class assigns the students to:

- (1) identify and interpret short story,
- (2) do peer discussion or class discussion to find and share ideas,
- (3) relate those ideas with daily life's values as the inspiration to make poem,
- (4) write poem (draft),
- (5) do finishing touch to complete the poem.

However, visual expression method in short story appreciation and creative writing class assigns the students to do different thing, namely:

- (1) identify and interpret short story,
- (2) do peer discussion or class discussion to find and share ideas
- (3) relate those ideas with daily life's values as the inspiration to make poster,
- (4) write the concept of poster,



(5) do finishing touch to complete the poster.

The advantages of these innovative methods are that the teaching and learning process is truly student-centered. Students become very active in the classroom and get engaged with every step of the models. Student's expression and imagination to create the product, in this case are poem and poster, are highly valued and appreciated. They also become very communicative through lots of discussion and sharing between peers. Authentic ideas and creativity are the most significant values generated from both methods.

Students' Interest in Literary Works

Crow states that interest may relate to the force that encourage us to tend to feel or to feel interested and attracted to person, things, or activities (via Abror 1993). In relation to literary works, the interest influences us to like certain literary works or literary activities involving certain literary work. Hurlock mentions three aspects which develop interest, namely :

1. Cognitive aspect : this aspect is based on the concept developed by a person related to his/her experience in daily life.
2. Affective aspect : this aspect is reflected through the attitude of a person towards the object of interest.
3. Psikomotor aspect : in this aspect, a person will get involved in certain activity related to the object of interest.

Students' interests of literary works interact with verbal intelligence. Verbal intelligence is the ability to think with words and use language to express meaning (Campbell dan Dickinson, 2006). There are some characteristics of student who dominantly posses verbal intelligence such as showing interest in journalism, poem, prose, drama, storytelling, debate, editing, and many more. Thus, student with high interest in literary works may have high academic achievement in short story appreciation and creative writing class.

METHODOLOGY

This is a quasi-experiment research which uses the posttests only with experimental and control group design. This research compared the impact of the independent variables which are written expression method and visual expression method in Creative-Productive model on students' academic achievement of short story appreciation and creative writing as the dependent variables. Moreover, students' interests of literary works will play the role as the intervening variable. Students' interests will be divided as high interest and low interest which is expected to have interaction with the treatment.

The sample of this research is two different groups consisted of 32 students in the first group and 31 students in the second group. Those 63 students are the seventh grader from SMP Masehi 1 and 2 PSAK Semarang. Based on the multistage cluster-sampling technique, the sample is generated from 3 (three) junior high schools in Masehi foundation in Semarang, Central Java, Indonesia. For the sake of the experiment, it is required that the performance of both groups is equal or identical. Prior to the treatment, the academic scores of short story appreciation and creative writing as well as the level of interest in literary works were measured. This prior measurement was analyzed using T-test.

There are two types of statistical procedures conducted in this research. They are T-test and MANCOVA. T-test was conducted to measure the effectiveness of each method. It was



compared based on the mean difference of the short story appreciation and creative writing's academic scores between the first group and second group. MANCOVA of the Multivariate Analysis of Covariance was used to see whether or not students' interest in literary works as the intervening variable or the covariate also interact with the result of the short story appreciation and creative writing's academic scores between both groups.

RESULTS AND DISCUSSION

Before the treatments were given to the both groups and the results of the treatments were measured, it is necessary to show the baseline of mean scores between each group's results. It is to make sure that the students of both groups have the equal ability as the starting point before the experiment was conducted. The results from the Levene test were as shown on the following table.

From the table, it can be inferred that the Levene test result of creative writing is 1,111 with the value of $p = 0.582$ and significance of 5 % (0,05). Because $0,582 > 0,05$, the variance of the sample is homogen between experiment and control group.

Table 1. *Levene Test of Short Story Appreciation Scores between Experiment and Control Groups before Treatment*

		Levene Statistic	df1	df2	Sig.
NILAI	Based on Mean	,307	1	61	,582
APRESIASI	Based on Median	,351	1	61	,556
	Based on Median and with adjusted df	,351	1	59,151	,556
	Based on trimmed mean	,339	1	61	,563

Table 2. *Levene Test of Short Story Creative Writing Scores between Experiment and Control Groups before Treatment*

		Levene Statistic	df1	df2	Sig.
NIL	Based on Mean	1,111	1	61	,296
AIM	Based on Median	,893	1	61	,348
K	Based on Median and with adjusted df	,893	1	49,748	,349
	Based on trimmed mean	,615	1	61	,436

From the table, it can be inferred that the Levene test result of creative writing is 1,111 with the value of $p = 0.296$ and significance of 5 % (0,05). Because $0,296 > 0,05$, the variance of the sample is homogen between both experiment and control group.



Table 3. *T-test Analysis between The Scores of Experiment and Control Group after Treatment Based on Students' Interest in Literary Works*

	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
AprEtinggi	66.434	15	.000	78.1875	75.679	80.696
AprETrendah	57.884	15	.000	77.7500	74.887	80.613
mkEtinggi	85.588	15	.000	80.2750	78.276	82.274
mkETrendah	93.113	15	.000	79.9000	78.071	81.729
AprEVtinggi	64.758	16	.000	75.3706	72.903	77.838
AprEVrendah	94.143	13	.000	73.6643	71.974	75.355
mkEVtinggi	84.918	16	.000	75.8412	73.948	77.734
mkEVrendah	106.434	13	.000	76.2857	74.737	77.834

Note :

AprEtinggi: the score of appreciation, using written expression method in the students with high interest

AprETrendah: the score of appreciation, using written expression method in the students with low interest

mkEtinggi: the score of creative writing, using written expression method in the students with high interest

mkETrendah: the score of creative writing, using written expression method in the students with low interest

AprEVtinggi: the score of appreciation, using visual expression method in the students with high interest

AprEVrendah: the score of appreciation, using visual expression method in the students with low interest

mkEVtinggi: the score of creative writing, using visual expression method in the students with high interest

mkEVrendah: the score of creative writing, using visual expression method in the students with low interest

Written Expression Method and Visual Expression Method for Students with High Interest in Literary Works

From the table it can be inferred that the result of $t = 66,43$ for the score of appreciation and $t = 85,58$ for the score of creative writing is reported higher than t table which is $2,13$ ($66,43 > 2,13$; $85,58 > 2,13$) with the significance of p which is $0,000 < 0,05$ for the score of appreciation and $0,000 < 0,05$ for the score of creative writing. From the table also can be inferred that the written expression method is more effective than the visual expression method based on the mean difference. It is proved by the fact that the mean score of the short story appreciation and creative writing using written expression method is higher than the mean score of the short story appreciation and creative writing using visual expression method for the students who have high interest in literary works ($78,18 > 75,37$ and $80,27 > 75,84$). In the other word, Written expression method gave better impact on the improvement



of academic scores of short story appreciation and creative writing for the students who have high interest of literary works.

Written Expression Method and Visual Expression Method for Students with Low Interest in Literary Works

From the table it can be inferred that the result of $t = 57,88$ for the score of appreciation and $t = 93,11$ for the score of creative writing is reported higher than t table which is $2,13$ ($57,88 > 2,13$; $93,11 > 2,13$) with the significance of p which is $0,000 < 0,05$ for the score of appreciation and $0,000 < 0,05$ for the score of creative writing. From the table also can be inferred that the written expression method is more effective than the visual expression method based on the mean difference. It is proved by the fact that the mean score of the short story appreciation and creative writing using written expression method is higher than the mean score of the short story appreciation and creative writing using visual expression method for the students who have low interest in literary works ($77,75 > 73,66$ and $79,90 > 76,28$). To conclude, Written expression method gave better impact on the improvement of academic scores of short story appreciation and creative writing for the students who have low interest in literary works.

Table 5. *The Impact of Written Expression and Visual Expression Method Controlled by Students' Interest in literary works*

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	menulisKreatif	265.262 ^a	2	132.631	11.550	.000
	apresiasi	336.628 ^b	2	168.314	8.712	.000
Intercept	menulisKreatif	9294.256	1	9294.256	809.403	.000
	apresiasi	9506.648	1	9506.648	492.076	.000
Minat	menulisKreatif	8.746	1	8.746	.762	.386
	apresiasi	31.243	1	31.243	1.617	.208
Metode	menulisKreatif	260.913	1	260.913	22.722	.000
	apresiasi	315.147	1	315.147	16.312	.000
Error	menulisKreatif	688.971	60	11.483		
	apresiasi	1159.168	60	19.319		
Total	menulisKreatif	385151.568	63			
	apresiasi	373442.122	63			
Corrected Total	menulisKreatif	954.234	62			
	apresiasi	1495.796	62			

a. R Squared = .278 (Adjusted R Squared = .254)

b. R Squared = .225 (Adjusted R Squared = .199)

From the table above, it is shown that there was a significant difference of the score of short story appreciation and creative writing after the treatment was conducted. This is proved by



the fact that the result of analysis of $F = 16,31$ for the score of short story appreciation and $F = 22,72$ for the score of creative writing are reported higher than F_t which is 4,00 ($16,31 > 4,00$; $22,72 > 4,00$) with the significance of p which is $0,000 < 0,05$ for the score of appreciation and $0,000 < 0,05$ for the score of creative writing. To conclude, the methods conducted in the experiment, written and visual expression method, affected the improvement of students' score. The above table also informs us that $F = 1,61$ for the score of short story appreciation and $F = 0,76$ for the score of creative writing is reported lower than F_t which is 4,00 ($1,61 < 4,00$; $0,76 < 4,00$) with the significance of p which is $0,208 > 0,05$ for the score of appreciation and $0,386 > 0,05$ for the score of creative writing. In other word, students' interest in literary works doesn't significantly influence students' score of the short story appreciation and creative writing even though the evidence shows that there are differences of the mean scores between students with high interest and low interest (look table 2).

The basic reason why the scores of short story appreciation and creative writing improved through written expression method and visual expression method is originated from the theory that the students who get used to finish a range of tasks and activities related to literary text, often as a shared activity in groups, may come to be more personally familiar with the text and also may sharpen their own response (Collie and Slater, 2009). By the means of written expression method and visual expression method which were conducted 3 times in each group, the students became very familiar with literary text and also became more confident to express their responses. It was indeed resulted in the gain of scores. This finding goes in line with the finding of the research conducted by Murbaningsih (2009). It was stated in the research that the improvement of students' scores is due to the effectiveness of the fun, innovative and meaningful methods which enable the students to be actively engaged in the classroom.

Regarding to students' interest, the belief stated that drawing unearths our response in the literature by giving us a way to start making our thinking concrete; so that the students won't feel too intimidated to begin (Mitchell, 2003). This meant that the students with low interest will probably tend to gain more scores in visual expression method rather than written expression method by doing drawing which is less intimidated than making poem they are not fond of. It was necessary to note that, there was no discrimination between good painter or bad painter, because the posters were not graded based on the quality of the image but more on how the picture could convey meaning from the short story. The result turned differently from what was expected from the previous belief stated. Both groups consisting of students with high and low interest gained more scores in short story appreciation and creative writing by the means of written expression method. The implication of this condition was that school didn't have to orient its curriculum towards students' present interests (Mouly, 1973). It is the job of the teacher and school to develop new interests which are needed by the students regarding to their future.

Creative-Productive model through written expression method were significantly raised students scores or achievements in both high and low interest because there is belief that everyone has at least some creative potential even though it differ widely in the extent to which they are able to realize that potential. (Wright,2009). Thus, although some students had low interest in literary works they were still able to produce proper response towards literary appreciation through creative writing.



CONCLUSION

According to the result of the statistical analysis, this research concluded two main points. The first one was that Written Expression Method was more effective compared to the Visual Expression Method to improve academic achievement of short story appreciation and creative writing on both group of students who have high and low interest in literary works. This result proved that the method was founded based on the belief that the more the students get engaged with literary works, the more they are becoming confident and familiar with it. The method also may sharpen students' own responses towards short story. Everybody has their own creative side. Despite having low interest in literary works, some students still performed well in short story appreciation and creative writing. Second finding found out that students' interest in literary works was proved to have no interaction with students' academic achievement of short story appreciation and creative writing. It can be inferred that students with high interest in literary works don't always perform well in short story appreciation and creative writing.

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Reflective Thinking Pre-Service Teachers in Learning

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ABSTRACT: Thinking as a process of generating new mental representation through the transformation of information involving a complex interaction between mental attributes. Reflective thinking helps integrate thinking skills. Think this happened to any particular individual as a prospective student teachers in instructional practices. From the results of the study found that: (1). Reflective thinking is needed by teachers to deal with the complexity of students and learning, (2) Reflection is a certain way that is planned, can be practiced, evaluated, and refined, (3) there is an increase in learning, especially how to think, teaching, and learning, (4) need coaching to improve the competence of prospective teachers (students) in developing reflective and critical thinking skills, and (5) there are three tasks of teachers or prospective teachers in managing student learning in the classroom in order to be able to think reflectively, namely: (a) adjust the content of mathematics given the level of development of students' mathematical scheme, (b) adjusting the process of presenting the material with a reflective thinking process of students, (c) gradually, need to increase self-reliance in learning.

Keywords: reflective thinking, pre-service teachers, and learning.

INTRODUCTION

Learning involves thinking in every human being to achieve a wide range of competencies, skills and attitudes. Through thinking, humans learned to improve the quality of life in society. Think will always be committed by any person or individual, thus thinking is internal, arise within the individual and continuous.

Solso (1995) suggests thinking can be defined as the process of generating new mental representations through traformasi iteraksi information involving a complex between mental attributes such as assessment, abstraction, and problem solving. For example, when reading the book, the information received through the various stages starting from the sensory to the memory. This information is transformed so as to produce what is referred to as the memory of new information, and this new knowledge as well as for the person.

Mayer (Solso: 1995) explains that: First, thinking is a cognitive activity that occurs in a person's mental or mind, does not appear, but it can be concluded based on the behavior looks. For example, chess players demonstrate the process of thinking through the steps or movements on the chessboard. Second, thinking is a process that involves multiple manipulations on the cognitive knowledge. Knowledge has ever had (stored role in memory) coupled with the information now so that changing one's knowledge of the situation being faced. Third, think with activities geared to produce solutions to problems. As a player of chess, every move he does is directed to win a game. Although not all of the steps taken by successful, generally in the thoughts of all measures aimed at solving the problem sutu.

Vilhelm von Humboldt as the first use of reflective learning (the reflective learning) (Gurol, 2011:388). The critical role of reflective thought is as a means to encourage thinking for problem solving situation, because it provides an opportunity to learn and think about the best



strategies for achieving the goal of learning (Rudd, 2007). Reflective thinking helps integrate thinking skills (Shermis, 1999).

The results Chee and San (2011) indicate that prospective teachers as a whole is not critical. Prospective teachers (students) do not indicate that they are actively practicing the four learning processes, namely: the assumption of the analysis, contextual awareness, imaginative speculation and skepticism practices indicate reflective (Chee, 2011).

Sezer (2008) states that reflective thinking is the awareness of what is known and what is needed, it is very important to bridge the learning situation. Gurol (2011) defined reflective thinking as a process of purposeful activity and appropriate to be followed in which individuals recognize, analyze, evaluate, motivate, have deep meaning, use appropriate learning strategies. Thus the reflective thinking of teachers aim to achieve learning targets and generate new learning approaches that have a direct impact on the learning process. Further explained that the process of reflective thinking can be used in the process of learning and teaching (learning) by the prospective teachers and students.

The results Gurol (2011) showed that reflective thinking is required in the thinking of prospective teachers in the learning process. In addition gurol also said that prospective teachers (students) often act in accordance with reflective thought.

Van Manen (in Maureen, 2003) suggest a hierarchical model of three modes or different levels of reflective thinking, namely: technical, contextual, and dialectical. Technical level of reflection regarding the effectiveness of the application of skills and technical knowledge in the classroom. Contextual level involves reflection on assumptions, which assumptions underlying these practices in the classroom. Dialectical level needed to ask questions about the moral, ethical, or socio-political.

Lee (2005) states teachers 'reflective thinking to develop teachers' reasoning. Why teachers use specific learning strategies and how teachers can improve their learning can affect a positive effect on students. Therefore, it is recommended that prospective teachers need to engage in reflective thinking and not just learn new ideas but also to enhance the professional.

Based on the importance of reflective thinking presented above it is clear that this thought occurred to any particular individual as a prospective student teachers. Each student is required if the student's reflective thinking to achieve a good learning process.

DISCUSSION

Reflective Thinking

There is some notion of reflective thinking (reflective thinking). Skemp (1982) states that reflective thinking can be described as follows:

- a. The information or data that is used to respond from within (internal)
- b. Can explain what has been done
- c. Recognizing the mistakes and correct them in the future
- d. Communicate ideas with drawings or symbols rather than with a direct object.

Zehavi and Mann (2006) suggested that reflective thinking (reflective thinking) for meta-cognitive level refers to four categories: selection techniques (techniques), monitoring



(monitoring) the solution process, insight (insight) or ingenuity, and conceptualization (conceptualization). Further described by Zehavi and Mann that the connection of mathematics and the traditional solution-based CAS, the CAS-based problem solving using students' reflective thinking, the choice of techniques (techniques), monitoring (monitoring) the solution process, insight (insight) or ingenuity, and conceptualization (conceptualization) while the traditional solution to stage monitoring (monitoring) is not the case.

Here is a diagram illustrating the process of reflective thinking.

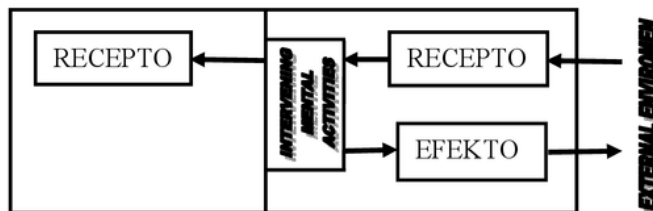


Diagram 1. Reflective thinking

Raising Efforts Reflective Thinking Process

Reflective thinking is important to further develop the mathematical knowledge. It is interesting to know at what age is a reflective thought process began to emerge within the child and how the thinking process can be raised even if it could be how the accelerated emergence of reflective thinking in children. To answer these questions, can be seen in a study by Inhelder and Piaget in Skemp (1982). From the research they do, obtained an indication that a child develops a process of reflective thinking in the age range 7-11 years, and in the age range that a child is able to manipulate a variety of concrete ideas, such as reversing an action (in imagination), and giving something back to the previous stage. Inhelder and Piaget also found that study subjects they have not been able to give reasons why they are doing something formally, consider a form of argument out of it until they hit adolescence. In their study also found the fact that the child could not reason from a hypothesis if the hypothesis is contrary to what they experienced.

From the results of experiments conducted Inhelder and Piaget indicates no progress in the process of reflective thinking of the children who become subjects in this study, the subjects were drawn from students in the schools of Switzerland. This development can occur through interactions between the innate ability of each subject of study in cultural and educational experiences they endured. What has not been known until now is how much influence the learning process experienced by the subject to develop reflective thinking process. There are other experiences as a material consideration to answer these questions, many children in school at first learned to sing spontaneously, simply because they are grown in a culture where they listen to others sing, but this learning process can be accelerated and ultimately the ability of these children singing can be raised and they can become members of the choir of the famous choir. It could be said to date is the development of reflective thinking process and ability to make a formal excuse is not a subject of teaching and learning process that is done deliberately. Because on the one hand, these capabilities are important to be realized in teaching and learning, but on the other hand is not known how to teach it.

Way of teaching that gave rise to the process of discussing and arguing is a useful way that can be used in teaching and learning. Why is that? Because when someone is willing to make



a reasonable hypothesis about something from a variety of situations, it requires the ability to formulate ideas in mind explicitly and prove it by showing the reduction of these ideas from the ideas that have been accepted. If the above situation can be trained in teaching and learning, then students will have the opportunity to train and develop reflective thinking process.

Communication seems to also be a thing that can improve the development process of reflective thinking. One other factor is the ability to link between the ideas held by the symbols.

Student Tasks in Managing Teacher Learning to Student Ability for Reflective Thinking

Some expansion has led to the implication in which an individual is at the stage of intuitive, able to reflect both the content and form together. Able to make a formal reasons, in general. If he is given a topic on the level of reflective thinking, then he is given the topic of B at the same level, which is reflective. With this capability, one can expect (although with great effort) to reflect the concepts that have not been established so that eventually he can build a better reflective system. Thus, it can be said that giving the matter at the stage of intuitive thought before going on stage is a sequence of reflective thinking is good to learn a new branch of mathematics which, although further research to examine the statement is still needed.

Another contribution that is expected of a teacher is the teacher can gradually reduce the dependence of students to teachers. Skemp gives the following example: when her son for the first time a puzzle, or his own mother helped her son to get the puzzle pieces which must be installed to complete the entire piece is installed, but there is a stage of development experienced by their children, when children do not like if he or she is assisted by Skemp. The same thing needs to be done by a math teacher when he taught. Furthermore, one would be able to analyze a new material for himself, he can customize the new knowledge with its scheme in a way that is most meaningful to him, although how it is different from the way the material presented by the teacher.

From the above it can be concluded that there are three tasks of teachers or prospective teachers in managing student learning in the classroom in order to be able to think reflectively, namely:

- a. Adjust the math materials provided with the development of students' mathematical scheme.
- b. Adjust the presentation of the material with the thought processes of students (the process of reflective thinking).
- c. Gradually, increase the students' analytical skills to a higher stage, so that if students are already at a certain stage, then the level of student dependence on teachers can be more reduced.

CONCLUSION

From the results of the study can be concluded:

1. Reflective thinking is needed by teachers to deal with the complexity of students and teaching.
2. Reflection is a certain way that is planned, can be practiced, evaluated, and refined.
3. There is an increase in learning, especially how to think, teach, and learn.



4. Need guidance to improve the competence of prospective teachers (students) in developing reflective and critical thinking skills.
5. There are three tasks of teachers or prospective teachers in managing student learning in the classroom in order to be able to think reflectively, namely:
 - a. adjust the mathematical materials provided with the development of students' mathematical scheme,
 - b. customize the presentation of the material with a reflective thinking process of students,
 - c. gradually, the need to increase self-reliance in learning.

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Applying Cooperative Learning Numbered Head Together (NHT) Type in Trigonometri Topic on XB Grade Student of Telekomunikasi Tunas Harapan Vocational High School

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Abstract

The purposive of this research is to know increasing student's achievement on student grade X class B Telekomunikasi Tunas Harapan Vocational High School in trigonometry topic applying of cooperative learning NHT type. The subjects of this study are 29 students consist of 15 female students and 14 male students.

The problem applies when teacher doing teaching learning process in the class, where the teacher is still use the conventional methods in teaching. It is caused the student's achievement is low, it shown by 58,62% students only got the minimum criteria, it is 75 in mathematics.

Applying of cooperative learning model NHT type shown that increasing student's achievement happens. The first evaluation test cycle show that 68,62% got the minimum criteria, while the second is 82,76%. It increases than before. The conclusion of this study is cooperative learning NHT type can increase student's achievement on student grade XB Telekomunikasi Tunas Harapan Vocational High School.

Key Words: student's achievement, cooperative learning NHT type.

INTRODUCTION

Background

Mathematics consists of ideas or abstract concepts are composed of several levels and deductive reasoning (Abdurrahman, 1999: 255). Teacher as the facilitator has a role to provide a true understanding of concepts in students. Trigonometry is mathematics subject is often difficult for students. This is because teachers do not connect trigonometry with material that had been learned by student, as if into a concept that is completely new, coupled with formulas to be memorized by the students, without the student knew where the formula came from. These events occurred in grade XB Telekomunikasi Tunas Harapan Vocational High School, where conventional learning is still used by teachers, in addition minimum the compactness of students in class. Relationships one students with the other students in the grade XB not close and support each other in the learning process. This resulted the group of students that have less ability, willingness to learn the other cleverer friends to be exist yet. Few of the teacher's is addressing to this issue, because the teachers ability to provide individual tutoring is very limited. It is seen from student's achievement that 12 students or 41.37% of the 29 students have uncompleted KKM, with the KKM 75.

Mathematics learning conditions such as this need to be improved to enhance student achievement. This improvement effort is the determination of the learning model that uses the paradigm of learning and student-oriented. One type of learning model is a type of Cooperative Learning Numbered Heads Together (NHT), the NHT is one method of learning that aims to improve student achievement by conditioning the students in group discussions with heterogeneous students. Characteristic of this model is that the teacher refers the student



to represent the group, without first telling who will represent the group. This method is an excellent way to increase individual responsibility within the group and each student must always be ready to be appointed so that student participation can be realized. Based on the above it can be pulled a goal of this research is to improving student achievement in grade XB Telekomunikasi Tunas Harapan Vocational High School at Trigonometric material by applying a type of cooperative learning model Numbered Heads Together (NHT).

REVIEW OF LITERATURE

Student's achievement

Student's achievement shows the student's ability in learning, where according to all ability, not only in one of humanity aspect (Supriyono, 2001). Gagne (in Hamzah, 2008) explain that student achievement is student's ability as the result of learning activity which consist of five types: students can use symbol (intellectual skill), students explain a concept or definition (verbal information), student can solve a problem by using some ways (cognitive strategy), and attitude.

While with Supriyono and Gagne, Sudjana (2007) explain that student achievement is consequence from student evaluation (test) and learning evaluation is made for examining the ability which student got after doing learning process. Student achievement in this study is postulated at Sudjana's opinion, the ability which student got after doing learning process in school that shown by learning evaluation (written test).

Factors that influence student achievement

Student's goal in learning is consequence by many factors that influence student's achievement, from internal and external of the student (Slameto, 2003). Roestiyah (2000) explain that internal factors (factors from inside of the student) consist of health, safe, the ability, interest, etc. Thus, Nursalim et al (2007) explain that ability factor consist of intelligence and interest. Slameto (2003), add tired factor as one of factor that influence student achievement and grouping internal factors such as Roestiyah explanation (2000) and Nursalim et al (2007) into psychology and physical.

Slameto (2003) and Roestiyah explain that external factors is consist of three factors, family factor, school factor and society factor. Student's achievement is influenced by the way of parents nurturing, relationship in family, house condition and economic condition. School factor that influence student's achievement consist of teaching method, curriculum, relationship between teacher and student, relationship between student, school discipline, facility condition, and learning method. Society factor consist of student activity in society, mass media, friend, and live in society.

Cooperative learning model

Cooperative learning model is a model of learning where a little group of student is cooperating and help each other in solve the task (Jacob in Sutrisni, 2009). Then, Panitz (in Supriyono, 2011) explain that cooperative learning model is a larger concept which consists of all kind of cooperative.



While with Lie's opinion (2003), stated that cooperative learning model is not same with just learn in group. There are elements that make it different with the other grouping. Implementation of cooperative learning procedures to correct the model will allow teachers to be more effectively managing the classroom. Furthermore, As'ari (in Sutrisni, 2009) states that in the cooperative learning, students not only required to be individually successful in attempt to achieve or try to over their friends, but are required to work together to achieve shared outcomes, the social aspect is very prominent and students are required to be responsible for the success of the group. Students are homo social or creatures that tend to live together, so it takes a group approach is used to foster and develop social attitudes (Syaiful: 2002: 63)

David (in Lie, 2003) gives opinion that the important components in cooperative learning is positive interdependent, personal responsibility, face to face, communication between member of group, and group process evaluation. This research is postulated at Lie's opinion (2003), explain that cooperative learning model is not the same with just learn in group.

Cooperative learning, Numbered Heads Together (NHT) type

Cooperative learning, Numbered Heads Together (NHT) type is learning type which is conducted for influencing the interaction between students and for increasing student achievement. Lie (2003) explains that NHT is used for involving student in strengthening the understanding of learning or for checking student understanding toward lesson. NHT give a chance for student to share ideas and consider the answer and motivate the student for increasing spirit of cooperativeness.

Other opinion from Candler (in Sumartini, 2007), by implementing cooperative learning NHT type, student will be motivated to participate in discussion, in order to gain answer when the number is called, and the students can learn to be active participants. NHT in this research is postulated at Lie, where NHT is used to involving student in strengthening the understanding of learning or for checking student understanding toward lesson.

Steps of cooperative learning NHT type

NHT type consists of 4 steps (Lie, 2003). Step 1 is begun by numbering. Teacher makes some group where consist of 4-5 students heterogeneously base on academic ability and if possible, the member of group from of race, culture, ethnicity, and gender are different. Each member of the group is numbered 1-5. The next stage is to ask questions. At this stage the teacher is asking questions to students and the students listen to the question. The third stage is to think together. Teachers give students the chance to think together to unify their opinion. The last stage, the teacher calls a number of students, and then students from each group who have the same number raised their hands. The teacher then pointed to one student among the students who raise their hands in a group to answer questions.

Advantages and disadvantages of cooperative learning model NHT type

Advantages and disadvantages of NHT type, stated by Kagan (in Lie, 2003), the advantages are the class became more active, each student get the opportunity to express his opinions, development competency, the time to correct student's achievement is more effective and efficient. The disadvantage are needed more time allocation and unusual of students to learning with cooperative learning.



METHODOLOGY

Type of this research is a class action research (CAR) where consist of two cycles, each cycle consists of four consecutive stages, namely planning, action, observation and reflection. Cycle in CAR considered successful if the results of study on the cycle has met the minimum completeness criteria established by the school. Implementation of cooperative learning, Numbered Heads Together (NHT) type in this research, uses minimal completeness criteria was 80%.

The subject of this research is grade XB engineering software program Telekomunikasi Tunas Harapan Vocational High School Semarang regency school year 2011/2012 with total students are 29, consisting of 15 females and 14 male students. The procedures of this study are as follows:

1. Planning
Planning step include making lesson plan, observation sheet, make student grouping, work group sheet, task and evaluation test that used at planning step in the implementation of cooperative learning NHT type.
2. Action
In the implementation step, the plan regarding with the teaching and learning through NHT technique was implemented after all of the preparation had been made. The implementation step include:
 - a. First cycle
The implementation the model of cooperative learning NHT type in the first cycle is abstractly, mean that the implementation is not really type NHT. This role is student allowed to choose the member of the group by them self. During the learning, the student activities and teacher are observed to find out the effectiveness of cooperative learning NHT type to increase student's achievement. The evaluation of implementation NHT type is done in each appointment, then data analyst to discover effectiveness and detention from using this type. Based on the evaluation and data analyst, then can be determined the new strategies to cooperative learning model fix the implementation on the second cycle.
 - b. Second Cycle
Second cycle using NHT type concretely that the member of the group is determined by teacher heterogeneously based student's achievement. Observation is done during learning process. Using the result from the evaluation the first and second cycle, the new format NHT can be planned to the next cycle.
3. Observating
This step held in conjunction with the implementation step. The result of observation is writing on the observation sheet. In additional, the pictures of the student's and teacher's activities are taken. Observation is focused on the implementation the model of cooperative learning NHT type and student's role in the learning process, particularly in discussion group.
4. Reflecting
In this step, the activities consist evaluation to implementation step, the result of the test, and student's responsibility to learning process using NHT type. Based on the data collected will be a reference to improve the next cycle.



RESULTS AND DISCUSSION

Early conditions student of grade XB, in learning activities, the teacher still use the conventional method, so there are still shortcomings in the learning activities. Shortage is still at least as active students in learning, lack of student's attention during the learning process, and lack of the interaction among students, are due to the result in student's achievement is reduce. It was shown by the students who have not reached the KKM, with the KKM 75. At first cycle and second cycle, made a program of learning with cooperative learning NHT type.

Implementation of first cycle conducted by three face to face meetings. Teacher and students begin to build an atmosphere of learning with cooperative learning NHT type, student's active in learning has not been seen, indicated by the persistence of students who are talking themselves when being discussed. Student's achievement in evaluation test in first cycle have not shown significant improvement, it was shown that there are 9 students who have uncompleted of 29 students.

Implementation of second cycle was implemented in three face to face meetings. Learning on the second cycle has been increase more. Students are more active than in first cycle, is more focused in discussion groups or in individual test. This is evidenced by an increase in student's activity scores in first cycle and second cycle when using cooperative learning NHT type.

The results obtained by studying mathematics in grade XB after performed acts of first cycle and second cycle in this study are listed in Table 1 below.

	Early condition		First Cycle		Second Cycle	
	Total of Student	percentage	Total of Student	Percentage	Total of Student	percentage
Uncompleted	12	41,38%	9	31,03%	5	17,24%
Completed	17	58,62%	20	68,97%	24	82,76%
Total	29	100,00%	29	100,00%	29	100,00%

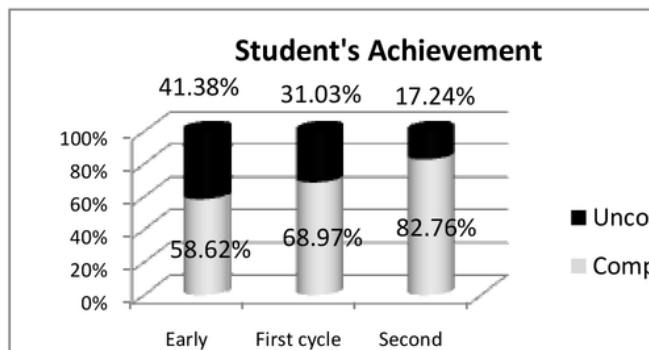


Figure 1. Diagram of Student's Achievement

Based on Table 1 and Figure 1, show that the student's achievement of grade XB in early conditions have not shown the desired results, as many as 12 students or 41.38% uncompleted KKM, with KKM is 75. While 17 other students, or 58.62% has reached the KKM. The average value reached 75.27. At the end of the first cycle, the teacher gives a test on the



material ratio of trigonometric with angle is determined from the side of right triangle and comparison of trigonometric the various quadrants. In the second cycle obtained an average value of 82.65 with 68.97% completed, while at the end of meeting in second cycle, the teacher give the test with the material is trigonometric with the angle more than 360^0 and the relations between Cartesian coordinates and polar coordinates, produces a class average of 78.14 with 82.76% completed. Based on the early conditions and the first cycle, the average increase by 7.38 or 7.38%, while if it is compared to first cycle and second cycle, the average grade decreases. This is because there is one student who did not take the test second cycle. In addition, because the material is more complex in second cycle than first cycle.

Nevertheless, these results have met the completeness limit specified as 80% of students scored 78 or more. If viewed from the completeness limit derived from the early conditions to second cycle is always increasing. Thoroughness in the early conditions until the first cycle increased by 10.35%, and from first cycle to second cycle increased by 13.79%, bringing the total percentage increase in the thoroughness of the initial conditions up to 24.14% in second cycle. Accordingly, the application of cooperative learning NHT type can improve student's achievement in grade XB Telekomunikasi Tunas Harapan Vocational High School at trigonometric lesson.

CONCLUSION

Based on the result of research and discussion so can conclude that implementation cooperative learning NHT type can increase student's achievement in grade XB Telekomunikasi Tunas Harapan Vocational High School at trigonometric lesson. Student's achievement from early condition to second cycle increased by 10,33%.

Recommendation

1. For Teacher
 - a. Teachers should choose an appropriate learning model for teaching and learning activities in schools is effective
 - b. Teachers should engage students actively in the process of learning to students' satisfaction
2. For School
 - a. Support and provide opportunities for teachers to implement cooperative learning NHT type
 - b. Provide the necessary infrastructure so that teachers can be creative in teaching

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The Effectiveness of Inquiry Learning Approach in The Social Laboratorium To The Increasing of Learning Creativity in Social Study Subject (IPS) to The Fifth Grade Elementary School Students

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Abstract

The objective of this research was to recognize the effectiveness of inquiry learning approach in the social laboratory towards the enhancement of learning creativity of 5th grade social study subject students at SD Negeri Bowongso 1 Wonosobo Semester I on the 2011/2012 period. There was a basic competence that was achieved in the IPS learning in the social laboratory was "Recognizing a variety of natural and synthetic phenomenon and time territory division in Indonesia by using map/atlas/globe and other media. This research was a developed research for the inquiry learning approach model and the enhancement of learning creativity, embraced development and application model. In the application model stage, an action classroom research from Stephen Kemmis and Robin Mc. Taggart which consisted of action remedy arrangement, action remedy application, observation, and reflection. Action variable was the inquiry learning approach and the related learning creativity variable. The data collection technique was an observation. In order to maximize the application model result, model was done at two times cyclus. The data analysis used *Confirmatory Factor Analysis (CFA)* dan *Structural Equation Modeling (SEM)* approach. CFA approach was used to analyze the suitability of the measurement model, where as SEM approach used to analyze the suitability of the structural model. The analysis calculation used *LISREL 8.51* software. The suitability of the measurement and the structural model were based on the criteria *r-value* >0.05 , *Root Mean Square Error of Approximation (RMSEA)* ≤ 0.08 , and *Goodness of Fit Index (GFI)* > 0.90 .

The research result showed that there was found an effectiveness of inquiry learning approach in the social laboratory towards the enhancement of learning creativity of 5th grade social study subject students at SD Negeri Bowongso 1 Wonosobo Semester I on the 2011/2012 period. The usage of inquiry learning approach in the social laboratory was showed by the validity that was obtained from LISREL Estimates (Maximum Likelihood). All of the indicators (4) was proven had good validity and the most reliable indicator (formulating problem, determining work procedure, collecting data, presentation) was X1 (formulating problem score) and X4 (presentation score). The latent creativity indicator variable that had the best loading score at 0.845 was X5 (fluency). The path diagram output which was the CFA analysis resulted on the same estimation score as the similar LISREL output. The loading between X1 (formulating problem) and inquiry was at 0.71. All of the indicators were significant, because the t score higher than 1.96. The confirmatory model was suitable, because it had significant P score with the P score = 0.00628 higher than 0.005. *The Chi-Square* at 50.335 with 24 freedom degree. From the LISREL output showed that P-value at 0.3398 > 0.05 , *RMSEA* = 0.021 ≤ 0.08 and *GFI* at 0.925 > 0.90 . Thus, the structural model was suitable and compatible to be used, and the effectiveness of the inquiry learning approach in the social laboratory towards the enhancement of the IPS learning creativity of 5th grade students was proven.

Keywords: effectiveness, inquiry approach, social laboratory, and creativity enhancement



INTRODUCTION

Social Study or *Ilmu Pengetahuan Sosial* (IPS) is one of the lessons which are started from SD/MI/SDLB to SMP/MTs/SMPLB. The IPS learning discusses a lists of events, facts, concepts, and generalizations those related with social issues so that the IPS learning scope is so wide those consists of place, time, social system, and behavior. Hence, one of the IPS learning goal formulations is to have a basic skill on logical and critical thinking, curiosity, inquiry, problem solving, and skill in the social life. (Government Regulation Number 22 Year 2006 about Standard Contents). The consequence of the learning implementation is the teacher should involve the students to be active. It is in line with shifting and changing in the education paradigm, from the old paradigm that emphasize on behavioristic in the teaching-testing form into the new paradigm that emphasize on the constructivistic process in the form of learning-continuous improvement.

Learning process is directed on the learning experience to arrange and make a work or to create a new idea through the application of a set of events, facts, concepts, and generalizations on the social issues in the social environment, so the basic competence can work effectively. Thus, the students will feel the learning directly, by examining the environment, formulating the problem, doing the environment observation (nature and social), using the technology or by doing interview with the society, so they will have unforgettable learning experience. This learning experience provides an essential meaning on encouraging the students to be curious and doing an activity, thus will discover (inquiry) something and stimulate the students' creativity which is extraordinary on the learning.

Creativity will encourage students to have certain idea/concept towards a social phenomenon which they saw. The variety of idea/concept shows the variation of the students' thoughts (creativity) in recognizing and solving social problems. This fact indicates the relationship between IPS learning and creativity.

Munandar (1990:50), defines creativity is an ability that reflects on fluency, flexibility, and originality in thinking, and an ability to elaborate (to develop, to enrich, to specify) an idea. Furthermore Guilford (in the Munandar, 2009) states the characteristics of creativity which are:

- a. *Fluency of thinking*, an ability to create a lot of ideas from an individual thought rapidly.
- b. *Flexibility of thinking*, an ability to produce variety of ideas, answers, and questions
- c. *Elaboration of thinking*, an ability to develop ideas and to add or to specify details from an object, to make it more interesting.
- d. *Originality of thinking*, an ability to initiate a unique or original idea.

Later, the ability is translated by Sukmadinata (2004:104), to make a new combination based on the available information data, so it will discover many possible answers towards a problem which is emphasized on its quality, effectivity, and variety of answers. Regarding to National Advisory committee on creative and culture education which is translated by Craft (2005:291), "Illustrates creativity as a form of an imaginative activity that can produce something original, pure, genuine and valuable. " In a line with the above concept, Torrance (1998) affirmed that creativity is a process to feel and to observe a problem, to make a hypothesis, to assess and to test a hypothesis, to modify and to test the hypothesis again and to show the results. The results of creativity are new, original and valuable things. In order to know how much the creativity level of an individual is, a measurement is conducted by Torrance (1968:13) that the creativity measurement is stated similar with the steps on the scientific method, which are the process of (1) sensing difficulties, problems, gaps in



information, missing elements, something asked; (2) making guesses and formulating hypothesis about these deficiencies; (3) evaluating and testing these guesses and hypotheses; (4) possibly revising and retesting them; and finally; (5) communicating the result.

Subsequently, Torrance (1998) in the Abdul Kamil Marisi (2007), states that in the implementation of creativity measurement develops seven activity which are done by the test participant, those are making question, guessing causal effect, predicting cause of an event, developing a value of an object, using an object extraordinarily, asking an extraordinary question and making a guess.

Consequently, to measure creativity, there are 4 indicators:

1. The fluency measures aspect on making questions consist of making problem identification and making question;
2. The flexibility measures aspect on guessing causal effect will discover the relationship between two variables and aspect on predicting the cause of an event produces a framework of thinking;
3. The originality measures aspect on developing the value of an object those are making hypothesis formulation, determining work procedure, conducting experiment, and processing data.
4. The elaboration measures aspect on asking extraordinary question those are proving evidence, using an object extraordinarily, doing interpretation, and making prediction which are making and presenting a report.

Creativity is carried out on the IPS learning that is arranged as *scientific inquiry*, which stimulates the ability of thinking, working and acting scientifically as well as communicates it as an important aspect in the life skills. This kind of learning is a learning that is using inquiry approach.

Inquiry approach gives an opportunity to students in learning to develop their intellectual potency in a set of activities which are arranged to discover something. The students are encouraged to be actively seeking answers of their problems and drawing conclusion individually through the scientific thinking which is critical, logic and systematic. The students will not act and behave passively on accepting and memorizing lesson that is given by their teacher anymore (Hidayati, 2009). Based on Bruce Joyce and Marsha Weil (2008), the learning implementation of using inquiry approach consists of five stages, which are 1) Facing on the problem; 2) Data collection and verification; 3) Experimental data collection; 4) Organizing, formulating and explanation; 5) Inquiry process analysis. Regarding to E. Mulyasa (in the Siti 2009), inquiry approach is an investigation approach that involves mental process with the following activities: 1) Asking questions about natural phenomenon; 2) Formulating discovered problem; 3) Formulating a hypothesis; 4) Arranging and conducting an experiment; 5) Collecting and analyzing data and 6) Drawing conclusion developing scientific attitude. Based on Wina Sanjaya (2008), in general the learning process by using inquiry approach can follow these steps: 1) Orientation; 2) Formulating problem; 3) Formulating hypothesis; 4) Collecting data; 5) Examining hypothesis; and 6) Drawing conclusion.

The three arguments above is similar, so it can be concluded that the stages of inquiry learning are stage of orientation (facing on the problem) is done by teacher; stage of verification (formulating the problem); stage of hypothesis formulation is done by teacher; stage of experiment arrangement (determining the working procedure); stage of data



collection; stage of research process analysis (examining the hypothesis); stage of conclusion formulation. The implementation in the field uses four stages, those are formulating problem, determining work procedure, collecting data, and presenting report.

Next on the research result which was done by Sullivan (2011) found that inquiry approach that was performed collaboratively in the IPA learning about the robotic solving problem encouraged the creativity development of 6th grade elementary students. There were four aspects those were proven important in the inquiry approach to reach the students' creativity development, which were open ended, goal oriented task, teacher modeling from the inquiry techniques, and the use of media and environment which were packed in the form of games. The use of media and environment made the students could develop the comprehension integrated with their friends through media tools, communication and knowledge interaction those owned by the students.

The research which was carried out by Longo (2010) found that the inquiry method helped students in enhancing their creativity. The students' ability measurement process through test made a load that discouraged the creativity development of teacher and students during the learning process. In this research the inquiry method was proven on helping the students found their own knowledges, not only by recalling the lesson taught by the teacher. The inquiry learning which was conducted by Longo was proven could enhance the students' motivation, curiosity, and attractiveness by sticking to the required curriculum.

2
In the research that was performed by Wardani Naniek Sulistya (2010) entitled "Upaya Meningkatkan Kreativitas Siswa Dalam Pembelajaran IPS SD Dengan Pendekatan Inkuiri Melalui Diskusi Kelompok". The research finding showed that there was an improvement of students' creativity in the IPS Elementary School (Sekolah Dasar/SD) learning through discussion group learning method. The creativity was indicated by the dynamic discussion group which consisted of the students' fluency in discussing the answers of questions given, the students' ability in predicting causal effect of related events from the struggle materials, and developing the value of related event (from struggle). Hence, the use of discussion group could increase the students' ability in making category of predicting causal effect from an event, improving cooperative ability, activeness, and enhancing the teachers' ability on maintaining the relationship with the students.

Based on the three researches above, the learning development in the class especially for SD students is necessary to be conducted by using inquiry learning approach which centered to the students, so that the teachers' roles in the IPA learning as an advisor, stimulator, and fasilitator. Whereas the students in the inquiry learning develop their creativity to discover the curiosity to an object, dare to take a risk and be open towards their own knowledge and experience.

Based on the observation of IPS learning 5th grade students of SD Negeri Bowongso Wonosobo Central Java showed that the teacher attempted to involve the students in the learning by using question-answer, eventhough it told by the teacher. The teachers' questions tended to the cognitive ability achievement in the weak level which was on the level of knowledge and comprehension. The level of implementation, analysis, evaluation and creation were rarely concerned by the teacher. This case indicated the weakness of the awareness about the importance of the creativity for the learners which affected to the less optimal of the creativity in the school. Although the learning result of 5th grade students were confirmed not completed just reached 26.4% of 30 students. While the students' questions



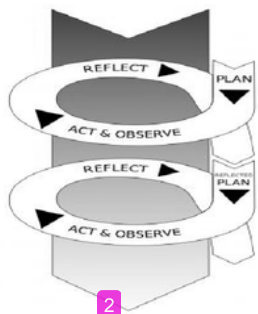
expectation during the learning session just reached 30% of the whole students. This case was probably caused by the learning which could not stimulate the students' curiosity and affected to their weak motivation. The creativity development was one of the ways to empower students and cannot be avoided anymore, regarding to the science and technology development expectation. Hence, this problem should be solved by designing an education to make the students active and reactive through inquiry approach which performed directly in the society as the social laboratory.

2
The problem which is formulated in this research is there any effectiveness on the inquiry learning approach in the social laboratory towards the enhancement of learning creativity of the 5th grade social science students at SD Negeri Bowongso Wonosobo Central Java in the Semester I at 2011/2012 period.

METHODOLOGY

2
This research was the developed research for inquiry learning approach model and the enhancement of learning creativity which consisted of application and development model. The research application included the action classroom research (penelitian tindakan kelas/PTK) by using spiral model from Kemmis Stephen and Mc. Taggart, Robin, consisted of 2 cycluses. Each cycluse was composed of action plan, application plan and observation, and reflection. The cycluse step was illustrated in the figure 1 below.

2
The subject of this research was 5th grade of elementary school. The action variable was inquiry learning approach and the related learning creativity variable. Inquiry learning approach was IPS learning approach with basic competence on recognizing the variety of natural and synthetic phenomenon as well as the division of time territory in the Indonesia by using social laboratory media. The learning stages were formulating problem (X1), determining work procedure (X2), collecting data (X3), and presentation (X4). The learning creativity was the total of fluency score (X5) which was the aspect of indentifying problem and making question; flexibility (X6) which was finding the relationship between two variables and frame of thought; originality (X7) which was formulating hypothesis, determining work procedure, doing experiment, processing data; and elaboration (X8) on conducting examination, doing interpretation, making report and presentation. Whereas, the effectiveness of the inquiry learning approach, was the measurement of the accomplishment level of the learning process.



2
Figure 1. Action Classroom Research Spiral Model from Stephen Kemmis and Robin Mc. Taggart



The data collection techniques used observation. The data analysis method applied *Confirmatory Factor Analysis (CFA)* approach which was used to analyze the suitability of the measurement model and *Structural Equation Modeling (SEM)* was used to analyze the suitability of the structural model. The analysis calculation used LISREL 8.51 software. The suitability of the measurement and the structural model was based on the criteria: *r-value* > 0.05, *Root Mean Square Error of Approximation (RMSEA)* ≤ 0.08, dan *Goodness of Fit Index (GFI)* > 0.90.

RESULTS

The first stage of this research was the implementation of inquiry learning within basic competence on the IPS lesson of the 5th grade students on the odd semester. Recognizing the variety of natural and synthetic phenomenon as well as the time territory division in Indonesia by using map/atlas/globe and the other media, and the implementation of the learning inquiry was suitable with the required scenario. There was the students' creativity achievement level through inquiry learning at cyclus 1, was showed in the table 1 below.

Based on the table 1 above, so the creativity level of the 5th grade students tended to be weak. This was showed from the fluency indicator that 40% of the students reached weak level. It meant that to identify problem and make question, the score was less or same with 4. But, on the flexibility, the creativity level tended to increase at 40% in the score 5 or 6, it meant the total score found the the relationship between two variables and frame of thought. The elaboration indicator which most of the students had, the score of the creativity level was below or same with 4. This could be meant, there was a drastic change in the learning, since the students as an object, transformed into subject, thereby was necessary to be adapted before.

Table 1 *The Frequency Distribution of Creativity Score Cyclus 1 Recognizing the variety of natural and synthetic phenomenon in the social laboratory*

Score	Fluency		Flexibility		Originality		Elaboration	
	Fre	%	Fre	%	Fre	%	Fre	%
≤4	10	40	9	36	12	48	13	52
5-6	8	32	10	40	6	24	8	32
≥7	7	28	6	24	7	28	4	16
Σ	25	100	25	100	25	100	25	100

Description:

Fluency: X5 identified the problem and made question;

Flexibility: X6 found the relationship between two variables and frame of thought;

Originality: X7 formulated the hypothesis; determined work procedure; conducted experiment; processed data;

Elaboration: X8 did the examination; did the interpretation; made the report, and presentation.

Although the obtained score was low, there was a big change, thus the inquiry approach could encourage the students greatly to develop their creativity. However, it was necessary to improve the learning so they could achieve the optimal result by did it in the cyclus 2. There was the measured creativity level, showed the result that was provided in the table 2 below.



Table 2 *The Frequency Distribution of Creativity Score Cyclus 2
Recognizing the variety of natural and synthetic phenomenon in the social laboratory*

Score	Fluency		Flexibility		Originality		Elaboration	
	Fre	%	Fre	%	Fre	%	Fre	%
≤4	2	8	2	8	2	8	3	12
5-6	5	20	10	40	17	68	6	24
≥7	18	72	13	52	6	24	16	64
Σ	25	100	25	100	25	100	25	100

Regarding to the table 2 above, so the creativity level of the students was increased. This was showed from the fluency score, 72% students reached maximum creativity level. It indicated the students could make 3 – 4 problem identifications and 3 - 4 questions. But, in the flexibility, the creativity level reached 52% at the score 5 or 6, meant that the students discovered 2 – 3 relationship between two variables and made a correct frame of thought. The total amount of creativity level in the cyclus 2 was increased. It could be understood because there was found an experience on it.

The Suitability of the Inquiry Learning Approach

The effectiveness of the IPS inquiry learning approach could be recognized through the suitability of the measurement model by using CFA and SEM approach to analyze the suitability of the structural model based on the criteria: $r\text{-value} > 0.05$, $RMSEA \leq 0.08$, dan $FI > 0.90$. The result was obtained as follow:

LISREL Estimates (Maximum Likelihood) Measurement Equations

$$X1 = 0.715 * \text{Inquiry, Errorvar.} = 0.551, R2 = 0.481$$

$$(0.168) \quad (0.179)$$

$$4.245 \quad 3.086$$

$$X2 = 0.622 * \text{Inquiry, Errorvar.} = 0.651, R2 = 0.372$$

$$(0.168) \quad (0.180)$$

$$3.698 \quad 3.628$$

$$X3 = 0.424 * \text{Inquiry, Errorvar.} = 0.877, R2 = 0.170$$

$$(0.168) \quad (0.179)$$

$$4.245 \quad 3.086$$

$$X4 = 0.358 * \text{Inquiry, Errorvar.} = 0.877, R2 = 0.128$$

$$(0.175) \quad (0.205)$$

$$2.048 \quad 4.275$$

$$X5 = 0.845 * \text{Fluency, Errorvar.} = 0.483, R2 = 0.597$$

$$(0.161) \quad (0.160)$$

$$5.255 \quad 3.021$$

$$X6 = 0.771 * \text{Flexibility, Errorvar.} = 0.460, R2 = 0.564$$

$$(0.152) \quad (0.142)$$

$$5.086 \quad 3.237$$

$$X7 = 0.761 * \text{Originality, Errorvar.} = 0.509, R2 = 0.532$$

$$(0.150) \quad (0.137)$$

$$5.075 \quad 3.720$$

$$X8 = 0.809 * \text{Elaboration, Errorvar.} = 0.401, R2 = 0.620$$

$$(0.144) \quad (0.122)$$

$$5.608 \quad 3.286$$



From the output that was resulted above, it showed that there was the lowest indicator was 0.128 at X4; 0.170 at X3 which was the inquiry indicator for presentation and data collection that had the small contribution towards the latent inquiry indicator. Whereas the other indicators (X2, X1, X7, X6, X5 dan X8) were proven good enough to present latent variable. X3 and X4 indicator were not significant and had the lowest of R2 score, and the validity of both indicators was the weakest, so it was dropped from the indicator. The most reliable indicator for inquiry indicator was X1, for creativity indicator was X5 (fluency), because it had the best loading score which was X1 at 0.715 and X5 at 0.845.

The model was the most suitable because it had probability score that not significant (p-value = 0.00128 and Chi-Square 50,335 with df=24). Chi-Square at 50.335 exceeded 0.05, so Chi-Square was not significant to check whether the data was suitable with the model or not, hence it rejected an alternative hypothesis and affirmed null hypothesis.

The CFA analysis used 5 latent variables (inquiry, fluency, flexibility, originality, and elaboration) with 8 indicators. The LISREL output would produce also the path diagram which was provided in the appendix. The path diagram output resulted on the same estimation score as the LISREL output. The loading between X1 and the inquiry was at 0.71. Whereas the relationship between latent variable of inquiry and fluency was 0.66; the relationship between latent variable of fluency and elaboration was 0.97. This relationship was a correlation not a covariance. It was caused by the latent variable that had not the same of the measurement unit with the one of its indicator. The path diagram output produced also the score t. path diagram output t-value in the figure, showed the significant relationship between the indicator and the latent variable. It showed from the output above that all of the indicators were significant at the level 5 % (default) which was indicated on the black color of the t-value score. Regarding to the figure *path diagram output* showed that all of the indicators were significant, because the t score higher than 1.96 (number on the leftmost arrow). In order to know the confirmatory model was suitable, it was necessary to notice GFI output with *Degrees of Freedom* = 24 and *minimum Fit Function Chi-Square* = 50.335 (P = 0.00628).

The requirement of the suitable model had the P score that was not significant, it was the P score was higher than 0.005. *Chi-Square* at 50.335 with 24 freedom degree kebebasan and significant P score because P score = 0.00628 higher than 0.005. It indicated that the model was suitable and matched with the data. So did the suitability of the measurement and the structural model which based on the criteria: P-Value >0.05, RMSEA ≤ 0.08, dan GFI > 0.90. From the LISREL output showed that P-value was obtained at 0.3398 > 0.05. RMSEA = 0.021 ≤ 0.08 and GFI at 0.925 > 0.90. Thus, the structural model was suitable and compatible to be used.

CONCLUSION

This research concluded that the potency of the creativity of the 5th grade students through IPS learning with the inquiry learning scenario was high. From the four creativity indicators were proven fluency creativity (X5) was the highest creativity, and the inquiry indicator was X1 and X4 (formulating problem and presentation) were the most reliable inquiry learning.

CFA analysis showed the same estimation score. The loading between X1 (formulating problem) and inquiry was at 0.71. The Lisrel output indicated P-value at 0.3398 > 0.05. *RMSEA* = 0.021 ≤ 0.08 and *GFI* at 0.925 > 0.90. Hence the structural model was suitable and compatible to be used, and it could conclude that the effectiveness of the inquiry learning



approach in the social laboratory towards the enhancement of the IPS learning creativity of 5th grade students was proven.

Policy Implication

Teachers are expected to modify a learning that is concerned to the students by designing innovative learning, especially on using inquiry approach that encourages the students' creativity.

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Influence of PAIKEM GEMBROT Model to Mathematics Students' Achievement Grade X Accounting I Diponegoro Vocational High School Salatiga

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Abstract

The purposive of this research is to know about influence of Paikem Gembrot Model to Student's achievement Grade X Accounting I Diponegoro Vocational High School Salatiga. This research is quasi experiment with 36 sample, which include 4 male students and 32 female students. The file analysis use Paired t-test and we got $t = -5,175 < -0,1960$. It means that there are significant different of student's achievement between student's achievement before got Paikem Gembrot Model and student's achievement after got Paikem Gembrot Model. The average of student's achievement before got Paikem Gembrot Model is 62,78 and after got Paikem Gembrot Model, the average of student's achievement is 76,25. It means that there are influence of Paikem Gembrot Model to mathematics student's achievement Grade X Accounting I Diponegoro Vocational High School Salatiga.

Keywords: Paikem Gembrot Model, Mathematics Student's Achievements

INTRODUCTION

The outcomes in mathematics learning of tenth-grade, first-accounting students of SMK Diponegoro Salatiga has not met the teacher's expectations. This is inferred from our interviews with mathematics teacher of SMK Diponegoro Salatiga and students' evaluation results presenting the grades of estimated 60 percent of 36 students that are still below KKM 6.5 standard. Our observation finally provides us the cause of the matter which is students' lack of motivation in learning mathematics due to the teacher's conventional, that is teacher-centered, learning model.

The conventional learning model implemented in SMK Diponegoro Salatiga is not only ineffective in improving students' learning results but also leads to pronounced tedium and dislike for mathematics. In regard to this condition, a new, student-centered learning model known as PAIKEM GEMBROT Model (Substantial-Entertaining-Amusing-Creative-Innovative-Active Learning) is implemented with a purpose to better learning qualities by improving already-existing practices. The PAIKEM GEMBROT Model encourages students to develop skills, attitude and comprehension of learning sources and materials, including environment employment, resulting in attractive, entertaining and effective learning activity. By the implementation of the model, tenth-grade first-accounting students of SMK Diponegoro Salatiga are expected to attain a better and improved learning results.

The above backgrounds provide us with a problem that is: is there a correlation between the implementation of PAIKEM GEMBROT Model and students' grades? The purpose of this research is to apprehend the effect of the implementation of PAIKEM GEMBROT Model on the students' learning results.



LITERATURE REVIEW

PAIKEM GEMBROT Model

PAIKEM GEMBROT (Substantial-Entertaining-Amusing-Creative-Innovative-Active Learning) is a program or an integrated learning model aimed at bettering quality and efficiency of educational administering by improving already-existing practices. The term PAIKEM GEMBROT basically refers to an integrated learning method that utilizes a theme to correlate several course subjects such that the process results in a valuable experience for students (Trianto in Depdiknas, 2006: 5). An integrated learning is a learning method that begins with a topic or a certain theme correlated with another concept in spontaneous or conceived manner, whether applied to one or more course subjects. The richer the students' learning experience, the more meaningful the learning becomes. Generally, PAIKEM GEMBROT is a learning method utilizing certain theme to correlate subjects discussed in a course and real-life experience to give meaningful experience to the students (Hadi Subroto, 2000: 9). The purposes of the development of PAIKEM GEMBROT (Iif Khoiru Ahmadi dan Sofan Amri, 2011) can be defined as general and specific. The general ones comprise (1) meeting the needs of students with specific characteristics in their cognitive and affective development; (2) fulfilling the rights of students according to their respective educational needs; (3) meeting students' intellectual needs and future perspectives; (4) meeting students' needs for self-actualization; and (5) considering students' potential role in future leadership. The specific purposes include (1) rewarding students as a means to stimulate students' motivation in accelerating their programs completion according to their respective potentials; (2) improving effectivity and efficiency of students' learning process; (3) overcoming possible learning tedium that could be detrimental for students' optimal potential development; and (4) enhancing students' improved balance in spiritual, intellectual and emotional intelligence.

PAIKEM GEMBROT Syntax Table (Trianto, 2005: 122) in direct and cooperative learning setting, which is Phase-1 (Preface) includes (1) correlating current course with the previous; (2) motivating students; (3) examining students to assess students' understanding of prerequisite concepts; (4) explaining the purpose of learning (Basic Competence and Indicator). Phase-2 (Learning Subject Presentation) includes (1) presenting necessary concepts through demonstrations and reading material; (2) presenting skills developed; (3) presenting needed apparatuses in the form of diagram; and (4) modeling the usage of apparatuses by chart. Phase-3 (Training Assistance) includes (1) organizing students into study groups; (2) advising students on how the study and discussions should progress adjusted to the respective group's composition; (3) distributing books and student's worksheet (LKS); (4) advising students of completing the activity reports; (5) attending only to students' minimum assistance needs; (6) collecting groups' results as scheduled. Phase-4 (Comprehension Analysis and Feedback Giving) (1) preparing study groups for class discussion; (2) requesting one of the member of a group to give presentation of his/her group's activity results according to completed worksheet (LKS); (3) requesting another group to respond to the presentation given; (4) assisting students to conclude the discussion. Phase-5 (Development Through Opportunities for Advanced Training and Implementation) includes (1) checking and giving feedbacks on the assignment completed; (2) assisting students in concluding subjects studied; and (3) dispensing homeworks. Phase-6 (Analysis and Evacuation) in which teacher assisting students in evaluating their learning progress.



Learning Result

Learning result, as defined by Hamalik (2002 : 155), is the change in students' attitude that can be observed and assessed regarding their change in knowledge, attitude and skills. The change is understood as improvement and development toward better values. Learning result is created by interaction between teaching action and learning action; teaching action is concluded with learning action evaluation, and in contrast learning result for students occurs at the end of learning process (Dimiyati, 2002:3). A learning process will eventually result in students' competence in knowledge, attitude and skills. Change in competence is an indicator with which we assess students' learning results. These results, represented in grades, are outcomes of learning taught to students. Hence, students' active participation in learning process is essential, without which the learning process will not progress in desirable course resulting in below-standard learning results. Learning results are affected by two kinds of major factors, which are students' internal factors and external factors (Slameto, 2003: 54-72). Internal factors comprise (1) physical faculties (physical health and bodily defects); (2) psychological aspects (intelligence, focus, interest, aptitude, motivation, maturity, preparedness); (3) fatigue. External factors comprise (1) families (parents' educational method, family ties, home environment, parental concerns, cultural background); (2) school (teaching method, curriculum, teacher-student relationship, student-student relationship, implemented discipline, learning facilities, learning time, learning standard, building condition, learning method, homework) and (3) society (students' social activities, mass media, friends, people's way of living).

Hypothesis

The hypothesis of this study, based on the above literary overview and framework, is "implementation of PAIKEM GEMBROT Model definitely affects learning results in mathematics of tenth-grade first-accounting students of SMK DIPONEGORO SALATIGA."

METHODOLOGY

This research is conducted in quantitative method. The purpose of quantitative research is to develop and use mathematical models, theories and hypotheses related to natural phenomena. The subject population of this research is the entire tenth-grade students of SMK DIPONEGORO SALATIGA from two accounting classes and one marketing class. We sampled thirty six students, consist of four male students and thirty two female students, using purposive sampling method

Instruments used in this research are test and interviews. Test given to students is objective test on matrix subtraction and addition, scalar multiplication of matrices and matrix multiplication. This objective test was based on competence standard, basic competence, indicator and PAIKEM GEMBROT Model included in Learning Procedure Planning (RPP). We use validity and reliability to analyze the test's results.

We use comparative hypothesis assessment as data analysis technique in this research. There are various available statistical techniques in comparative hypothesis assessment for two or more samples. The one we use here is Difference of Means Analysis.



RESULTS AND DISCUSSION

Data Description

Subjects of this research are four males and thirty two females of tenth-grade first-accounting students of SMK DIPONEGORO SALATIGA school year 2012/2013. Pretest data show an estimated 63% of students' grades is still below KKM 5.5 standard. Posttest data yields below-KKM-standard grades percentage of 20%.

Normality test

The first step of this research is assessing initial values and terminal values. Normality test is carried out using Kolmogorov-Smirnov test.

Table 1. *Normality Data*
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Initial values of XA SMK Diponegoro Salatiga	.134	36	.102	.937	36	.042
End values of XA SMK Diponegoro Salatiga	.125	36	.166	.952	36	.124

a. Lilliefors Significance Correction

Based on Table 1 we obtain significance value 0.102 for initial value and 0.166 for end value. Both values are above 0.05, meaning the populations sample is distributed normally.

Data Homogeneity Test

After we completed normality test that yields normality of data, we progress with homogeneity test to examine variance similarity of population.

Tabel 2 *Data Homogeneity*
Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
4.695	1	70	.034

Table 2 yields significance value 0.034, well above 0.05. It means both population have similarity of variance. Variances of initial values and terminal values are similar, thus both populations are homogeneous.

Difference of Means Test

After we performed the precondition tests, which are data normality test, yielding normal distribution, and homogeneity test, yielding homogeneous populations, we proceed with



paired t-test to compare pretreatment initial values and posttreatment end values. T-test procedure using SPSS is as follows:

a. Hypothesis

H_0 : There are no differences between pretreatment (learning using conventional model) and posttreatment (learning using PAIKEM GEMBROT Model) values.

H_1 : There are differences between pretreatment (learning using conventional model) and posttreatment (learning using PAIKEM GEMBROT Model) values.

b. Significance rate : $\alpha = 5\%$

c. Statistical Assessment

Difference of means or t-test is formulated as follows :

$$t = \frac{(\bar{X}_1 - \bar{X}_2) - d_0}{s_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}} \sim t(n_1 + n_2 - 2)$$

$$s_p^2 = \frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}$$

d. Computation

Tabel 3. *Results of Difference of Means Test*

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Initial values of XA SMK Diponegoro Salatiga	62.78	36	21.858	3.643
End values of XA SMK Diponegoro Salatiga	76.25	36	15.918	2.653

Tabel 4. *Paired Correlation Results*

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Initial values of XA SMK Diponegoro Salatiga & end values XA SMK Diponegoro Salatiga	36	.700	.000

Tabel 5. *T-test Results*

Paired Samples Test

	Paired Differences					t	Df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Initial values XA SMK Diponegoro Salatiga – End values of XA SMK Diponegoro Salatiga	-13.472	15.621	2.604	-18.758	-8.187	-5.175	35	.000



Based on the above table, we obtain significance value $0.000 < 0.05$, which means H_0 and H_1 are accepted.

e. Critical region (DK)

$$DK = \{t \mid t < -1,960 \text{ atau } t > 1,960\}$$

f. Decision Making

We obtain $t = -5.175 < -1,960$ from hypothesis test which means H_0 is rejected and H_1 is accepted, thus there is a significance learning- result difference between pre-treatment (learning using conventional model) and post-treatment (learning using PAIKEM GEMBROT Model).

g. Conclusion

From the above t-test, we can infer that the hypothesis put forward in this research is accepted, which means students' average grades before treatment with PAIKEM GEMBROT Model differ from students' after-treatment grades.

DISCUSSION

There is an improvement in learning results using PAIKEM GEMBROT Model compared to learning using conventional model. Average students' grades before treatment with PAIKEM GEMBROT Model is 62.78, whereas after-treatment average is 76.25. The increase in average indicates that mathematics learning using PAIKEM GEMBROT Model is effective in improving learning-results of tenth-grade first-accounting students of SMK DIPONEGORO Salatiga.

There are benefits in learning using PAIKEM GEMBROT Model. Those are students' learning experience and activity that are relevant to students' developmental stage, equivalence between students' chosen activities and their interest and needs, meaningful learning activity leading to lasting results, improvement in cognitive ability within integrated learning process, pragmatism learning activity adapted to students' environment, and improvement in students' social capability within integrated learning process. PAIKEM GEMBROT Model brings about critical and logical mode of thinking to students, pleasure in learning activity and motivation to study mathematics and enjoy mathematics learning.

CONCLUSION

The result and discussion above show improvement in posttreatment average grades, which is 76.25, well above conventional model 62.78 average grades. This means learning using PAIKEM GEMBROT Model is effective in improving learning results of tenth-grade first-accounting students of SMK Diponegoro Salatiga.

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Advanced Diagnosis and Instructional Interventions of Literacy Problems on Writing: A Case Study to an Iranian Third Grade Student

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Abstract

An advanced diagnosis was done to an eight year old student from Iran, studying in the third grade school at the United States. An assessment was conducted to measure his ability in writing. Five Developmental Writing Stages by J. Richard Gentry was used to measure his writing level. The analysis revealed that he was on Writing Stage. He needed help in organizing a good paragraph, outlining ideas in systematical pattern, spelling, punctuation, and using plural/singular words. One on one intervention was used to design the instruction. It was the attempt to the more qualified Writing Stage. His writing began on Writing Stage and ended on the same stage. He maintained his focus in the central idea of the theme. He began with one letter to write the title and one sentence to build the paragraph. In both pretest and posttest he used both approximate and conventional spelling. However in posttest, he made no phonetic spelling mistake as he did in the pretest.

Keywords: writing, Iranian third grade student, advanced diagnosis, literacy problem, instructional intervention

INTRODUCTION

An assessment was conducted to measure an Iranian third grade student writing level. Interview to the student, parents, and teachers was conducted before the assessment; including observation of the students' environment.

He was the only child in his family. He lived with his father and mother. His mother was a geographic high school teacher in Iran. She earned her master education in climatology. His father was a professor in animal nutrition, teaching at the university in Iran. They lived in United States for two years due to his father's project in the University of Arkansas.

He was not eager to go on the first days of his new school in United States. His mother admitted that one of the reasons was his difficulty in English. He was the only student from Iran in the class. He was an eight year old male third grade student whose first language is Kurdish. In addition, Persian (Farsi) becomes formal language that is used in Iranian schools. His parents also spoke Kurdish as their first language. In addition, they spoke Persian (Farsi) in their job while they were in Iran. Although their first language was Kurdish, the parents always encouraged him to speak English.

The student mentioned that he had only five English books at home, but his parents took him every week to the public library to borrow books or films to enhance his English. He admitted that his parents were his model of reading.

At school he had a good relationship to his friends. Yet, he had a best friend in the class. He tended to be active in the class. When the teacher asked questions, he often volunteered to



answer. He spoke confidently whenever he presented his idea to the class. During recess, he played soccer or swings with his friends. During lunch, he shared stories with friends sitting next to him.

During the first month of studying, his parents and teachers tried to do their best for his English improvement. In addition to his parents encouraging him to speak English at home and taking him to the public library, he got language support service from the school. Together with his friends of the same language level, he got a program of language intervention by a language intervention instructor. His teacher understood and then helped him to make improvement in the classroom.

In his classroom, every day's schedule started with writing. The teacher gave writing prompt and explained it before students started to write. The writing prompt consisted of explanation on the theme, writing procedure, and suggestion how to work with detail information on writing. Then during the third hour, students read aloud and built vocabulary. It proceeded with word study. Teachers gave new words to the students to study the meaning, pronunciation, and phonemes. After recess and encore time (i.e., when students developed their knowledge in social life, emotional feeling, and problem solving) students did a quick read.

There was also independent reading activity. During the independent reading, individual students would sometimes were tested on spelling, words per minute reading, etc by the teacher. Spelling tests were based on the list of the words that were given in the early week and learned within a week. In the last hour of the day, students had their guided reading groups and language intervention.

Language intervention was his class activity during the last hour. It was an activity when intervention instructors gave interventions towards students within low to high risk level. Students were grouped based on their risk level. The level was the result from series of tests in the early year of the third grade. Intervention instructor gave different kinds of intervention. Each intervention lasts for about 50 minutes. Within a week, there was a time when students could check out books when the school library aide was available.

Third grade students had to read books. The titles of the books were the teacher's preferences. In addition, students should also read books of their choices. He admitted that he didn't like nonfiction book until his friend suggested him to read it for fun. Now, many times he preferred nonfiction books for his individual reading. In his class, every time students finished reading a reference book, there was a discussion or test on the story. There were also individual presentations and discussions on the individual reading. Teacher gave guidance before students did the activity. The guidance consisted of steps or procedure and information on how to do the activity.

Each student had their supply box based on the school direction in the early year. The reading materials were also provided in a rich classroom environment. All of the sources were accessible for the students at any time, based on the teacher's instruction or rule of the class. They were located in the classroom, within the range that the students were easy to access.

Within nine months, he had learned English in a range of skills that he had reached. Though he had developed his language ability to some extent he had to be given intervention on multi-syllable word. He also needed to enhance his research skill in reading. Vocabulary became



one of the aspects to increase since he had learned English in a very short time. Besides, the phonemic and phonic of the vocabulary should be sharpened. Considering his self-confidence in presenting English in the class, the aspects of fluency and comprehension still needed to be profoundly established.

The following research section gave detail identification on the type of assessment to determine his skill in English; especially on writing. The assessment then led to the decision in making certain intervention on writing to reach a better English writing skill accomplishment on the post test after the intervention.

DISCUSSION

An assessment was conducted to measure the student's ability in writing. Table 1 described the aspect of literacy measured, the assessment tool used, and the result of the assessment.

Table 1
Assessment for Literacy Case Study

Aspects of Literacy	Assessment Tool	Pre-Intervention Results	Post-Intervention Results
Writing	Five Developmental Writing Stages by J. Richard Gentry	Writing stage	Writing stage

His writing was measured using Five Developmental Writing Stages by J. Richard Gentry. The assessment was conducted by analyzing his writing on his dream job in the future. Before writing, he got an explanation on the theme and procedure to write the paragraph.

The analysis revealed that the student was on Writing Stage. He wrote it independently, without others' input. He creatively put 'f' as the title of the paragraph. He explained it was from the word 'future'. Most of the words he wrote using approximated spelling and conventional spelling. Only one word was wrong. He wrote it 'whant'. It should be 'want'.

A writing sample collected indicated that Zaniar needed help in organizing a good paragraph, outlining ideas in systematical pattern, spelling, punctuation, and using plural/singular words. It was the attempt to the more qualified Writing Stage and to get him to the domains of Consistent Control. One on one intervention was used to design the instruction in lesson plan.

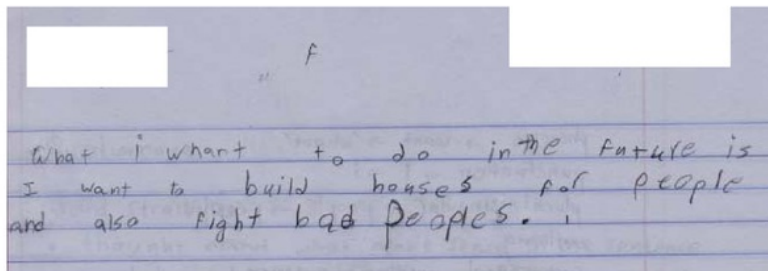


Figure 1. Pre-intervention writing assessment.



The lesson plan was implemented. It was implemented based on a book guidance entitled *Your Writing Assignment* by Dana Meachen Rau (2009). At first, the student read out loud a book entitled *Alfie and Betty Bug – A Lift-the-Flap Book* by Amanda Leslie (2001). He tried to understand the order of Alfie and Betty Bug activities since the morning, afternoon, evening, and night.

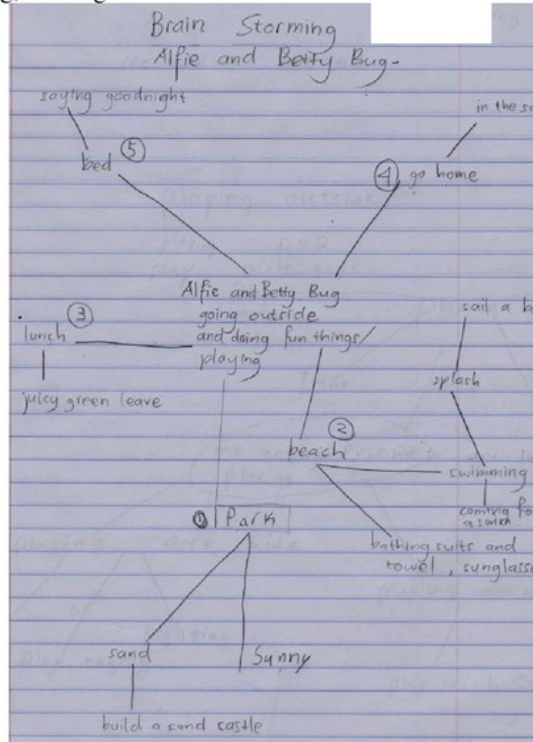


Figure 2. Semantic map in the intervention.

By understanding the sequence of the events in the book, he tried to make a semantic map of a story to brainstorm his idea about the story. After got the explanation in how to make semantic map, we made the map based on his oral instruction. I helped him to write his idea into a semantic map of the story. After we made the map, we put numbers as the sign of sequences based on the story. By that method, he learned the organization, sequence, and detail information of the story. Besides, he learned organizing ideas to make a story.

At last, he tried to identify the spelling, punctuation, and singular/plural noun in the story. He got the explanation about them. Besides, he tried to understand punctuation through a guidance punctuation book for children.

The student's post intervention writing assessment was measured using Five Developmental Writing Stages by J. Richard Gentry. The assessment was conducted by analyzing his writing about the most interesting experience. Before writing, he got an explanation on the theme and procedure to write the paragraph. We began the post intervention assessment by a discussion. The researcher tried to make the student remembered the instructional exercises he'd done before. Then, he began to write by himself.

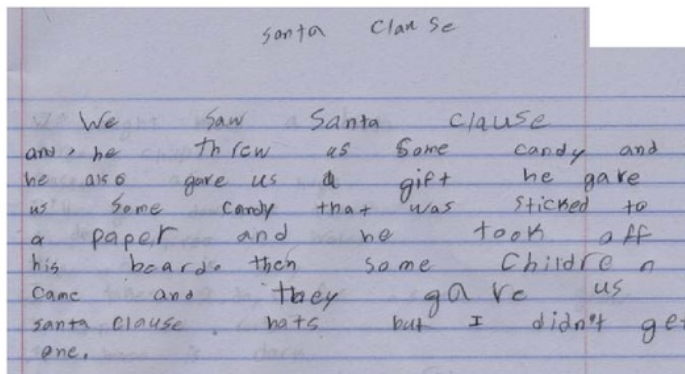


Figure 3. Post intervention writing assessment.

The analysis revealed that he maintained his writing level on Writing Stage. He wrote it independently, without the researcher's input during the process. He chose his own topic about Santa Clause. Most of the words he wrote using approximated spelling and conventional spelling. Only one word was wrong. He wrote 'many candy' for what should be 'many candies'.

CONCLUSION

After analyzing all pretest, posttest, and anecdotal records data, it appears that the student's literacy skills were developing in some aspects and remaining in his level for the duration of this case study. While he showed the greatest improvement in vocabulary, he still needed help in writing.

The student's writing began on Writing Stage and ended on the same stage. He maintained his focus in the central idea of the theme. He began with one letter to write the title and one sentence to build the paragraph. In both pre and post intervention assessment he used both approximate and conventional spelling. However in posttest, he made no phonetic spelling mistake as he did in the pre intervention assessment.

It was recommended that he worked on organizing his ideas before writing. It was better for him to work more on composing writing with main ideas and supporting details. He enjoyed making semantic map than making sentences to list the main ideas and supporting details. The researcher found that he loved fiction about high technology, namely *Star Wars*. That was a reason for us to provide books with the similar theme to help him got used to organization of supporting details in a paragraph. Besides, we could provide attractive colorful semantic map of a story with *Star Wars* pictures in it. It could stimuli his focus on the supporting details organization in a paragraph.

Another recommendation was there should be a writing activity after the student understood the story. Using a similar sequence of writing style in the story would let him to practice making similar paragraph organizations. It would gradually build his skill of in organizing paragraphs. In addition, a lot of reading and writing would make him aware of the correct punctuation for his writing.



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Influence of Jigsaw Type of Cooperative Learning Model towards Students' Learning Motivation in Circle Topic on Students Grade VIII Pangudi Luhur Junior High School Salatiga

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Abstract

This research is made because there are some problems in Pangudi Luhur Junior High School Salatiga especially in Grade VIII, those problems are students' learning motivation were low, teachers' learning models made students bored. The purpose of this research is to know the difference of students' learning motivation in mathematics when teacher used jigsaw type of Cooperative Learning Model. Paired Sample T-test is used for significant testing of differences of students' learning motivation in joining mathematics lesson before and after using jigsaw type of Cooperative Learning Model. From the analysis we got $\text{Sig.} = 0,014 < 0,05$. It means, using jigsaw type of Cooperative Learning Model can affect students' learning motivation in joining mathematics lessons.

Keywords: jigsaw type of Cooperative Learning Model, students' learning motivation, mathematics.

INTRODUCTION

Pangudi Luhur Junior High School Salatiga has heterogeneous students in each class, especially in Grade VIII. Some students in this class is active students, but active in a negative sense. They are active in speaking of things not related to the lessons, especially during mathematic lessons. Students do not care about the subject matter delivered by teachers in the classroom. The desire and motivation to join the mathematics lesson is very low, so the students chose to talk with friends beside them and make the classroom so noisy. If it keeps going this way, teachers will have difficulties in explaining the materials and at the end the learning objects cannot be achieved.

The motivation for someone to do something is influenced by the needs of the person as stated in Wæge in Hannula (2010). Students don't have conscious thought to learn mathematics and they do not feel "need" mathematic in their lives. Students think that mathematics is difficult, overwhelming and have confusing formulas. Teacher learning model which tends to be boring can affect students' motivation to learn in the classroom. To solve these problems teachers should find the right models in delivering the learning materials so students are motivated to learn, one of which teachers can use is jigsaw type of Cooperative Learning Model.

Jigsaw type of Cooperative Learning Model can enhance interaction between students with teachers and students with students, as well as mutually beneficial inter-group discussion. In addition, invite students to be able to solve problems relating to the subject matter of mathematics so that students can engage actively in the learning process. Teacher as a facilitator create an active, interactive, creative and fun learning with the jigsaw type of Cooperative Learning Model. Students in groups will learn to listen to ideas or the other opinions, discussing agree or disagree, offer or accept constructive criticism and students do



not feel overwhelmed when their work were wrong. The purpose of this process so that students could develop their thinking skills and could motivate students' in studying. As in the International Journal for Educational Studies by Ahmad and Jazuli (2009) who concluded that: (1) Mathematical communication ability of students who learn using jigsaw type of Cooperative Learning Model is better than those using conventional model of learning, (2) the students' main activities during the learning process using jigsaw type of Cooperative Learning Model are listening to teacher's or peers explanation, making necessary note, studying the student work sheet, discussing with their peers; while those of the teacher are monitoring students' activities, guiding and motivating.

With those stated above in mind, the problem of this research can be formulated as follows, "How does the use of models of the jigsaw type of Cooperative Learning Model towards students' motivation in a circle topic on Grade VIII Pangudi Luhur Junior High School Salatiga?"

REVIEW OF LITERATURE

1. Learning Motivation

Motivation is a kind of encouragement for people to do something. It is about why people do that and what the point in doing it. To find the answer for that questions, maybe we should find what kind of thing that support them (natural) and incentive or stimulus (external) that make them interested to do that thing. Maybe they are motivated by their instinct or their will to get satisfaction, or maybe because of their urge life needs. Motivation's word used to describe a encouragement, needs or will to do something specific or general and can be applied toward people behavior in every condition.

One of benefit in using motivation concept is to describe people general tendency in their efforts to reach certain achievement. Motivation often be seen as relatif stability of people private character. Some people are motivated to get their best achievement, some people are motivated to play along with other people and they express their motivations in many different ways. Motivation as a stable character is a different conception with a motivation to do something specific or special in a certain situation (Wuryani, 2002).

Wuryani (2002) in her book analyzed some professional opinions, such as: McClelland and Atkinson (1964) stated that the most important motivation for education psychology is achievement motivation, where people tend to fight to get their success or to choose an activity with "success or failed" orientation. Motivation in education world, Wendt, French, Thomas and Kestenbaum stated that students who have motivation for great achievement tend to be success in doing their task in school. On the other way, students who are not success tend to lose their motivation dan maybe they will take their mind off towards every activity (activities that could make them be more success).

There are some theories from some professional for learning motivation, such as: cognitive dissonance theory, Covington's self-worth theory, Edwards and Atkinson's expectancy theory (Wuryani, 2002) and Maslow theory (Purwanto, 1996).



a. Cognitive Dissonance theory

One of psychology theory that explain about people behavior by giving some reasons to show that they are positive is cognitive dissonance theory. This theory stated that people will be mad or not happy if their confidence are against behavior that inconsistent psychologically. To solve their unhappiness they change their behavior or their confidence or they will say that their behavior is true and said all the sensible reasons. In education situation, cognitive dissonance is often be used if students receive an unhappy feedback for their academic achievement.

b. Covington's self-confidence theory

According to Covington's self-worth theory (1984) is one of achievement motivation theory. It combines the motivation's components with "success and failed" perception. According self-word theory, an individual learn from people perception that people are judged from their perception. If people failed in doing something, people perception would say that they are not capable. Failure make them feel that they are not worth and do self-reflection. For the consequence, when those people are facing the problems that might make them failed, they will avoid it and make some strategy to cover themselves from their poor ability. Covington and Omelich (1989) found that students would feel ashamed with combination of hardwork and failed, and less ashamed with combination of less work and failed. Hardwork and failed is the most serious threat toward people self esteem.

c. Edwards (1954) and Atkinson (1964) Expectancy theory

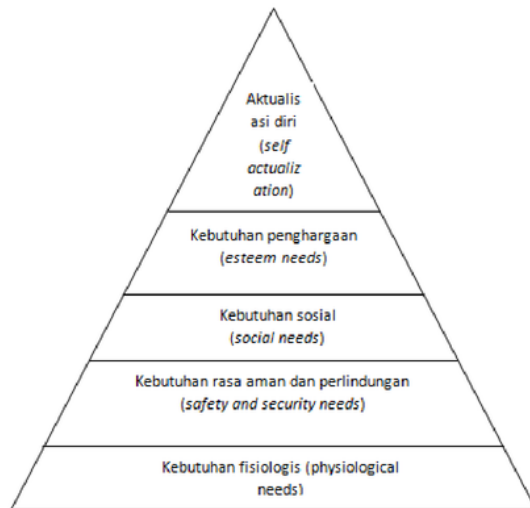
Typically, the relationship between needs and behavior is the individual responds to emerging needs. Various needs are competing to be fulfilled and reach the satisfaction. Individuals are often faced with how to choose a response to various needs. The effort of picking depends on the kind; it's what we called with expectancy theory. Edwards and then Atkinson formulate and develop the theories of motivation based on the following formula.

Motivation (M)	=	Perceived probability of success (Ps)	X	Incentive value of success (Is)
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This formula is called a model of expectancy or expectancy-valence model; because the theory is mostly depend on one's expectations to get the reward (prize). This theory says that human motivation to achieve something is rely on the forecasts that there is a chance for success (perceived probability of success or Ps) and the value they place on success (incentive value of success or Is). Atkinson (1964) added an important aspect to the expectancy theory, which is under certain conditions, if the possibility to be success is so great it can break the motivation. The most important implications of expectancy theory to education are a reasonable opinion that the tasks for the students should not be so easy and not so difficult.

d. Abraham Maslow's theory

Maslow argued that there are five levels of basic human needs. The five levels then used to be a key of the study of human motivation. The five levels of basic needs can be seen in the following figure:



Source: Maslow dalam Purwanto (1996)

Figure 1. Levels of Abraham Maslow's Theory of Basic Human Needs

(1) physiological needs. This requirement is a basic need, which is primary and vital, which concerns the basic biological functions of human organism such as the need for food, clothes, and shelter, physical health, etc.; (2) The need for safety and security as its safe, protected from harm and threats of disease, war, poverty, hunger, injustice, etc.; (3) social needs which includes among others the need for love, counted as a person, recognized as a member of the group, solidarity and cooperation; (4) the need for respect (esteem needs), including the requirement rewarded for achievements, capabilities, status, rank, etc.; (5) self-actualization needs (self actualization) such as the need to enhance the potentials, self developing into maximum achievement, creativity and self expression.

There are several measurement tools in determining the motivation of students, including: (1) Performance test is a instrument to obtain information about loyalty, sincerity, targeting, consciousness, duration and frequency of activity, (2) Questionnaire, to understand about persistence and loyalty, (3) Hold free to grasp information about the vision and aspirations; (4) achievement tests, to understand the information on learning achievement, (5) Scale to understand information about their attitude.

In this research refers to Abraham Maslow's theory on the fourth level which states that motivation is the need for respect (esteem needs), including the requirement rewarded for achievements, capabilities, status, rank, and so on, whereas for the measuring instrument will use a type questionnaires.

2. Cooperative Learning Model

Learning model is a pattern or specific learning steps which are applied to the purpose or the competence of the expected learning outcomes will be achieved quickly effectively and efficiently (Suyitno, 2006). Cooperative Learning Model is a set of teaching strategies designed to teach teamwork and interaction among students. Learning model in question is learning model that can improve academic skills, speech training, as well as inculcate



morality to students. Slavin in Solihatin (2007) said that the Cooperative Learning Model is a learning model where students learn and work in small collaborative groups where the members consist of four to six people, with the heterogeneous group structure.

According to Michaels in Solihatin (2007) stated Cooperative Learning Model is more effective in increasing motive and students' performance. According to Johnson & Johnson in Jacobsen (2009) stated that Cooperative Learning Model can be defined as a system of work or study in a structured group. Five basic elements of Cooperative Learning Model, is positive dependence, individual responsibility, personal interaction, cooperative skills, and group process. In addition there are five basic elements which form the basis of an effective Cooperative Learning Model the social interaction is applied to learning facilitation, students work together in groups to accomplish tasks, learning objectives express an aim which then leads the group-activity learning activities in a group, the teacher responsible for individual student learning, students develop skills of cooperation and also the goals of learning content.

Model of cooperative learning is a broader concept includes all types of group work include more forms of teacher-led or directed by the teacher. Generally considered to be more cooperative learning is directed by teachers, where teachers assign tasks and statements as well as materials and information designed to help students solve the said problem. Teachers usually assign a specific form at the end of exam, Suprijono (2009). Cooperative Learning Model consists of six phases, namely:

Table 1
Cooperative Learning Model Phases

Phases	TEACHER BEHAVIOR
Phase 1 : <i>Present goal and set</i>	Explain the purposive and prepare the students' be ready to learn.
Phase 2: <i>Present information</i>	Present the information to the students orally.
Phase 3: <i>Organize students into learning teams</i>	Giving explanation to students about the steps to make learning-team and help the groups to do transition efficiently
Phase 4 : <i>Assist team work and study</i>	Help learning groups during doing the tasks.
Phase 5 : <i>Test on the materials</i>	Testing students' knowledge about various learning material or groups presentate their work
Phase 6 : <i>Provide recognition</i>	Prepare method to acknowledge the individual effort and achievement, or towards groups.

Source: Suprijono(2009: 65)

This study refers to the theory of Johnson & Johnson in Jacobsen (2009) stated that Cooperative Learning Model can be defined as a system of work or study in a structured group.

3. Jigsaw

One type of Cooperative Learning Model is jigsaw type of Cooperative Learning Model. According to Arends in Sudrajat (2008) stated that the jigsaw type of Cooperative Learning Model is a type of Cooperative Learning Model that consists of several members of a group



and each members of the group responsible to control the learning materials and be able to teach the material to other members within the group. Jigsaw type of Cooperative Learning Model was first developed and tested by Elliot Aronson and friends at the University of Texas and then adapted by Slavin and friends at John Hopkins University Arends (Slavin, 2005). Jigsaw type of Cooperative Learning Model is based on the philosophical thought Slavin (Solihatin, 2007) "Getting Better Together" which means to get something good should be done together. Solihatin (2007) also explained that students is easier to find and understand the difficult concepts if students together to discuss the problems with their friends. The excess of jigsaw type of Cooperative Learning Model is to involve all students in learning and teaching others as well (Zaini and friends, 2007).

Suprijono (2009) stated the jigsaw type of Cooperative Learning Model see that success in learning is not merely have to be obtained from the teacher but also from other involved in the learning, for example: peers. Therefore, the learning achievement in this approach is not only determined by the ability of the whole person, but it would have a good result if done together in a small well-structured group. In contrast to the theory Siberman, Melvin L. in Jacobsen (2009) stated that jigsaw type of Cooperative Learning Model is a group exchange techniques, but there are important differences that each student learning and teaching something then when they are combined with the other students who learned the different material can form a coherent knowledge or skills.

Jigsaw type of Cooperative Learning Model Steps according to the Zaini (2007) is select material that can be divided into several segments or sections, divide the students into several groups according to the number of existing segments, each group gets the task to read and understand with the different materials, each group sends its members to other groups to deliver what they have learned in their own group, restore the class situation as usual and then ask any problems that cannot be solved in groups, give students questions to check student understanding.

In this study refers to Siberman, Melvin L. in Jacobsen (2009) stated that jigsaw type of Cooperative Learning Model is a group exchange techniques, but there are important differences that each student learning and teaching something then when they are combined with the other students who learned the different material can form a coherent knowledge or skills. On stage or step of learning with jigsaw type of Cooperative Learning Model refers to Zaini (2007), that is select material that can be divided into several segments or sections, divide the students into several groups according to the number of existing segments, each group gets the task to read and understand with the different materials, each group sends its members to other groups to deliver what they have learned in their own group, restore the class situation as usual and then ask any problems that cannot be solved in groups, give students some questions to check student understanding.

METHODOLOGY

This research is quantitative-descriptive research using statistic. The purposive of using descriptive research is to describe the class condition. Quantitative approach is used to generally see how far the students are motivated when teacher used jigsaw type of Cooperative Learning Model. This research took 58 students in 8 Pangudi Luhur Junior High School Salatiga as the population. With some consideration, this research used 28 students of VIIIIB class as the sample, consist of 14 male student and 14 female students.



To collect the data, this research used research instrument such as questionnaire and learning model. It used motivation questionnaire consist of intrinsic and extrinsic aspect, furthermore it can be seen in the table below:

Table 2
Motivation Questionnaire Explanation

No	Motivation aspects	Sub Aspects	Indicator	Positive	Negative
1	Intrinsic	1. Consciousness	1. Consciousness to study mathematics diligently.	1,39,41	11,30,51
		2. Like or don't like	1. Students' feeling when joining mathematics lesson.	12,21,52	2,40,42
			2. Students' feeling when doing mathematics' problems	3,31,43	13,22,53
		3. Will	1. Students' will to join mathematics' lesson.	14,23,54	4,32,44
			2. Students' will to get to know mathematics more.	5,33,45	15,24,55
			3. Students' will to do mathematics problems.	16,25,56	6,34,46
2	Extrinsic	1. Enthusiasm	1. Curiosity to get to know more about mathematics.	7,35,47	17,26,57
			2. Students' desire to get to know more about mathematics.	18,27,58	8,36,48
		2. Needs for appreciation	1. Needs for achievement appreciation	9,37,49	19,28,59
			2. Needs for appreciation for what student have done.	20,29,60	10,38,50

On this motivation questionnaire using Likert scale with four alternative answers. SS for very like, S for like, TS for unlike, and STS for very unlike. Each question on the questionnaire were scored from 1 to 4. For favourable item, SS were scored four, S were scored three, TS were scored two and STS were scored one. For unfavourable item, SS were scored one, S were scored two, TS were scored three and STS were scored four. Instruments of learning models are related to the teaching models when using jigsaw type of Cooperative Learning Model. For learning model this research used Lesson Plan. Analysis data technique in this research used Paired Sample T-test, to compare first results with the second results after the teachers applied jigsaw type of Cooperative Learning Model.

RESULTS

This analysis used Paired Sample T test as data analysis technique. The data were analyzed in the form of students' learning motivation questionnaire results before and after using jigsaw type of Cooperative Learning Model. This analysis used SPSS, with H_0 is student learning



motivation before and after using jigsaw type of Cooperative Learning Model is same, and H_1 is student learning motive before and after using jigsaw type of Cooperative Learning Model is different. This research chose 5% as level error, if score less than 0,05 then H_1 accepted. So there will be different before and after using jigsaw type of Cooperative Learning Model.

The analysis result with Paired Sample T test can be seen on this output below:

Table 3
Paired Sample T test Analysis Result

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 ANGKET_1 - ANGKET_2	-5.679	11.489	2.171	-10.134	-1.223	-2.615	27	.014

DISCUSSION

Motivation questionnaire are given to 28 students in the first period or before teacher used jigsaw type of Cooperative Learning Model, each questionnaire has 60 statements. Validation result for first period had 5 invalid statements. Those are statements about teacher appreciation to student that had no better work compare with the other student work. There are 24 students stated their disagreement, and 4 students stated their agreement. It means that the students in this class have motivation to get an appreciation because they didn't want to hand it over their friends, so the students have their effort to learn and exercise better. The other statements are about the boredom while joining the class, there are 4 students stated that they were bored when joining mathematic class. It means, the four students were not motivated in joining the class, because teacher still used conventional learning method.

On the second period or after teacher used jigsaw type of Cooperative Learning Model, there are some differences between the first period results. The second questionnaire has same aspect with the first questionnaire, has 60 statements and there are 4 invalid statements. One of the statements is about parent's give an appreciation when their children (students) got first rank in class. Nineteen students stated their agreements and nine students stated this disagreement. It means that the statements on the questionnaire are out of the validation indicator. Parent's giving appreciation for their children (can be money, praising, gift, etc) when they got first rank in the class, it can motivate them to compete with their friend to get first place or get better mark. There are 56 valid statements, one of those statements in about students feeling when they are solving difficult mathematic problem in group. There are 26 students stated their happy feeling when solving the difficult problem together in groups, but the other two have an opposite state. They disagree because they have no happy felling when solving the problems together in groups. From the students' statements, it can be described that they have motivation in learning together in groups.

Analysis result for paired sample T test can be seen in table 3. It shows that there are some differences toward learning motivation before and after using jigsaw type of Cooperative



Learning Model. It can be proved by checking the significant value. It stated that $\text{Sig.} = 0,014 < 0,05$. Therefore, H_1 accepted. It means that hypothesis about the differences toward learning model before and after using jigsaw type of Cooperative Learning Model is truly proved.

This research result showed that the hypothesis about the differences toward learning model before and after using jigsaw type of Cooperative Learning Model can be accepted. Before teacher used jigsaw type of Cooperative Learning Model, students had no motivation in joining mathematic less, but after teacher using jigsaw type of Cooperative Learning Model students are more motivated to join the lesson

CONCLUSION

Based on the result above in the process of mathematics learning using jigsaw type of Cooperative Learning Model, there are many things can be concluded such as: there are the differences toward learning model before and after using jigsaw type of Cooperative Learning Model; by using jigsaw type of Cooperative Learning Model in can't affect student learning model in Grade VIII Pangudi Luhur Junior High School period 2011/2012.

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Developing Comic for Physics Lesson Media with Electric Current Topic

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Abstract

This research aims to develop the comic with the topic of the physics of electrical current that can be used for students to learn. The students' responses to the comics as a media of learning and their understanding of physics concepts after reading the comics studied with action research methods class. When learning, the students read the comic book, then answer the questions that led them to find a solution to the problems associated with electric current. Results showed that students interested in learning to use the media to follow the comics, and they easily understand the concepts of physics. In this topic students are easy to imagine a picture of atoms, the electric current as electron flow and the electric potential so the students easy to understand the electric current.

Keywords: comic, media of learning, electric current

INTRODUCTION

Actually, comics that have banned in school are still admired by the students as the reading materials when they feel saturated. Many people had developed Physics comic commercially and there are many researches had resulted in learning design which uses general comics as well as Physics comic for the instrument to learning (Kusyanti and Kristiyanto, 2009).

In the physics text books that spread a lot, the contents are dominated by lots of long sentences, the formulas and abstract physics concepts. Students tend to be lazy to read it because it is not attractive and hard to be understood. Because it is hard to be understood, most of children repeat the physics concepts and physics formulas without really knowing the meaning. Thus, students do not really like Physics subject.

Students are more interested in reading comics than text books. It is because comic belongs to quite light reading materials because it is dominated by pictures and short sentences. Comics use daily language so that students will be more easily to learn. Therefore, comic are more interesting than text book.

Problem raised in this research is that how comic could attract students' attention to study and increase their understanding in electric current? This research is aimed to develop physics comic that could be used in physics learning which is the topic is about electric current.



REVIEW OF LITERATURE

Comic

Comic is media of pictures that is composed by panels in sequence which forms a narration story. Comic belongs to light reading and easy to be understood (Grimmsurae, 2011:3) than text book. It is because pictures in comic dominate the sentences. Texts in comic are always short, terse and clear. Using long text is not really necessary because the pictures will support the text. Generally, comic contains story of fiction. There is only a few numbers of comics which are designed to explain physics.

Indeed, it will really helpful if there is light comic that is easy to be understood, could explain knotty physics theories. Comic could illustrate micros things in electric current concept (example electron) and also form story that illustrate phenomenon of electric current in daily life. Little phenomenon often out of our consideration, but actually it is necessary to open the students' mind so that they will be more critical facing what happening is.

Electric charge

All things arranged by the atoms in the big number. The size is really small so it could not watched by bare eyes. Atoms arranged by the core that surrounded by electrons. The core set by protons and neutrons or just proton. Atom and its substance have been illustrated in comic pictures.

Proton is positive charge and electron is negative charge. Every neutral atom has the same number of proton as much as electron. If the thing has more electron than proton, that thing is charged negative. It also the opposite, if proton more than electron, the thing is charged positive. Naturally, between two differences types of electric charges will emerge force of attract. Whereas between the same type of two electric charges, will emerge repulsive force. The electric charge and its characteristics also illustrated in comic.

Electric current

Electric current is number of electric charge (Q) that flows through a section per time unit (t) (Halliday, 1984:183). Electric current flows on the conductor if there is electric potential difference connected to the conductor. Electric current will flow from the higher potential to the lower one (Hewitt, 1985:338). In solid conductor, that is free electrons (negative charges) which flow through the series (Hewitt, 1985:339). Electron current could not be watched by bare eyes, it been illustrated in pictures comic.

Lower potential has bigger number of electron than the electron in higher potential. Both potential will dispose to reach balanced, that is movement of the electrons from the node that oversupply by electrons to the node that lack of electron. So, the direction of electron is from the lower potential to the higher one. Electron illustrated into water and the different electric potential illustrated into two tank of water with different high of water. This illustration made students easier to be understood about the learning material. So, this illustration is needed to be drawn in the comic.

With the advantages of comic that had been talked in chapter before, comic could be used as good instrument. Physics comic could motivate students to read. If they have been motivate to



read, so automatically they read physics. By reading, students could learn physics concepts that including on comic. So, physics comic could be used as well as text book physics and could be used as media in class. In the school without good laboratory, studying still could be done in class with comic as the media.

Learning in class

Comic gifted to the students for the substitution of text book physics. The plot of comic appropriated to the learning plan. Learning opened by motivating students with founding a problem which related to the topic electric current. Next, reading and observe comic positioned on the main activity. From this activity, students will get knowledge about electric current concepts. With the knowledge, students are expected to solve the problem. So, reading comic positioned for the main activity to support students solving the problem. This is step by step discovery learning:

Numb	Step by step learning	Explanation
1.	Motivating	Students are motivated to learning
2.	Founding problem	Students found a problem that would been solving together
3.	Hypotheses	Students suggest their hypotheses to solving the problem with their logical reasoning
4.	Main activity	Students read comic about electric current and write down the principles that could be found in the comic
5.	Problem solving	Students using the principles to solving the problem
6.	Consolidation	Students tested to analysis if they are understand enough about the topic electric

Plot of the learning become the manual to plot comic there for students easily holding the learning.

With the plot is on the table above, teacher could build up interaction in class by requesting question related what students read on comic. Surely, if they have done to read comic, they must know the contents of comic. So, they will understand what teacher talk in class. If they understand what teacher has been talking, surely they could mix up in the interaction with teacher. So, learning became more interesting for students.

METHODOLOGY

2
Method has been used in this research is class action research with the type teacher as the researcher, whereas teacher done the research in the class (Kasbolah, 1998:122). The research constrain at the mark of the students. If their mark not yet including 70, comic will repaired and the learning repeat till the output reach the minimal mark (Wardhani dkk, 2008:2.13). The subject is 9 students of Public High School grade XI in Salatiga town. The instruments are comic contain electric current substances, learning plan with the matter electric current, test for analysis students comprehension after using comic as the media on learning and questioner to analysis students interest to the learning with that comic.



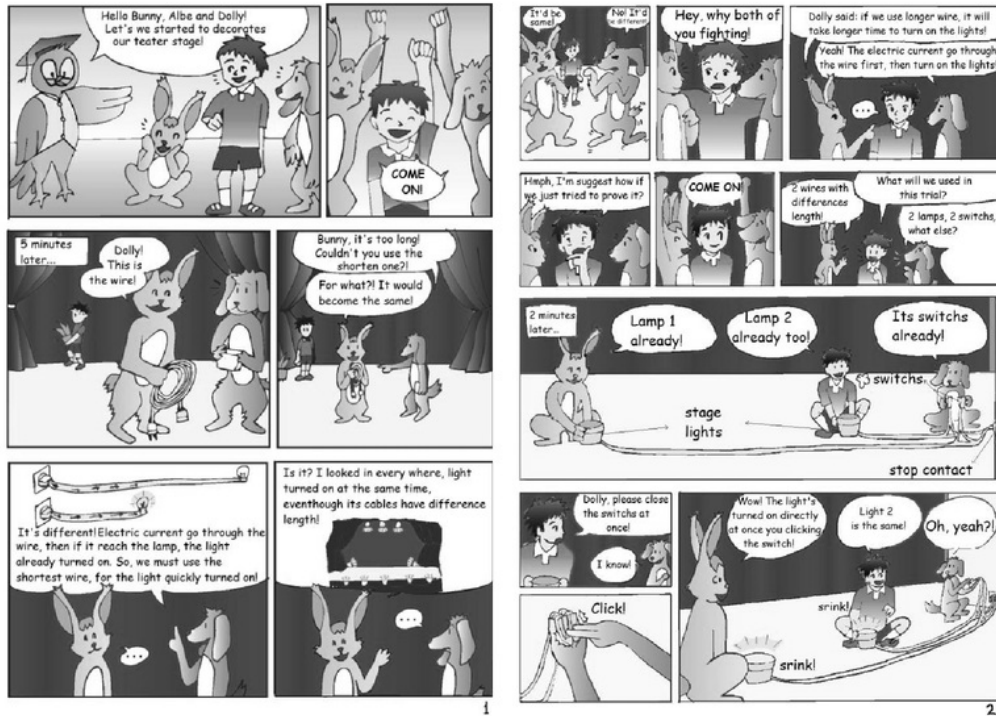
RESULTS AND DISCUSSION

Observing along the learning

Cycle 1

Motivation

Students showed 2 lamps that could shine at the same time even the distances from the source are different. Students had been gifted a task to read comic page 1-2 like the pictures below:



Founding problem

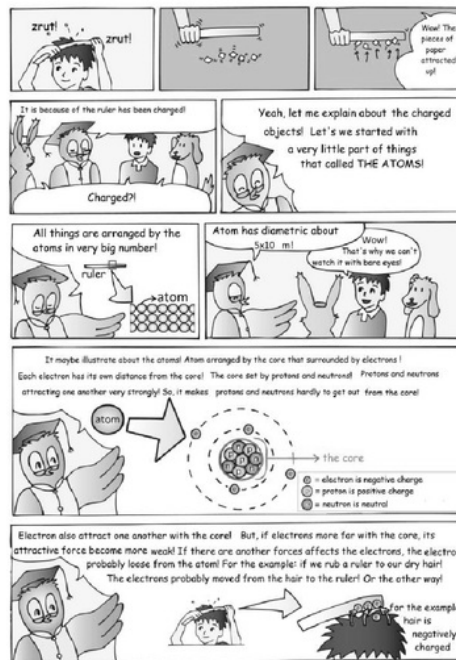
After read pages above, students were questioned: what is the problem that will we solve in this time? A student tried to answer that the problem is length of wires do not effects how long time lamp needed to shine. Another student tried to answer that the problem is why the different length of the wires do not effects how long time lamp needed to shine? There is a student whose quest what is the problem, but another student tried to answer her that in the comic page 2 written down the problem: why the lamps could shine in the same time even the length of the wires that connecting source is different? Most of students discuss it with their table partner. It shows that most of students had been motivated so it attracted them to answer the teachers' questions and discussed the topic with friends.

Hypothesis

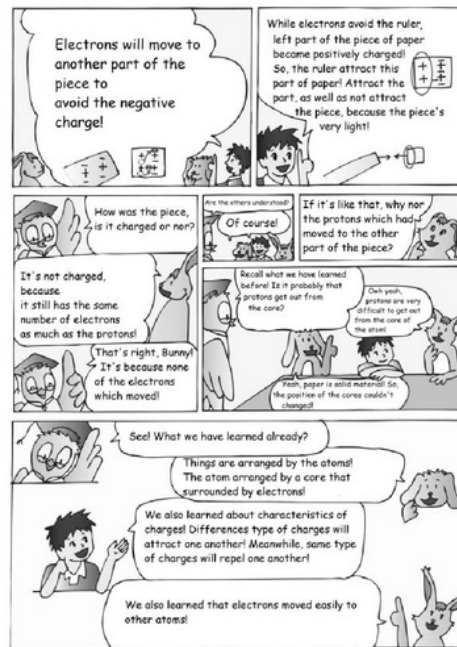
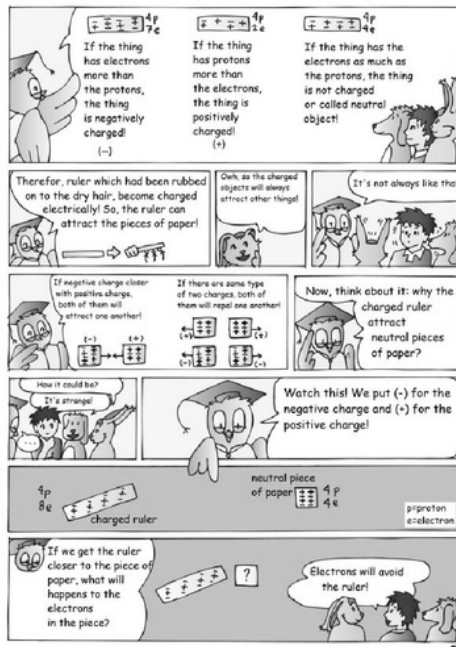
Most of students gifted their own hypothesis. Then, it had been written down on the table. It shows that most students actively tried to solve problem.

Main activity

To watch the hypotheses were right or not to solve the problem, students were assigned to read comic page 3-4 that contained about how the static electric had been made, like the pictures below:



Students were questioned: how the thing became loaded according to the comic? A student answered that mica ruler could be loaded if electrons moved from hair to ruler. The student was questioned: How electrons move from hair to ruler? Then, other student answered electrons could move by rubbed ruler to the dry hair. Students had been given a question: how is the comparison of electron number and protons? At the same time, most of students answered that loaded thing, has different number between electron and proton. Students were assigned to read the comic page 5 of force appear between n charged objects as follows:



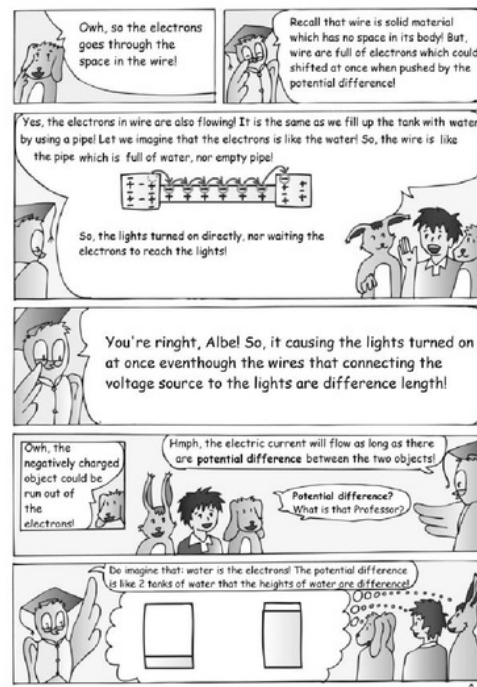


After reading the comic page 5, students were questioned: what type of force that will emerge if similar electrically charged objects brought closer? And: What type of force that will emerge if differences type of two electrically charged objects that brought closer? A student said if similar charged objects brought closer, repulsive force will emerge and if differences type of electrically charged objects will emerge attractive force. There are other students who mutter the same answer.

Students were assigned to read comic page 6, which contains about the position of the electric charge on a neutral object that approached by charged objects as above. When finished reading the comics page 6, students were questioned: how a neutral paper can be attracted by the negatively charged ruler? A student falteringly answered that electrons moved from right side of the paper so that the positive part attracted by the negatively charged mica. There is another student who saw the students had difficulties answer the question. So she tried to answer that electrons in the paper moved to the left side of the paper to stay away from ruler. So the right side of the paper was positively electrically charged and can be attracted by the ruler.

Students were questioned again: why electrons can move to another atom while the protons are very difficult? A student tried to answer: because attractive force of electrons and the core is so weak, so the electrons can be separated and moved to another atom. But the proton is very difficult moving to another atom, because the attractive force of neutrons and protons in core is very strong. Students were questioned again: Which parts of atom that could move easily to another atom? All the students seemed confused by this question. Students were asked more specific: the electrons, protons or neutrons? Most of the students replied in unison muttering electrons.

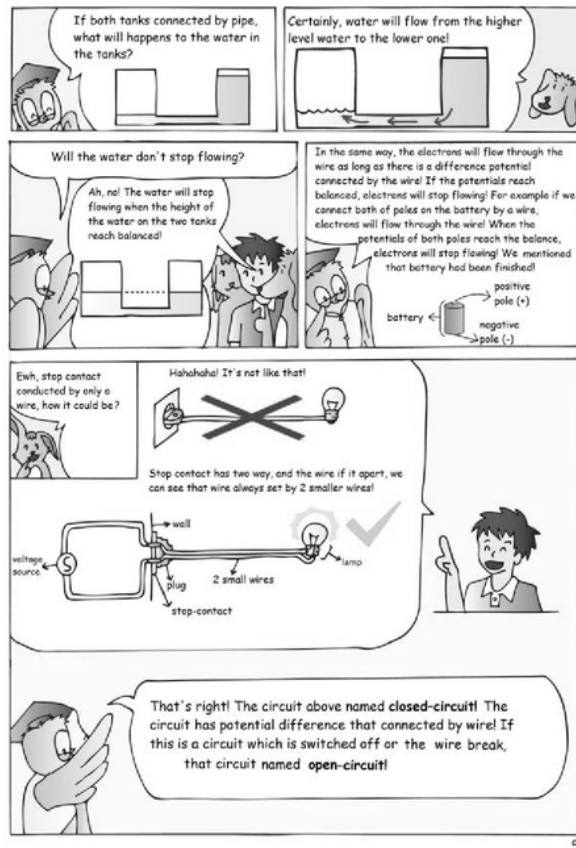
Students were assigned to read comic pages 7-8 that give definition of electrical current as follows:





After reading the students were questioned what happens if positively charged object and negatively charged connected? A student replied that the negatively charged object will give electrons to positively charged objects. Other students asked if they have a different opinion, but no one had different opinion.

Students were questioned: what is electric current? A student clearly answered a flow of electrons. Other students mumbled the same answer.

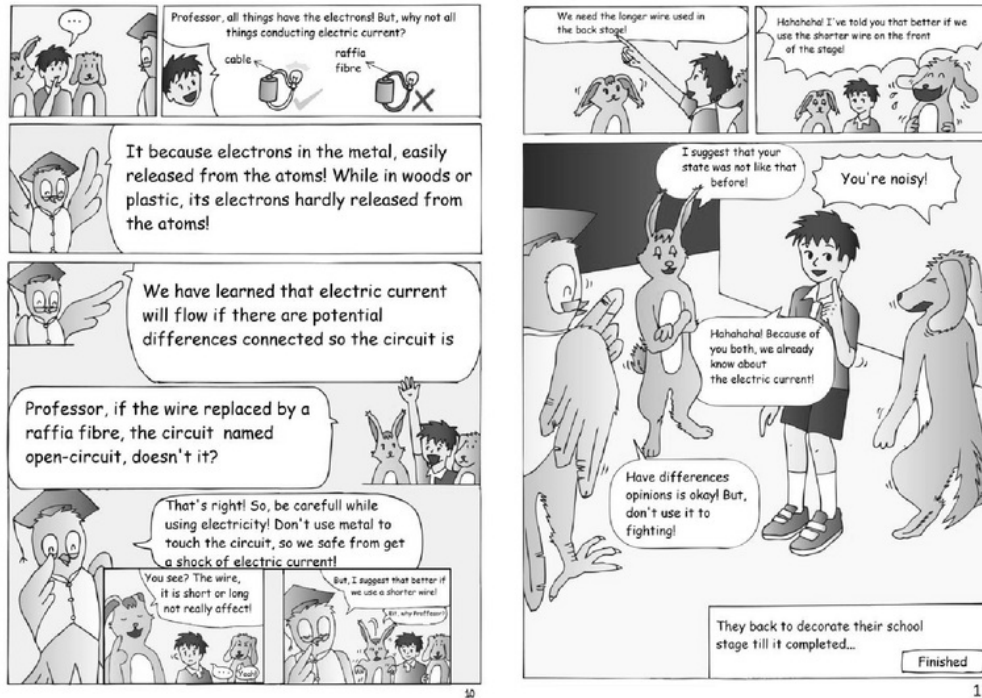


Students were assigned to read the comic page 9 that describes potential difference as shown in figure 5. After reading, students were questioned again: will electrons don't stop flowing? All students in unison said no. Students were asked: why the answer is no. All students were in silence for a moment, they looked discuss it with their table partner. Then a student answered: it is like the pictures on page 8, the electrons flow till the different potential become same potential.

Students were assigned to read comic pages 10-11 that describe what condition that make electric current flows as in figure 6. Students were questioned: whether all the objects can conduct electric current? Most of the students in unison said no. But there is a student answered: yes. Then the student who answered yes was asked: why all the objects can conduct electricity? The student answered: metal easily passed through by electric current, electric current flows in it in big number and electrons going through it rapidly. Meanwhile, material such as wood flow small electric current and transfer electrons slowly. Then the



student was assigned to read carefully comic page 10 and she was explained that not all things conduct electric current, only objects made of metal only. Then, another student told the student who had been mistakenly, that comic describes it that way. It showed here that students who answered: no, they had read the comic carefully. But the student who answered: yes, probability did not read the comic carefully.



In this main activity, most students actively answered questions and there were also discussion among students about the comic.

Solving the problem

Students were reminded to the problem: why the lamps can shine at once even though its distance from the voltage source is different? A student answered falteringly that lamps can immediately turned on because the cables are filled with electrons. Then another student, who saw that student difficulty answered, continued her friends answer that: when connected to a voltage source, the electrons in the wires can also be simultaneously shifted and turned on the lamps. According to this answer, the problem is not yet solved. Students were lead by another question: so if the electrons simultaneously shifted, what do relate to lamps that could shine in the same time even there are different distances from the source voltage to the lamp? A student then said that since the electrons move simultaneously, so the electrons in first lamp and the second one are also shifted simultaneously, so that it can turn on the lights at the same time. Then the teacher asked if anyone has another opinion? Initially all the students were silent. Then there was a student answering no one has different opinion. Problem can be solved well by learning using comic.



In this study, most students actively answered questions and there was good interaction between teacher-students and discussion among students about the material along the learning process. This indicated that students were enthusiastic in participating in learning.

Cycle 2

At cycle 2, there is the comic that replaced the page 6 as follows:



Page 6 given addition of statement that: if protons way out from the core, there is a nuclear reaction.

The students were assigned to read the comic pages 5-6 contents the position of the electric charge on neutral objects which are approached by charged objects. After reading, students are given a question: whether protons can move to another atom? A student answered proton can't move to another atom, if it moves, it must be a nuclear reaction. Then there is a student asked if all the objects could cause a nuclear reaction? Researchers said that all bodies do have the atoms in the core that nuclear reactions can occur. But if you just rub or pull objects by mica which is charged, it can't cause a nuclear reaction. Students continued asking: does that mean that the proton can't get out from the core if only approached by mica which is charged? Researchers said that what she said was right.

In the second cycle, students were also assigned to read the comic pages 9-11. The students were questioned: whether if there is a potential difference connected with a wire, it must be closed circuit? The students paused. Then a student said: yes. The other students also



answered: yes. The students were questioned again: is an electric current flowing in this cable? Students silence for a moment. Then there was a student who answered: yes, because based to the condition, electric current must be flows in the cable, because there is a potential difference connected to the cable so the circuit closed. When fitted with light, the current indicated by the shining of the light. So do not let the poles of the battery connected by conductor, as long the battery will run out because the electric current flows through the conductor without the appearance. The students were asked whether they had been understood the topic had been discussed already. All was silent, then all answered: they had.

At cycle 2, all students were attend the learning carefully, it looked that all the students read comic seriously.

Comic Function Analysis of Learning

Cycle 1

Motivation-Hypothesis-Founding Problem

At the beginning of the learning process all the students looked through the pages of comic, although they have not been asked to read it. This suggested that students interested in reading comic that had been distributed to them.

On the problem formulation, there was a student who formulating the problem correctly. There was a student who can't found the problem and her table partner showed her the problem within comic, so she became aware what the problem was. Other students had revealed problem on the other sentences that had the same meaning. So the problem within the comic can be understood by the students in accordance with the correct theory of physics. This is because the dialogue in the comic snapshot-clear, and comic illustration in accordance with the concepts of physics. This is consistent with the theory of making comics in which the dialogue is snapshot-clear and the supported images consequent to theoretical physics.

After founding problem, most of the students gave each hypothesis. This means students were active on learning process. It's because the comics were attractive, it was mentioned by most of the students on the questionnaire sheet that they filled up.

Main activity-solving problem

In main activity, students were assigned to read comic stage by stage and were questioned that lead them to conclude some physics concepts in the comic, which is that similar electrical charges repel, differences type of electrical charges attract, the electrons move easily through the atoms while protons can't, and electric current in wires are flowing electrons. After reading the comics, students can understand the principles and they were able to explain these concepts in their own words. It is because the comic book contains illustrations, such as illustrations of atoms, illustration of charged objects and illustration of flowing electrons. It's very easy for the students to imagine the atom, electric charge and electric current and potential differences. This proved that abstract concepts illustrated in a comic to make the concept more real to the students so much easier to understand.

After reading the entire contents of the comic, students can solve problem, the lights that are near or far from the source voltage can be lit simultaneously because the cables has been filled by electrons, so when the cables were connected to a voltage source, the electrons



vibrate simultaneously along the cable and mashing each other so that the resulting heat energy that moves as fast as lightning turn on wolfram, so with different cable lengths that were not so big, does not affect how quickly the lights on.

Reflection

After working on the test, it appeared that most students still think that the proton can move to other atoms. Whereas just electrons which can move to the other atoms. They were also thinking that no electric current flowing in the circuit if no lights illuminated on the circuit.

It is incorrect that the proton can move to another atom because comic do not reveal clearly that the proton can't move to another atoms. In the comic page 4 stated: "Protons and neutrons are very difficult to get out of the core because they strongly attract each other". It turned out that the statement is not given explicit information that the proton can't move to another atoms.

In a part of comic that contents about terms of flowing electric current, provided there are examples of electric current flowing in the circuit are connected by wires. Light on the circuit is just appearance of the current. Actually, there is an electric current flow in the wire even if there are no lights. But most students consider if there are no lights on, it means there is no electric current.

Based on the test results, students have not reached the minimal standard (see Table 2 column Students Value, p. 21). To improve learning, part comic about the characteristics of the protons and electrons were given additional information that is proton will not move to another atom, if the protons out of the core it means that nuclear reaction have been occur. In the part of comic contents terms of electric current, given the example of the electric current flowing in the cable that connecting the two poles of the battery.

Cycle 2

As comic repaired, a re-implemented learning had been performed. Learning is not repeated in full, but only repeat the part that students did not understand, that were (1) protons that can't get out of the core and (2) there was electric current flowing in the wires which connecting potential differences.

Learning began by assigning students to read the comic pages 5-6. After reading, students were questioned: whether protons can move to another atom? A student answered proton can't move to another atom, if it moves it means there was a nuclear reaction. Then, another student asked if all objects could cause a nuclear reaction? Researchers said that all bodies have protons and neutrons that attract one another in the core, it potentially emerge nuclear reactions. But if you just rub or pull the charged mica, it can't cause a nuclear reaction. Students continued their questions: does that mean that the proton can't get out of the core if only approached by charged mica? Researchers said that what she said was right.

Next, students were assigned to read the comic pages 9-11. They were given a second example of the battery poles that were connected by a cable. The students were questioned: whether the circuit closed if there was potential differences connected by a cable? The students paused. Then, a student said: yes. Many other students also answered: yes. The students were questioned again: is a current flowing in this cable? The students make quite for



a moment. Then there is a student who answered: Yes, because the terms of electric current qualified, that there was a potential difference which is connected to the cable so the circuit is closed.

At the end of the lesson, students work the test again. Most of the students answered correctly the same questions. This indicates that the comic section proton-electron characteristics and the electric current, initially need improvisation. So, the comic need to be improved.

Results and Analysis Answer Questions

Here are the test results of students:

Table 1

Students mark

Student number	Mark 1	Mark 2
1	50	70
2	60	70
3	70	70
4	100	100
5	60	90
6	80	70
7	60	80
8	90	100
9	70	70

Based on the table above, in cycle 1, only 55% of students who reach the exhaustiveness study. These results suggest that learning was less effective on the first cycle.

Comic corrected and a re-implemented learning had been performed. Based on the mark 2, the students have increased, 100% of students achieving exhaustiveness study. This indicates that comic improvements have been made the lesson more effective.

Results and analysis of questionnaire answers

The followings are the results of questionnaires of students. According to the answers in the table, we can see that lesson using comic appeal to most students. Most students also seemed enthusiastic along the lesson. But, there is a student who answered the lesson was not interesting, because basically the student do not like reading comics.

Visible in the learning process, students could answer correctly the leading questions till they found the conclusion to solve the problem. Based on the answers on the questionnaire sheet, it is because the comic made them easier to accept the lesson material. There is also more detailed answer that in comic drawn real pictures, so it is not difficult to imagine the concepts.

The student which was answered that lesson using the comic does not appeal, also got good grades. It because of her had pursued the entire process of learning.

Based on the answers, most of students have been able to understand the comic. There are two students answered yet understand all the part of comic and suggested that the language have been improved simplified. This means that the dialogue in the comic is too formal for students.



There is also a student who answered feel bored because many explanations is too long. This means that many sentences in the comic too long and should be shortened.

Based on the answers, most students said they were more motivated to learn physics after reading this comic and a few said no. It shows the comic has made students more interested in studying physics. Some students are not motivated because they had focused on their interest.

Using the comic in lesson in the classroom were making students interested in pursuing physics and even some of them are motivated to study physics more. It shows comic is one of good alternative media for physics lessons that could interest students to pursued.

Table 2
Student Questionnaire Answers

No.	Questions	Answers
1.	Is learning by using comic interesting for you? Why?	Yes because there is a real picture, so student don't need to imagines by their own thoughts that probably has difference meaning (1 person). It is attractive, because we can learn within playing (1 person). Yes, because it can better understand the matter (3 people). Yes, more exciting, is not monotonous (1 person). It is interesting because I am much easier to understand (1 person). Yes, because kids would rather read the comics (exclamation) (1 person). No, because they do not like reading comics (1 person).
2.	Are the entire contents of the comic can you understand it well?	Yes, I can understand (6 people). But can be boring at many parts (1 person). Yet (2 people).
3.	Which are parts of the comics that you do not understand it well?	In terms of language that is still stiff (1 person). Sentence (1 person). Part of the explanation is too long (1 person). All are understood (5 people). The final section (1 person).
4.	Do you have suggestions for this comic to be more easily understood?	Give a more object instances with explanations (1 person). Not good enough (4 people). More simplified language (3 people). Created ordinary (1 person).
5.	Are you more motivated to learn physics after reading this comic?	Yes (5 people). Nor (4 people).

CONCLUSION

Comic that was used in this study, have illustrated the abstract concept of electric current that have drawn in pictures of atoms, electrical charges in the matter, flowing electrons and illustration of potential difference, made students easily learn about electric concepts correctly.



This study shows that learning physics using comics could motivate students to pursue the lesson because they easily understand the abstract concepts of physics and the narrative that contains a story made the lesson not monotonic.

Suggestion

There still many abstract concepts of physics can be drawn into the comic, for example are lines of magnetic force, or direction of the force, impulse and momentum, the greenhouse effect and others. Hopefully in the future, a lot of comic artists will create comics with physical materials to support learning in schools, that not just entertaining but contains material that could help students understand the lesson.

In order to make comics more attractive and neat, comics can edited using the computer program such as Paint.net, Corel Draw, Adobe Illustrator or another program that can support. If using manual drawing techniques on paper, the comics can be scanned with a scanner which file conversion of scanning is formatted in PNG, BMP or JPEG that can be edited in the earlier programs.

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Efforts to Improve Results of Class X Student Majoring in Accounting B SMK Diponegoro Salatiga on the Material through a Linear Program of Type STAD Cooperative Learning Model

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Abstract

Now, paradigms of mathematics lesson tend to be boring and pressing students, as happened in the class X students majoring in Accounting B SMK Diponegoro Salatiga. Based on the observation before the study found students tend to be passive, resulting in lower student learning outcomes, especially on the square of material in equality 25.7% of students who finish edgearer than 65for minimum criteria and average is 54. Looking atthese problems, in order to improve student achievement outcomes required an action research model with appropriate learning. This action research uses a model of type STAD cooperative learning. Chosen as a model of cooperative learning cooperative learning model emphasizes positive interdependence, individual responsibility, face to face, the communication between members and the evaluation process. The study was conducted in two cycles. The first evaluation test cycle show that 62,85 % got the minimum criteria and average is 72,89, while the second cycle is 80% and average is 80,97. Based on the result showed that the model of type STAD cooperative learning can improve students learning outcomes X class B SMK majoring in Accounting Diponegoro Salatiga.

Keywords: STAD, student's achievement, cooperative learning type STAD, the linear program

INTRODUCTION

Mathematics is a field of study that is considered most difficult by students, because of the characteristics of abstract mathematics that leads to lower student achievement. Low yields due to study mathematics because mathematics is not only difficult, but is caused by several factors including the students themselves, teachers, learning environment, and learning models that are interconnected to one another. Teachers should apply the model of learning that involve students directly in learning activities. At the time of the teacher can not choose the right model of learning, will impact student achievement is not satisfactory. This happened in the learning of mathematics majors X class B SMK Accounting Diponegoro Salatiga, where the usual learning model is a model teacher use of conventional learning with lecture method. The low student learning outcomes demonstrated by the average value is still below the minimum criteria, which is 54 and a new completeness limit reaches 25.7%. Mathematics learning conditions need to be refined to improve student achievement. Efforts to improve this learning model is the determination of the learning model that uses the paradigm of learning and student-oriented.

One type of learning model is of type STAD Cooperative Learning Model. This learning model using the method of discussion groups, each consisting of 4-5 students with a diversity of academic achievement continued with the presentation of the work group. Active involvement in learning is expected to boost the productivity of students so that learning outcomes are expected to be achieved mainly in the linear program material. Based on the



above it can be pulled a goal of this research is to improve students' mathematics learning outcomes in a linear program for students majoring in Accounting B class X SMK Diponegoro Salatiga, 2 Semester Academic Year 2011/2012.

LITERATURE REVIEW

Student Achivement

Sudjana (2004: 14) defines the student achivement are a result of the learning process by using a measurement tool that is a test arranged in a planned, well written test, oral test and the test works. Learning outcomes are divided into three kinds: the skills and habits; knowledge and understanding; as well as attitudes and ideals, which each group can be filled with existing materials in the school curriculum. Dimyanti (2006) suggested learning outcomes are the results achieved in the form of numbers or test scores through the end of the student achivement of learning. Other definitions put forward by Ross (2003: 42) study is a result of changes in individuals who learn, not only of knowledge but also develop skills and appreciation of the individual self study.

Cooperative learning type STAD (Student Teams Achievement Division)

Model of cooperative learning is a learning model that prioritizes the groups as well as within it emphasizes cooperation. The purpose of cooperative learning model is the result of increased student academic learning and students can receive a range of diversity of friends and develop social skills (Anita, 2007).

According to Muslims, et al. (2000), cooperative learning is a learning approach that prioritizes the cooperation between students in groups to achieve learning objectives. Several types of cooperative learning by Trianto (2007), as follows: type of Jigsaw, the type of NHT (Number Heads Together), the type of TAI (Team Assited Individualization), and type STAD (Student Teams Achievement Divisions). Slavin, et al (1995) Cooperative learning type STAD cooperative learning is the most simple and can be used to provide an understanding of the material that is difficult concepts to students where the material has been prepared by the teacher through a spreadsheet or other learning tools.

Trianto (2007) says that the type STAD cooperative learning students are placed in learning teams consisting of 4-5 students who are mixed according to achievement level, gender, and ethnicity. Trianto also said, if the class consists of gender, race and background are relatively equal, then the only group formation based on the academic achievement of students.

Step by step type STAD Cooperative Learning Model

Trianto (2007), also noted the steps of type STAD cooperative learning. The steps of this cooperative learning type STAD is, consists of six steps as it is seen in table 2.1.



Table 2.1.
Step By Step Type Stad Cooperative Learning

Steps	Teacher activities
Step 1 Communicate its goals and motivate students.	Delivering all the goals achieved in in lessons learned and to motivate students to learn.
Step 2 Present or deliver the material	Explain the material to students with methods of lectures, demonstrations or through the reading material.
Step 3 Organize the students into groups to learn.	Explain to students what is the purpose formed in groups. Each consisting of a mixture of 4-5 students according to achievement level, gender, and ethnicity. If the class consists of gender, race and background are relatively equal, then the only group formation based on the academic achievement of students.
Step 4 Guide the group to work and learn.	Guiding the study groups when they are doing their jobs.
Step 5 Percentage and evaluation	Percentage of each group about their work and provide individual evaluation of the material being studied.
Step 6 Reward	Give appreciation as an aim to appreciate result learns individual and group.

METHODOLOGY

No.	Cycle Stages I			
	Planning	Action	Observation	Reflection
1	a. Together with teachers, analyzing the causes of the low value of the average student and completeness limits are reached where the average student is still far below the value expected by the teacher, which is 54 by the percentage was 25.71%. b. Observe the learning that teachers do in the classroom. c. Make the design of learning by using STAD. d. The material is determined on	Meetings 1: 2 x 45 minutes <i>Initial activities:</i> apperception in the form of greeting, attendance, and deliver the learning objectives. <i>Essence Activities:</i> a. Teachers deliver the material to draw on the system of linear inequalities two variables to determine the solution set. b. Teacher gives examples of questions. c. Teachers divided into 5 groups each consisting of 7 students. d. The teacher gives the group worksheets. e. Students discuss as a group to work on the	The learning process: a. Learning is done in accordance with the lesson study has been made. b. Classroom teacher is not controlled, it appears there was still crowded when students are learning takes place. Students in a discussion group: a. cooperation during the discussion groups is still low. b. The tendency of students still leave the task group on students who are considered smart in the group. c. They are fun to discuss things outside	a. Learning that good. b. Teachers can motivate students in learning. c. Teachers have not been able to create a classroom atmosphere conducive. d. The division has not been in accordance with the STAD group. e. The average value of 72.89 evaluations students with 62.85% completeness limit.



	<p>Cycle I is a drawing of two-variable system of linear inequalities to determine the solution set.</p>	<p>worksheet. f. Teachers provide opportunities for groups who will present the results of their discussion. <i>Final activity:</i> The teacher along with the students draw conclusions in the learning. Meetings 2: 2x45 minutes <i>Initial activities:</i> Apperception in the form of greeting and absenteeism <i>Essence activities:</i> a. Continuing the percentage of weeks ago. <i>Final activity:</i> The teacher along with the students draw conclusions in the study. <i>meeting 3: 50 minutes</i> test of cycle I.</p>	<p>the material covered.</p>	
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This type of research Classroom Action Research (CAR). CAR is composed of two cycles where each cycle consists of four stages in succession planning, action, observation and reflection. A cycle in CAR considered successful if the results of study on the cycle has met the minimum criteria set the school. Implementation of type STAD Cooperative Learning Model uses Minimum Criteria is 75%.

Subjects in this study is a class X student majoring in Accounting B SMK Diponegoro Salatiga by the number of 35 students consisting of 3 male students and 32 female students. Data collected by the written tests and observation. Written test of the assessment form is given to students to know the results of cognitive and observational study conducted on students in the implementation of active learning. The procedure of this study are as follows:

No.	Cycle Stages I			
	Planning	Action	observation	Reflection
2	a. Prepare lesson plans, worksheets groups, observation sheets and teachers and	Meeting 1: 40 minutes Initial activity: The teacher gives the motivation and apperception. Essence activities: a. Teachers deliver the material on the minimum	a. Learning is done in accordance with the lesson study has been made. b. Teachers have to create a classroom atmosphere	a. Learning that takes place is good. b. Students can be more active than



	<p>students about the evaluation of the second cycle.</p>	<p>and maximum values of the objective function. <i>b.</i> The teacher gives examples of questions.</p> <p>Activities End: Teachers along with students draw conclusions in the study. Meetings 2: 2 x 45 minutes Initial activity: The teacher gives the motivation and apperception Essence activities: a. Teachers form the seven groups, each group consisting of 5 persons. b. The teacher divides the group worksheets. c. Students discussing in groups. d. Teachers provide opportunities for groups who will present the results of their discussion Final activity: The teacher along with the students draw conclusions in the study. Meeting of 3: 2 x 45 minutes Initial activity: The teacher gives the motivation and apperception Essence activities: a. Continuing the percentage of weeks ago. b. Test cycle II. Final activity: The teacher along with the students draw conclusions in the study.</p>	<p>conductive. <i>c.</i> Students begin to actively ask the teacher. <i>d.</i> Students in a discussion group has been able to help each other among the members who have difficulties, as well as presenting in front of the class is better than 1 cycle</p>	<p>the first cycle. <i>c.</i> Classes are conducive learning takes place. <i>d.</i> The average value of 80.97 with the evaluation of students 80% completeness limit.</p>
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RESULTS AND DISCUSSION

Before the class action research was conducted, made the observation and data collection of initial conditions that will be given class action, the class X class B SMK majoring in Accounting Diponegoro Salatiga consisting of 35 students. Discussions with teachers and a survey to reveal the initial conditions of the class that the object of this class action. Based on the discussion, it was found that the teaching is done, teachers still use the conventional way of teaching the teacher as a center of learning and teaching is taught using the lecture method. Starting from the initial condition is the study of this action to implement the type STAD Cooperative Learning Model on a linear program of learning materials. CAR is composed of two cycles where each cycle consists of three meetings.



1. Results Learning Cycle 1 and Cycle 2

The results of studying mathematics class X B SMK Accounting Department Diponegoro Salatiga has not shown the desired results. A total of 26 students or 74.29% have not been thoroughly studied or have not reached minimum criteria set from at 65, while nine other students have achieved learning thoroughness. The average value of the class of 54. The highest value of 100 and the lowest score is 18.

At the end of cycle 1, the teacher gives a lesson at the end of the test material to draw graphs and determine the set of settlement produce an average value of 72.89 with a thoroughness grade 62.85%, whereas at the end of cycle 2 meeting, the teacher gives the material a final test to determine the maximum and minimum yield the average value of 80.97 class with 80% completeness.

2. Reflection of each cycle

Student learning outcomes are reflected from the end of cycle 1 test results showed that 62.85% of students have achieved learning exhaustiveness, while the indicator of the success of this learning improvement is 75% of students completed the study reached a value of minimum criteria from at 65. Based on these results we can conclude that a corrective action learning cycle has been able to increase the number of students who completed study of 9 students or 25.71% to 62.85%, but remedial action has not been completed because of the cycle I have not met the limit of completeness.

Student learning outcomes are drawn from the results of the final test in cycle 2 showed that 80% of students have achieved learning exhaustiveness, while the indicator of the success of this learning improvement is 75% of students completed the study reached a value minimum criteria set from at of 65. Based on the results of the final test in cycle 2 can be concluded that the improvement of mathematics teaching using learning type STAD model has succeeded in improving student learning outcomes in mathematics courses linear program material in class X B SMK Accounting Department Diponegoro Salatiga.

The results of the tests in Cycle 1, which consists of three meetings and test scores in Cycle 2, which consists of three meetings on the mathematics describing the results of studying the material linear program. The results of studying mathematics students in Cycle 1 and Cycle 2 is as follows:

Table 2

Comparison of results between the Mathematics Learning Cycle

No.	Information	Pre Cycle		Cycle 1		Cycle 2	
		Total (students)	%	Total (students)	%	Total (students)	%
1	Pass	9	25.71%	22	62.85%	28	80%
2	Not Pass	26	74.29%	13	37,15%	7	20%
3	Maximum value	100		100		100	
4	Minimum value	18		25		60	
5	Average	54		72,89		80,97	



Clarify the completeness limit comparisons of student learning for pre-cycle, cycle 1 and cycle 2 can be seen in Chart 1.

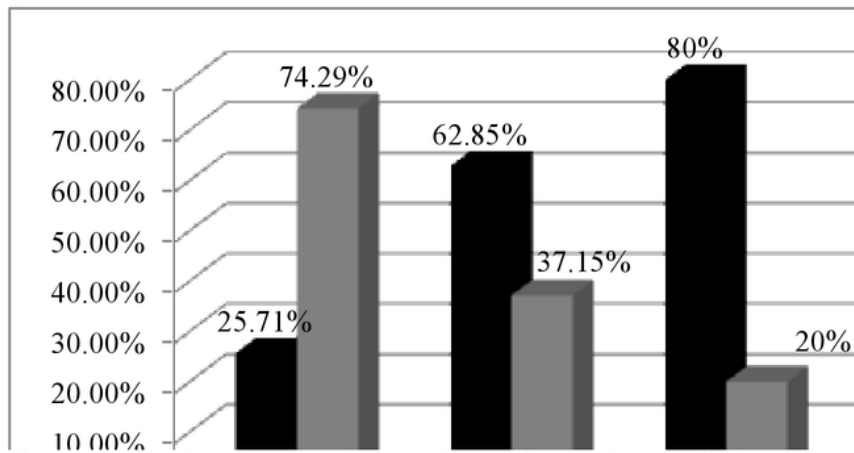


Chart 1: Comparison Between the Learning Cycle completeness limit

Based on Table 2 and Figure 1 above it can be seen that the mean and the completeness limit learning to cycle 1 increased compared to pre-cycle. In the cycle I have not reached the limit of completeness, it is done cycle 2, both the mean and the completeness limit students' higher than the pre cycle 1 or cycle. Cycle 1 conducted in 3 sessions. Applied learning model is a model of type STAD cooperative. I cycle test results are the highest values of 100 and the lower 25. The number of students who achieve exhaustiveness study 22 students or 62.86% of the 35 students and students who have completed 13 students or 37.14% of the 35 students, with a minimum completeness criteria of 70 and the average was 72.89.

In the second cycle executed in three sessions. Cycle II was held for the improvement of cycle 1. Learning model that is used is still the same, namely a model of type STAD cooperative. The results of the test cycle II the highest value 100 and the lowest score of 60. The number of students who achieve exhaustiveness study 28 students or 62.86%, and students who have completed 13 students or 37.14% with a minimum completeness criteria of 70 and an average of 80.97. Performance indicators in this study is 75% and 80% of the 35 students completed, then in the second cycle of action research has been successful.

Model of type STAD cooperative learning can improve student learning outcomes and the percentage of completeness of student learning. In the pre-cycle, the students achieved a mean value of 54 with the percentage of completeness of 25.71%. Therefore, to improve mathematics learning during these last it is applied to a model of type STAD cooperative learning materials, especially in the linear program. Having given the application of measures of type STAD cooperative learning model for 2 cycles then compared with the pre-cycle conditions, the results obtained in cycle 1, the learning outcomes of students increased to 72.89 percent completeness and to learn rose to 80.97. On this first cycle, an increase in learning outcomes and the thoroughness of learning. This proves that the students have adapted the model.



CONCLUSION

Based on the results of research and analysis conducted can be concluded that the use of models of type STAD cooperative learning can improve student learning outcomes X class B SMK majoring in Accounting Diponegoro Salatiga on linear program material. Improved student achievement can be seen from the development limit of completeness of 25.7% increased to 62.85% and up to 80%. The mean value of 54 students increased to 72.89 and then rose to 80.97 in cycle 2.

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The Development of Electronic Multimedia Teaching Materials with Macromedia Flash 8.0

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Abstract

The advances of technology happen so rapidly and they have an impact on people's lives. The impact also approaches the education world which is computers and the Internet are used to become a media of learning. This utilization facilitates the students to study and get the information in a short time. This condition is also done by SWCU through the media of E-learning which is Flexible Learning. But the learning models are not all equipped with teaching materials to facilitate student learning. The prepared materials are still dominated by moving the books in electronic form (file). The purpose of this research is to develop electronic multimedia learning materials with macromedia flash 8.0 to the basic concept of mathematics course in online Flexible Learning.

This research is a research development. The stages of development is done in four phases, namely: (1) the needs analysis phase, (2) the design phase of the development model, (3) the development phase and evaluation, (4) dissemination stage of the final product. The data collection techniques use the expert judgment and trial products. The instrument used was an expert validation sheet, closed questionnaire responses of students to the use of instructional materials in teaching, an open questionnaire to provide feedback about learning and teaching materials used, and also the test questions to see the impact of learning is used.

These results indicate that the multimedia-based on electronic teaching materials with Macromedia Flash 8 have a good category in terms of material and media. These materials can help facilitate student learning about the system of linear equations in three variables. The trials showed that students are getting more excited in learning math. Students more understand easily about the material because of the help of animation, video, color and attractive appearance. By using this help of text, audio, and video, students can be able to study more independently, so that teaching materials are suitable for being used as a self-teaching materials that can be used everywhere and students can learn that any time.

Keywords: electronic learning materials, multimedia, macromedia flash 8.0, mathematics

INTRODUCTION

The advances of technology happen so rapidly and they have an impact on people's lives. One of the effects is also occurred in education world by using computers and the Internet as a medium for learning. Computers and internet can make the students easier to make the task, saving time even further get more information as a learning resource. This makes students receive and obtain quickly the information, especially the course material and lessons.

These technological advances make the media and learning resources to be varied and interesting. Not only text and pictures but there are also audio and video animation, so a concept can be understood easily. The presentation of information done in several ways and forms that are often called multimedia. Technically, multimedia is not a new thing, because the integration of text and pictures have been widely applied in many applications. Multimedia can be used to support management processes at various organizational levels. The development of multimedia need authoring tools like Adobe Premiere, Macromedia



Director, and programming using a programming language that became part of the authoring tool, or programming language used in general (Ariesto HS, 2008).

With the authoring tool, interactive multimedia can be developed, where the animation is displayed in accordance with the results of mathematical and logic operations. One of the Authoring tool that can be used is Macromedia Flash 8.0 that has the ability to develop almost all multimedia applications. The hoped with this presence will facilitate the students to learn and get information (Ariesto HS, 2008).

The generation of electronic multimedia teaching material with Macromedia Flash 8.0 is also required in mathematics courses in S1 PGSD Studies Program to facilitate the delivery of content and student understanding. In addition, the making of electronic multimedia teaching materials background is the presence of mathematics as a knowledge that connected each other so that the misunderstanding in a concept will also be a misunderstanding concept in further (Cahya Prihandoko, 2006).

Mathematics also provides a positive contribution to the achievement of smart and dignified society through critical and logical thinking (Suminarsih, 2007). Under these conditions, the mathematics was chosen to be one of the subjects given in the third level of education in Indonesia, namely basic education (primary school and junior high school), and secondary education (senior high school). According to the Department of Education cited by Suharno (2004), mathematics that provided at primary level to secondary level is also called the mathematics school.

In fact, the learning of mathematics at S1 PGSD study programme is still rely on old ways or mechanistic way. This study relied only the explanation of the lecturers and exercises conducted by students. Learning requires students to do less active in learning, they tend to accept and passive. There are some who already utilize the learning of ICT (e-learning) that is Flexible Learning, but that is not maximized yet. Teaching material available has been still dominated by text and images only. Learning is not so interesting though it has already use the computer and the internet as a media and learning resources.

To overcome this problem, this research will try to developed the electronic multimedia teaching material with Macromedia Flash 8.0. These materials will be packaged in a CD that can be used by the students when they learning on campus or taken home to learn at their own home. These materials will be combined with the Flexible Learning as a means of online learning activities for the course Basic Concepts of Mathematics for the students of S1 PGSD FKIP institution. This learning activity will be held in the Satya Wacana Christian University's computer laboratory.

REVIEW OF LITERATURE

Electronic Multimedia Instructional Materials

The words electronic multimedia learning materials consist of two words, namely electronic materials and multimedia. Electronic teaching material is any material that used to assist teachers in implementing the teaching and learning activities so that students can experience the learning process and packed in electronic form (Andi Sapta, 2009). Multimedia is media that combine two or more media elements consisting of text, graphics, images, photos, audio, video and animation that are integrated. Thus the electronic multimedia teaching materials can



be defined as material that is packaged in an electronic form to assist teachers in implementing the teaching and learning activities so that students can experience the learning process.

Macromedia Flash 8.0

1. Understanding Macromedia Flash 8.0

Macromedia Flash 8.0 is one of Authoring tool that can be used to develop multimedia applications. Macromedia Flash 8.0 has features that provide the need to create animations and presents a dynamic and communicative animation. Macromedia flash 8.0 can displays an animation that can attract students / learners in following the process of teaching and learning activities (Ariesto HS, 2008).

2. Basic Concepts of Flash 8.0 Animation

Animation illustrates the moving object to make it look alive. Creating animation means moving images such as cartoons, paintings, writings and others. Animation has become popular since television media began to present moving images from camera transkription as well as the work of an animator. Animation is very good for presentations, modeling, documentation and so on. The films of Walt Disney animated cartoon that has been famous in the world a few years ago, still preferred by people (Ariesto HS, 2008).

3. The technique of making Flash 8.0 animation

Working techniques of animation has been changed along with the development of computer technology. Advance of making the animation is done by creating images that are combined so it could be a moving picture. To make a duration of animation requires the number of images (frames). The number of frames per second (frames per second / fps) is a unit that will produce the quality of animation. The more frames per second, the better animation quality resulted. Efficiency of animation work has been done since the introduction of cell animation technique (Celluloid sheet, a kind of transparent paper).

The basic idea of the cell is an image created for a single frame. Small changes made in subsequent frames, until the meaning the change is a keyframe. Animation is formed by the frames between two keyframe called in-between animation, usually created by a special animator. Cell animation techniques being the basic manufacture of all animations. With computers, which need to be determined is the keyframe, while the frames of which will be completed by computer (Ariesto HS, 2008).

4. Animation in Flash 8.0

Multimedia consists of two categories, namely linear and non linear (interactive). Non-linear movie can interact with other web applications via the click of a navigation button, form filling etc.. Web designers create non-linear movie by making the navigation buttons, logos animation, form animation with sound synchronization. Flash movie is a graphics and animation for web sites that are vector graphics with small file size, so it can be loaded in a short time. Basically, animation consists of vector graphics, but it can also be equipped with a bitmap and sound. Flash movie can be run with Flash Player through a browser or on in a



stand alone application. Flash can be used to create interactive animations, where visitors can enter the data, then Flash evaluates and displays the results (Ariesto HS, 2008).

5. Tools in Flash 8.0

Before starting to learn Flash, please note some terms used in Flash, as well as how to use rules. Toolbox contains tools for working with each icon function. Toolbox consists of four parts, the tools, view, color and options.

TOOLS contains functions to draw, select, create text, paint, remove, and create a path. Tools consists of several icons for drawing, namely:

- Pencil Tool → used to draw like a pencil function
- Pen Tool → to draw a part like a rectilinear and curved lines
- Line Tool → to draw a straight line
- Oval Tool → to draw a circle
- Oval Tool → to draw circles and ellipses
- Rectangle Tool → to draw a box
- Brush Tool → to draw using a brush

VIEW contains functions for displaying images

- Zoom Tool → to zoom in and out
- Hand Tool → to move the image

COLORS contain functions for coloring

- Stroke Color → to define the outline color in the picture
- Fill Color → to coloring the images.

OPTIONS contains other options to make variations on the functions of the tool and view. Eraser tool when clicked, will appear Eraser mode, the Eraser Shape and Faucet, with many of the following options.

Mathematics and Mathematics Learning

The term Mathematics comes from Greek, which means *manthenien* or *mathein* that the meaning is studying. The word Mathematics allegedly closely associated with the word Sangsekerta, medha or widya which means intelligence, or intelligence discovered (Sri Subariah, 2006:1). According Rusefendi (1993: 27-28.0) mathematics was organized from the mathematical elements that are not defined, definitions, axioms and postulates are substantiated, so mathematics is also called a deductive science.

Thus it can be said that mathematics is a science that studies the abstract structure and pattern that exist within it. It means that learning mathematics is essentially learning concepts, structural concepts and look for the relationships between concepts and structure.

So that learners can understand the concept of math should be taught in the order of pure concepts, followed by the concept of notation, and ending with the concept applied. In order to study the mathematical structure well the refresentation begin with the various concrete objects. For example, the child will more understand quickly the meaning of objects when it presented with various forms and types of objects or in other words that the objects will be observed must have a variety of type.



The steps that can be done by the teachers of mathematics in mathematics learning are as follows:

- a. Introduce the concept of mathematics through concrete objects.
- b. Add to and enrich the experience of learners.
- c. Instill the concept through the kind of game.
- d. Examine the nature of shared or discriminate the types and kinds of math concepts.
- e. Applying the form of symbols.
- f. Applying the concepts (structure) of Mathematics formally until the axioms and propositions based on the experience of learners.

Teachers in implementing the learning of mathematics are expected to underlie the learning approaches appropriate, include:

- a. Learners should use concrete objects and make abstraction of the concepts.
 - b. The material to be taught must have something to do or related to those already studied.
 - c. Change the atmosphere in an abstract to the concrete use of symbols.
 - d. Mathematics is a creative science therefore it should be taught with the science of art.
- So learning mathematics is a learning to organize the learners ability to think, reason, solve the problems, communicate, making relation between mathematics in to the real state of matter.

METHODOLOGY

This research is develop² research. The target of this research is to produce multimedia teaching materials using Macromedia Flash 8.0 for the Basic Concepts of Mathematics course materials Systems of Linear Equations in Flexible online Learning. ²he development of teaching materials refer to the Borg & Gall stages of development (1983), Nana S. Sukmadinata (2007), Dick & Carey (2005). Based on the stages of development is simplified into four stages, namely: (1) requirements analysis ph², (2) the model of development design phase, (3) development and evaluation phase, (4) dissemination of the final product phase.

Data collection techniques using expert assessment and product testing. The instrument used was an expert validation sheet ²covered questionnaire about the responses of students while using that teaching materials, an open questionnaire to provide feedback about materials and their utilization, and also test questions to see the impact of the uses of that learning material.

Data analysis for electronic teaching materials that are made through the validation and testing by calculating the scores obtained to assess the quality of the product. The scores criteria is using the scale of 1-5 (score 1 for very less, score 2 for less, score 3 for enough, score 4 for good, and the score 5 to very good) and qualitative data related to the student assessment data related to the use of electronic teaching materials in learning. Score of qualitative data is converted into quantitative data using a reference conversion using Likert Scale (Suharsimi Arikunto, 2005).

DISCUSSION

A. Development and Expert Assessment Phase



The development process of electronic multimedia teaching materials for online learning in the Flexible Learning about the system of linear equations in three variables through the stages as shown in Table 1 below.

Table 1
The development process of electronic multimedia teaching materials with macromedia flash 8.0

No	Activities	Result
1	Requirements analysis	<ol style="list-style-type: none"> 1. It was found that the learning e-learning materials are still using text materials 2. Students feel tired and bored using text materials 3. Requires instructional materials in another form
2	Product Design (The Development Model)	The results of the product design: <ol style="list-style-type: none"> 1. Story Board order of the displayed material and shape animation that will be raised 2. The video that support the materials 3. The picture that support the materials 4. The music to support the teaching materials
3	Development and Evaluation	The Development of teaching materials done by using Macromedia Flash 8.0 software with the name of electronic teaching materials. Made in four (4) science with a minimum of every sciene consists of five layers. Teaching materials that have been made was asses and trial to the expert and the students
4	Final Stage	The results obtained expert validation of the criteria of teaching materials with the categories of good and ready for use with the revisions pass first.

After the development of teaching materials is completed then tested by the experts to see the quality of the teaching materials that have been made. Expert who carried out the test results can be seen in Table 2 below.

Table 2
Recap the results of evaluation of teaching materials by experts

Aspect	Value	Category
Material	3.7	GOOD
Media	4.18	GOOD

B. Trial Result

Teaching materials that have been assessed by experts then being tested online. The results are listed in Table 3 below.



Table 3
Recap the results of evaluation of teaching materials by students

No	Trial Types	Value	Average	Category
Material Aspect				
1	One-To-One Evaluation	4.13	3.98.0	GOOD
2	Small Group Evaluation	4.05		
3	Field Group Evaluation	3.75		
Media Aspect				
1	One-To-One Evaluation	4.04	4.14	GOOD
2	Small Group Evaluation	4.51		
3	Field Group Evaluation	3.8.08.0		

These results show that the electronic multimedia teaching materials that have been developed was in good category. This is shows that the materials are either used in the study because of the material in accordance with the curriculum, the animation is made to explain the material being studied, the material easy to understand making it suitable as a standalone teaching materials so that students can study independently.

Viewed in terms of media, the teaching materials are also well used as a composition of attractive colors, clear text and other facilities, can be used well, the navigation buttons can be used easily, the content of the material are easy to read and understand, and in accordance with existing theories.

C. Observations and Student Responses to Learning Questionnaire Result

As the preliminary design of instructional materials that will be used in basic mathematics classes of systems of linear equations three variables material. Here are the results of observations of the learning activities that have been made.

Table 4
Observations of Learning Activities

No	TEACHING AND LEARNING ACTIVITIES	CATEGORY	
		YES	NO
1	Provide an explanation about the learning activities that will be implemented using Flexible-Learning and Electronic Multimedia Instructional Materials	V	
2	Explain the learning objectives to be achieved to provide motivation to the students and guidelines how to use of electronic teaching materials that have been prepared	V	
3	Give the formulation of the problem in the first appearance in Flexible-Learning as a reference to the activities and focus of the materials to be studied	V	
4	Lecturers direct the students to open electronic teaching materials that had been prepared in Flexible-Learning	V	



No	TEACHING AND LEARNING ACTIVITIES	CATEGORY	
		YES	NO
5	Lecturers lead the student to carry out the exploration	V	
6	Lecturers together with the students do the questions and answer activities related to the results of exploration that had been done by the students	V	
7	Lecturer with the students discuss the material that has been given based on the results of exploration and discussion	V	
8	Lecturer with the students making conclusion about the learning that has already done	V	
9	The students do the evaluation that has been provided in electronic materials	V	
10	Lecturers delivering action plan that will be implemented in the next meeting	V	

The results in Table 4 show that learning can be implemented properly. Teaching materials can be put to good used.

Learning activities was attended by 36 students. To see the response of the students to the learning process can be seen from the eight statements that represent the response of students towards learning. Students responses can be seen detailed from the following explanation.

Description:

SS = Strongly Agree

S = Agree

TS = Disagree

Table 5

The results of the questionnaire about the response of the students about the learning process

No	Statement	Total Score	Each of item Averages
1	I love math just do	148.0	4.11
2	I want to know more about mathematics when learning mathematics as we've just done	144	4.00
3	I was excited to learn mathematics	132	3.67
4	I have more freedom to learn mathematics with this kind of learning	120	3.33
5	I am much easier to learn with animations that explain the concepts given in Mathematics	121	3.36
6	I can easily understand the material in this learning Mathematics	112	3.11
7	I can easier doing my task by this learning	138	3.83
8	I was easier to follow the evaluation with this learning	147	4.08
Total			29.50
Average of total score			3.69



Based on the observations result of the study that has already done found that the learning process goes according to plan learning are made. This situation suggests that the teaching materials that can be put to good use in learning the basic concepts of mathematics course especially in systems of linear equations three variables material.

This result is also supported by the results of the students respons questionnaire about the learning made and the result get score 3.69. Based on the conversion of qualitative data into quantitative data with the reference by the conversion of Likert Scale (Suharsimi Arikunto, 2005) it is found that the score of 3.69 has a happy category of learning that given to them. It shows that the learning materials that used can help them to study and more understand easier about the material provided.

CONCLUSION

Based on the results of research and discussion, then it can be inferred that the electronic multimedia materials with macromedia Flash 8.0 has made is good in terms of content and media. This is supported by the attitude of the students who enjoy to do online learning at F-learning and can understand easier about the material by the help of animation, video, color, and interesting appearance.

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Reducing Bullying Through Sequentially Planned Integrative Counseling for Children (SPICC) Group Counseling for K-5 Student of SD N Pasekan 03 Ambarawa

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Abstract

This type of research is experimental. This study aims to determine the significance of the reduction bullying through SPICC group counseling. Subjects taken are as many as 31 students in the K-5. Instrument used in this research is bullying questionnaire that was adapted by Widiastuti (2010) based on the theory of Joseph R. "Beau" Biden (2006) with a modification. In this study, the experimental group were subjected to 16 group counseling sessions with a model SPICC. From the analysis of results obtained: 1) there is a reduction in bullying, as seen from the mean rank of 18.73 pre test and post test mean rank of 12.27. There is a difference in the mean rank score of 6.46 the frequency of bullying. 2) There is a reduction in the frequency of bullying significantly between pre test and post test experimental group supported with $p = 0.044 < 0.050$. 3) There are significant differences after the experimental group were given group counseling services SPICC model with a control group who did not receive services. This is supported by value-tailed Asymp. Sign.2 for $0.027 < 0.050$.

Keywords: SPICC (Sequentially Planned Integrative Counseling for Children), group ounseling, reducing bullying

INTRODUCTION

Murti (2010) argues that humanize human is homonization and humanization. It means humans were led in a manner such that could stand to be acting as a human moving. According to Drijarkara (2006) humans do not just have to be homo human being but must be a homo that human means higher culturistic. Because in reality the other States do not least child school precisely get treatment contrary to humanizing activity of man. Sejiwa Foundation (2008) found that not a few children who became victims of violence and the culprit is the closest person such as parents, other family, teacher, another security officer on the school and so forth as well as ternan peers.

Quantitatively I-PA DIY noted there are numerous cases of violence in child sexual abuse.

1. Cases in the following as much as 171 cases recorded 2011-2009
2. Parenting issue custody struggle as much as 61 cases
3. Physical violence as much as 51 cases
4. 33 cases of neglect as

Beau Biden (2010) says that bullying is when one child condition or group of children continues to hurt other children with words or actions. The powerful here means not only strong in physical size but can also be strong mentaly (Sejiwa Foundation, 2008). Means of action occur because there is an imbalance of bullying powers both physical between perpetrators and victims of bullying.



The data obtained from the author's interview with student observation at the break time in SD Negeri Pasekan 03 Ambrawa that students often have the verbal violence with friend and the school environment such as the elderly brother's closest and so on home environment. The author conducted 31 interviews (the students of class V) and obtained result that most perpetrators of bullying is male students. Most girls who become victims of bullying are afraid for dealing with bullying.

For obtain preliminary data about bullying action questionnaire to students class V, researcher share the results as the following:

Table 1.1
Categorized K-5 student bullying behavior

Category	Interval	Freq	%
Low	40 – 52	6	19.3
Middle	53 – 65	7	22.6
High	66 – 78	10	32.3
Very high	79 – 91	8	25.8
Total		31	100.0

There are many efforts can done in reducing the frequency of acts of bullying on student, one is with counseling. SPICC model or Sequentially Planned Integrative Counseling for Children Model is a approach model to counseling children involving multiple counseling model that has been established. Counseling model used as client centered therapy, gestalt therapy, narrative therapy, cognitive behavioral therapy and behavior therapy (Geldard & Geldard, 2011).

The model uses the concept of principles ideas SPICC and framework-related counseling approach. SPICC models are better than other because it is not only addressing one of emotional, but also proceeding with restructuring needs cognitive achievement and assist in behaviour change. Furthermore, this model using the strategies and interventions that come from a variety of counseling approach. Geldard & Geldard (2011) argues that in the SPICC model, children experiencing progress through a series of phases in each process of change. With emphasis on the process of certain changes in certain stages during the process of counseling is considered to be relevant for produce changes because each provides a specific approach to counseling theory about changes that occurred (Prochaska & Di Clemente, 1983 in Geldard & Geldard, 2011).

Saripah's research (2009) give the results as following 1) MKKP effective to increase empathy and decrease bullying aggression; 2) MKKP effective to improving the assertivity and confident victims of bullying; 3) MKKP works for bullying based on the pattern of foster parents; 4) MKKP effective for victims of bullying based on the pattern of foster parents; 5) MKKP effective for bullying based on school background; 6) MKKP works for victims of bullying based on the background of the school. Taking into account the result of the research, such research purposes that is Counseling Model is achieved producing an effective Behaviour Kognitif Counseling Model for tackling bullying of students in Elementary School.

Research Question

Based on the author's, the background which has been pointed out above can be formulated as a research problem as follow:



Whether counseling group with SPICC model can reduce the frequency of bullying actions significantly on the students of class V SD Negeri Pasekan Ambarawa?

REVIEW OF LITERATURE

Bullying

Bullying is a situation where the abuse of power or authority which conducted person/group. The powerful here means not only strong in physical size but can also be strong mentally. Victims of bullying are not capable of defending or self-preservation due to weak physical and/or mental (Sejiwa Foundation, 2008). Bauman (2008) argued some definition of bullying as following:

- a. The form of aggression with three components:
 1. The desire to hurt,
 2. Repetition, and
 3. The imbalance between the bully and the victim.
- b. The systematic abuse of power
- c. Individual recurring against negative interaction can either directly or indirectly by one or more people who are dominant.

The dangers that occur can be caused due to direct treatment of physical or physical and a second or second directly by the process of reinforcement or avoidance by the audience of Genesis (bystander).

Andrew Mellor (University of Edinburgh, antibullying network, 2005), describes bullying occurs when a person is persecuted by the actions of people and that he was afraid when bad behavior will happen again and feel helpless to prevent it.

Beau Biden (2010) saying that bullying is a condition when one child or a group of children continue to hurt children with words or actions. Bullying happens when one bully has emotional and physical strength are more than victims.

Riauskina, Djuwita, and Soesetion (2005) define school bullying as aggressive behavior is done over and over again by person/group who has the power, over other weaker with the intention of hurting the people. They then grouped into bullying behaviour in 5 categories:

- a. **Direct physical** (contact hitting, encourage biting)
- b. **Contact direct verbal threatens** (to embarrass, disdain, for bothering, to give a call (name-calling), condescending, sarcasm, put downs, etc)
- c. **Non-verbal behavior directly** (see sarcastically, poked tongue, showing face expressions that denigrate taunting or threatening)
- d. **Behaviour non-verbal** (silence someone, manipulated indirectly the friendship so be ignored isolated or sends sunt cans)
- e. **Sexual Harassment** (sometimes categorized aggression behavior physical or verbal)

Some of the opinions of the experts above it can be concluded that bullying is behavior where an imbalance of power between victims and perpetrators of bullying so it can be said that the bully is always stronger than their victims. Bullying can be physical verbal or psychological.



Types of Bullying

There are several types and forms of bullying but in in general practice, bullying can be grouped into three category (Sejiwa Foundation, 2008):

- a. Physical Bullying
- b. Verbal Bullying
- c. Psychologist Bullying

Bauman (2008) identify three bullying e.g: 1) Overt Bullying, 2) Indirect bullying, 3) Cyber bullying

The Factors That Led To The Occurrence of Bullying

Bullying can occur due to a situation that would be created, when there is a power difference met in one place between parties strong and weak (which frail victim of bullying). There are some perceptions of child, a child becomes a bully: a) because pre-well be victims of bullying, b) want to show the existence of self, c) the influence of television broadcast about violent, d) seniority, e) disadvantages of self, f) looking attention, g) vengeance, h) often treated harshly in home.

Bullying is not likely to happen only by the existence of bullying. There must be a victim who was subjected to oppression. Some characteristics that can become victims of bullying: a) small and weak, b) be different, c) difficult mix, d) low confidence, e) frequently misspoke, g) different accent, h) child who considered annoying and challenging bully, h) child stuttering physical defects, i) often regarded as argumentative towards bully.

Pepler and Craig (1988) identify some of hte internal and external factors associated with victims of bullying. Internally the vulnerable become victims of child bullying usually have tended to not temperament worrier like the social situation of social physical characteristics or otherwise have to withdraw a special on him which is ot found in other children such as hair color or different skin disorders or other physical sign. Externally, also generally come from families that are having trouble overprotective family and originates from the strata socially marginalized or viewed negatively by environment.

Symptoms effects of bullying (Sejiwa Foundation, 2008:12): School-phobia, crying, asking to transfer to another school, children learning concentration decreases, wouldn't doing socialization, often carrying certain items as bully requested, etc.

Group Counseling

Things that can be done by the school to prevent acts of bullying at school can do activities within the system anti-bullying one of them with counseling groups or peer group (Sejiwa Foundation, 2008). Regoli & Hewitt (2000) argues that one of the focus program to address violence in school counseling program including counseling group.

Through group counseling with children who have in common a problem can be awarded that a lot of children who have experienced these other problems. Such awareness will give reinforcement to the children to open and free in his personal problem.

According to Sandhu (2000) that "Student should participate in group counseling to experience the power of the group is the sharing of similar experience and feeling of



catharsis". Counseling groups are a little hard to do on a child who has the impulse control are weak and unable to control the excitement overload and aggressive nature (Kraft, 1996). Counseling groups are also less successful for children who have disorders due to pressure over changes to the psychotic social required in groups or children who have impaired expressive or receptive-expressive language mix and difficult to show frustration but rather with aggressive nature spur (Gupta et. al., 1996).

According to Corey & Corey (on Loekmono, 2003) the group counseling is held gradually. There are 6 stages in the formation of the group stages namely the beginning stages, stages of transition stage, stage of work, as well as the final evaluation and follow-up.

Group counseling approach generally has 2 types which are the non-integrative counseling group and the integrative group counseling. One of the models used in the integrative group counseling is SPICCC. According to Regers (2001) an Integrative approach may be needed when people want to bring their individual issues to a group and seek help from the group to think things through "out loud" and seek new perspectives.

The integrative approach uses open question and emphatic behavior. This based on Carl Rogers (2001) which stated "unconditional positive regard" for the counselee who reveals his/her problem.

Model Sequentially Planned Integrative Counselling for Children (SPICCC)

The SPICCC model is an integrative model that uses that strategy intervention coming from several counseling approaches. The SPICCC model is better because it is not just cover the emotional problem, but also do follow-up to the cognitive restructuring needs and help the more adaptive behavior change achievement. Geldard & Geldard (2011) argued that intervention will consist not more than 6 to 10 sessions. This model offers short and effective counseling approach for the 6 until 12 years old children.

According to Geldard & Geldard (2011), this model rests on assumptions as follows: 1. Changes positive in children will happen faster and last longer if effective approach counseling used to be free and aims to change certain points on the counseling process. 2. When using an integrative approach can utilize some of the counselors principle concept strategies and interventions are taken from particular counseling approach without whole ideas of hams receive and the concept of such an approach.

Within Geldard & Geldard, 2011, Lambert argues that most counselors believe that the main purpose of counseling is to help counselee to change. The process of change is to be achieved by using model SPICCC counseling relating to children is the following:

1. Changes related to stage
2. Changes related to creativity and exploration
3. Changes related to counselee perspective change

Phase of this SPICCC model begins from children who are brought to the counselors because they have emotional problems but viewed as a troubled child in behaving by the information provider. According to Geldard & Geldard (2011) there are 5 phases which exist in the SPICCC model.



Counseling Approach Used on SPICC Model

SEQUENTIALLY PLANNED INTEGRATIVE COUNSELING FOR CHILDREN (SPICC)			
Phase	The process required	Counseling Approach	Indicators of Success
Phase 1	Children join the counselors. The children begin to tell the story	Counseling that centered to counselee	Children are capable of telling stories about central problem
Phase 2	Children through it her story. Children's awareness on the issue began to increase. Children start dealing with emotions and may experience. Kids deflect conversation and show their resistance	Gestalt counseling	Raise awareness of children that is to make the children analyze problem clearly, feel and release emotions
Phase 3	Children develop different perspective themselves	Narrative counseling	Reconstruct and thicken the story to strengthens its perception
Phase 4	Children relate to beliefs that self destruct and looking for choice	Behavior counseling cognitive	The process of challenging the mind that doesn't help produce a change in attitude
Phase 5	Children practice feel and evaluate attitude	Behavior counseling	Feel the attitude and produce the reinforcement on the adaptive attitude

Hypothesis

Group counseling with the SPICC model can reduce the frequency of bullying action significantly on the students of class V SD Negeri Pasekan Ambarawa.

METHODOLOGY

This research uses experimental research. The true experimental design is related to the post test only control group design (Campbell & Stanley, 1963). The subject of the present study was 15 students of class V SD Negeri Pasekan 13 Ambarawa. Sampling Technique that used in this research is purposive sampling subject. The gauge this research is bullying questionnaire adapted by Widiastuti (2010) from Beau Biden theory. This questionnaire contains about bullying actions carried out in the school's students consist of 26 items. Data analysis techniques used in this research are the Mann Whitney test scores to see the differences end post-test in experimental group and control group.

RESULTS AND DISCUSSION

On processing statistical tests results to post test results between experimental group and control group with the technique of Mann Whitney appears that $p = 0,027 < 0,050$ with mean rank post test experimental group is 12,27 and mean rank post control group is 19,50. The difference in mean rank between a group of experimental test post and the control is 7,23, so there is a significant difference between the control group and the experimental group in terms of a reduction in the frequency of acts of bullying. In processing the results of statistical pre tests and post group experiments test by Mann Whitney technique appears that $p = 0,044 < 0,050$ with mean rank on pre test is 12,27. There is a decrease in mean rank groups



of experiments so there is a significant reduction in terms of action group experiments of bullying. From the explanation above obtained value that is Asymp. Sign. 2-tailed is $0,044 < 0,050$. This value means there is a significant difference between the act of bullying pre test and post test of experiment group. By the Mann Whitney post test between experimental group and control group obtained the results the value Asymp. Sign. 2-tailed is $0,027 < 0,050$ which means there is a significant difference between the groups was given a service by groups that were not given counseling services group with SPICC model on students of class V SD Negeri Pasekan 03 Ambarawa, disrict Semarang.

CONCLUSION

The conclusion of this research is that the service of the counseling group with SPICC model can reduce the act of bullying frequency of students class V elementary school significantly ($p = 0,044 < 0,050$).

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The Level of Character Strengths on University Students

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Abstract

Character strengths play significant role in the Positive Psychology's effort to build positive qualities both at the individual and at the group. The aim of this study was to investigate the level of character strengths (gratitude, curiosity, hope, love, zest) on university students from the Faculty of Psychology, Satya Wacana Christian University. One hundred and five of the first year students (consist of male 24 and female 81) were included in this study through saturation sampling technique. The instrument used was the character strengths scale modified from Values in Action Inventory of Strengths (Peterson & Seligman, 2004). Data analysis used descriptive statistics using mean scores and percentage scores. The results of the present study showed the level of element of character strengths of the respondents in this study was the greater number of respondents had an average level i.e hope (61,90 %), curiosity (71,42 %), love (53,33 %), zest (62,85 %), gratitude (46,66 %). Also the result indicated that five character were the highest to the lowest score in a row is gratitude, love, hope, zest, curiosity. Implication of the study has been discussed.

Keywords: character strengths, university students

INTRODUCTION

Nowadays we know that there are many crisis in Indonesia. It is undeniable that globalization and developmental of information technology have positive impact on humans, but also cause negative impacts that need to be aware of. Crisis of ethics and morals of the nation like corruption, integrity, and violence, or the emergence of conflicts originating from difference and conflicts of different cultures are the negative impacts.

Education as part of efforts to produces quality human recources should not only develop the aspect of knowledge and technology, but also teaches life morals and life values. According to Peterson and Seligman (2004) the values are mentioned character strengths. Park, Peterson, and Seligman (2004) told that character strengths can be defined as positive traits reflected in thoughts, feelings, and behaviors. Peterson and Park (2006) reported that character refers to qualities within individuals that lead them to desire and to pursue the good. Wright and Huang (2008) define character as those interpenetrable and habitual qualities within individuals, and applicable to organizations both constrain and lead them to desire and pursue personal and societal good. Recently studies of character strengths, an area of positive psychology, have been conducted abundantly. The study of character strengths is a relatively new area of research within the realm of positive psychology. Positive psychology focuses on the strengths of people and how those strengths were acquired. Although positive psychology is not a new concept, recently it has received more attention by researchers (Foster & Lloyd, 2007). In recent years, psychologists noticed a trend in psychology that focused on negative emotions, psychopathology, and human weakness and deficits, to the exclusion of promoting positive human flourishing in all aspects of life. These psychologists and others began to research what makes life most worth living, and the field of positive psychology was born (Seligman & Csikszentmihalyi, 2000). Positive psychology as "an umbrella term for the study of positive emotions, positive character traits, and enabling institutions" (Seligman, Steen, Park, & Peterson,



2005). They have discovered that human thriving has much to do with an individual's strengths of character and positive subjective experiences that lead to life satisfaction, happiness, optimism, and well-being (Seligman, 2002). One key area in positive psychology is the study of virtue and character strengths. Researchers are also beginning to see the importance of studying the character strengths of various demographic population.

Peterson and Seligman (2004) identified 24 strengths of character that are valued by most of the world's cultures. There are 24 character strengths (i.e. Creativity, Curiosity, Open-Mindedness, Love of Learning, Perspective, Bravery, Persistence, Integrity, Vitality, Love, Kindness, Social Intelligence, Citizenship, Fairness, Leadership, Forgiveness and Mercy, Humility/Modesty, Prudence, Self-Regulation, Appreciation of Beauty and Excellence, Gratitude, Hope, Humor, and Spirituality). Review results of some journals have found particular strengths of character have been robustly relationship with another variable. This character strengths mentioned the top five character strengths or key strengths The top five character strengths strengths i.e gratitude, hope, zest, curiosity, and love (Park dkk., 2004; Shimai, Otake & Park et. al., 2006; Park & Peterson, 2006). According to Park, Peterson and Seligman (2006) particular strengths of character (gratitude, hope, zest, curiosity, and love) are robustly associated with life satisfaction as well as work satisfaction across a range of occupation types, from unskilled laborer to CEO. Before that Seligman (2002) have find the five strengths - optimism, gratitude, zest, curiosity, and love – are associated with happiness. Engel, Westman, and Heller (2011) mentioned it as “*happy people's strength*” because optimism, gratitude, zest, curiosity, and love will positively affect well-being, good performance, and more related to happiness than others. Also Peterson et al. (2010) found that some strengths (optimism, zest, gratitude, curiosity, and spirituality) related to job satisfaction more than other strengths. The conclusion are character refers to qualities within individuals that lead them to desire and to pursue the good. Character leads people to do the right thing, and the right thing can be productive and profitable (Peterson & Park, 2006).

Gratitude: being aware of and thankful for the good things that happen; taking time to express thanks. A grateful person is aware of the good things that happen, and never takes them for granted. Friends and family members know that they are grateful because they always take the time to express their thanks.”

Zest: approaching life with excitement and energy; not doing things halfway or halfheartedly; living life as an adventure; feeling alive and activated. A zestful person never does anything halfway or halfheartedly. For them, life is an adventure.”

Curiosity: Taking an interest in ongoing experience for its own sake; finding subjects and topics fascinating exploring and discovering

Love (capacity to love and be loved): Valuing close relations with others, in particular those in which sharing and caring are reciprocated; being close to people.

Hope (optimism, future-mindedness, future orientation): Expecting the best in the future and working to achieve it; believing that a good future is something that can be brought about.

Nowdays the concept of character strengths is an interesting topic to explore. It is very important to design some program or activity for develop the character strengths through character



education since early in the years old until adulthood. Good character is not formed automatically; it is developed over time through a sustained process of teaching, example, learning and practice. It is developed through character strengths. The intentional teaching of good character is particularly important in today's society since our youth face many opportunities and dangers unknown to earlier generations. They are bombarded with many more negative influences through the media and other external sources prevalent in today's culture (Lickona, 1998).

Some program have designed for elementary students but it is still very limited in the higher education level. So that, it is needed the character education program effectively for university students. Before that, it is very important to know that the level of character strengths and the highest character strengths of university students. There fore, in the current research we investigate the level of character strengths (gratitude, hope, zest, curiosity, love) of the university students.

METHODOLOGY

Research Question

The researcher will attempt to answer the following research questions: What is the level of character strengths of the university students in this study?

Significance of the study

The findings of this study will help university students to discover their level of character strengths, in order to help them to development their character strengths in their lives. For the university administration, the lecturers, and the university counselors, it will help them to conduct the most suitable psychological programs, training and guidelines that assist the university student enhance their character strengths.

Research Design

In this study, descriptive research design was used. Descriptive method was employed to find the levels of the respondents' character strengths of the respondents in this study.

Participants

Participants in the study were 105 of the first year students (24 male and 81 female) from the Faculty of Psychology, Satya Wacana Christian University. The participants were included in this study through saturation sampling technique.

Research Instrument

To obtain the data necessary for the study to determine the character strengths level, the researcher used the Character Strengths Scale as the major tool for this study. The scale is a self-rating questionnaire designed to measure an individual's character strengths.

Statistic Analysis

After the administration of the tool, the completed character strengths scale was collected, checked, and tabulated. Statistical methods: Frequency was used to establish the levels of character strengths and mean ranking was used to establish the highest of character strengths.

RESULTS AND DISCUSSION

A. The level of character strengths of the university students in this study



1. The level of hope of the students

Table 1
The Frequency and Percent Distribution of the Students on the Level of Hope

Description	Frequency	Percent
High	2	1,90
Above Average	30	28,57
Average	65	61,90
Below Average	8	7,61
Low	0	
Total	105	

Based on the foregoing table the greater number of students (61,90 %) had an average level of hope. Thirty or 28,57 % of the entire group were found to possess above average level of hope while 7,61 % were in the below average level. There was only a very small percentage of students (1,90 %) with high level and no students in the low level of hope.

2. The level of curiosity of the students

Table 2
The Frequency and Percent Distribution of the Students on the Level of Curiosity

Description	Frequency	Percent
High	1	0,95
Above Average	20	19,04
Average	75	71,42
Below Average	9	8,57
Low	0	
Total	105	

Based on the foregoing table the greater number of students (71,42 %) had an average level of curiosity. Twenty or 19,04 % of the entire group were found to possess above average level of curiosity while 8,57 % were in the below average level. There was only a very small percentage of students (0.95 %) with high level and no students in the low level of curiosity.

3. The level of love of the students

Table 3
The Frequency and Percent Distribution of the Students on the Level of Love

Description	Frequency	Percent
High	2	1,90
Above Average	46	43,80
Average	56	53,33
Below Average	1	0,95
Low	0	
Total	105	



Based on the foregoing table the greater number of students (53,33 %) had an average level of love. Forty six or 43,80 % of the entire group were found to possess above average level of love while 1,90 % were in the high level. There was only a very small percentage of students (0.95 %) with above average and no students in the low level of love.

4. The level of zest of the students

Table 4

The Frequency and Percent Distribution of the Students on the Level of Zest

Description	Frequency	Percent
High	0	
Above Average	23	21,90
Average	66	62,85
Below Average	16	15,23
Low	0	
Total	105	

Based on the foregoing table the greater number of students (62,85 %) had an average level of zest. Twenty three or 21,90 % of the entire group were found to possess above average level of zest while 15,23 % were in the below average level. There was no students in the high and low level of zest.

5. The level of gratitude of the students.

Table 5

The Frequency and Percent Distribution of the Students on the Level of Gratitude

Description	Frequency	Percent
High	4	3,80
Above Average	47	44,76
Average	49	46,66
Below Average	5	4,76
Low	0	
Total	105	

Based on the foregoing table the greater number of students (46,66 %) had an average level of gratitude. Forty seven or 44,76 % of the entire group were found to possess above average level of gratitude while 4,76 % were in the below average level. There was only a very small percentage of students (3,80 %) with high level and no students in the low level of gratitude.

B. The highest character strengths on the university students

Based on mean ranking, the result indicated that five character were the highest to the lowest score in a row is gratitude, love, hope, zest, and curiosity.

Discussion

From this research we found that the greater number of students had an average level of the character strengths i.e hope (61,90 %), curiosity (71,42 %), love (53,33 %), zest (62,85 %), gratitude (46,66 %). From this research, it is crucial that the university student enhance the level



of five character strength because we know that the key strengths are robustly associated with life satisfaction, good performance and achievement than other strengths. The student must have gratitude because from some studies we know that gratitude are robustly associated with positive outcomes i.e well-being, life satisfaction, and good health. A grateful person is aware of the good things that happen, and never takes them for granted. Friends and family members know that they are grateful because they always take the time to express their thanks. The strengths of hope (Peterson & Park, 2006) is associated with good health, long life, and freedom from “accident”. Curiosity is taking an interest in ongoing experience for its own sake, and finding new subjects and topics fascinating. It is exploring and discovering. Zest (sometimes called vitality) is defined as the habitual approach to life with anticipation, energy, and excitement sometimes called vitality. Peterson et al. (2008) found that zest was associated with work as a calling, work satisfaction and general life satisfaction. In addition, Peterson et al. (2008) suggest that the study of zest also bears serious scrutiny because of its relation to psychological well-being (PWB). Zest was the single best predictor of work as a calling. Wrzesniewski et al. (1997) showed that work regarded as a calling was the most rewarding of all. Those who regarded work in these terms described it as central in their lives and enjoyable. Not surprisingly, their satisfaction with work was high. According to Peterson and Park (2006) the strengths of love associated with mental health, good performance and life satisfaction.

Results finding will help university students to discover their level of character strengths, in order to help them to development their character strengths in their lives. We hope this result study can also make a positive contribution to our understanding of students character strengths, especially gratitude, hope, zest, curiosity, and love, and how to increase students' level of character strengths. Therefore, it is very important to design character education program in the university institution, because people with good character are highly engaged in what they do and find significance beyond themselves in their activities. They are highly satisfied with their lives and that people who are highly satisfied are happier, healthier, more resilient, and productive.

For the university administration, the findings regarding the student respondents' profile of character strengths so they can be a help in designing programs, devices, and appropriate strategies which can further enhance their behavior. For the lecturers, it will help them to handle the orientation of the educational task, to guide their student to develop their character strengths in their study, in order to face their present and future challenges. For the university counselors, it will help them to conduct the most suitable psychological programs, training and guidelines that assist the university student enhance their character strengths.

CONCLUSION

1. From this research we found that the greater number of university students (61,90 %) had an average level of hope (61,90 %), curiosity (71,42 %), love (53,33 %), zest (62,85 %), gratitude (46,66 %).
2. Finding in this research can be used as a guide for intervention to enhance and maintain character strengths so that students have a higher character strengths. Therefore, it is very important to design character education program in the university institution because people with good character are highly engaged in what they do and find significance beyond themselves in their activities. Character strengths play significant role in the effort to build positive qualities both at the individual and at the group.



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Evaluation of Character Education

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Abstract

Development of education in Indonesia tends to be based on hard-skill education. However, it is paying less attention to soft skill and spiritual intelligence. The problem occurs in primary education to higher education. Consequently, many people are successful academically, but society in fact, do not feel benefit maximally. Then, to respond challenge of the era, government encourages character education with the hope that it would be able to make education of Indonesian to be better, harmonious, and balance in life of people. So, in order to realize and for a successful education of character, it is necessary to prepare some forms of evaluation and assessment by educators and their institution.

Keywords: Evaluation and Assessment on character education

INTRODUCTION

Education practice in Indonesia tends to be hard skill (technical skill)-oriented with goals of developing intelligence quotient (IQ). However, the practice is paying attention inadequately to soft skill capability contained in emotional intelligence (EQ), and spiritual intelligence (SQ). Learning in various schools and higher education give more emphasize on obtaining good results of exams. Many teachers have perception that learners with good competence are those with higher grade of exams.

With development of era, an education that is only based on hard-skill namely, producing alumnus with only academic achievement should start to improve. Today, learning should also be based on soft-skill (social interaction) development because it is very important in shaping characters of nation's young generation so that they will be able to compete, to have good ethic, moral, courteousness and to interact with society. Soft skill education is based on mentality guidance in attempts of encouraging a learner to conform to reality of life. A successful of an individual is not determined solely according to his or her knowledge and technical skill (hard-skill) but also skill of managing self and others.

Character is a quality or mental or moral strength, conduct or manner of an individual that is a unique personality differing him/her to other (Furqon Hidayatullah, 2010: 11). Character education is a system of character value cultivation to school members that is including components of knowledge, awareness or willing, and actions of performing the values to God, self, others, environment as well as nation so that he or she will be a good human being. Therefore, school administrator, educator and teacher need to know how to evaluate character education so that they have instrument of evaluation and development.

Character education is a planned and structured program based on way of thinking, principle and specific strategic implementation, according to goal and mission of each education institution.



REVIEW OF LITERATURE

Evaluation of Character Education

Evaluation of character education is a process of valuing character possessed by a child that is conducted systematically and systemic according to a plan and has a clear goal.

Evaluation of character education is conducted to measure if a child has a character or a set of characters established by school after some period of time of education. Therefore, essence of evaluation in context of character education is an attempt of comparing behavior of a child with standards (indicators) predetermined by teacher and school. Process of the comparison between a child's behaviors with indicators of characters is performed by process of measurement. It can be conducted by providing test or non-test.

According to Dharma Kesuma, Cepi Triatna, Johar Permana (2011: 138), goals of character education evaluation are: (1) to know progress of learning results of a child in the form of several specific indicators possession during certain period of time; (2) to know weaknesses and strength of a learning design made by teacher; and (3) to know effectiveness level of a learning process experienced by a child in classroom, school and home settings.

Based on goals of character education above, it can be understood that evaluation of character education is not limited to child's experiences at classroom only, his or her experiences at school and at home are also included. Of course, it is limited to learning experience of the child that is designed specifically by teacher. Design of Lesson Plan made by teacher is, in fact, formulating learning experiences of a child at home. It means learning evaluation of child at home does not performed if the teacher does not designing learning at home.

Evaluation of development and growth of a child's character possessed is not an easy one, but it is not impossible one too. Evaluation of character is an attempt of identifying progress of behaviors achievement (have a character) hierarchically from time to time through identifying and observing behaviors that are emerging in daily activities of a child.

Form of Character Education Evaluation

Form of character evaluation is evaluation of a child's self and portfolio.

1. Evaluation of child's self

Meaning of self-evaluation. Child's self evaluation sheet is an evaluation instrument identifying development of a child's behavior based on what had been experienced by a child through a reflection process on what had been experienced by the child. Process of reflection is a process by which children expresses their experiences, sensation they had felt, their responses to a process they had experienced, and plan about future for them and their environment. Sheet of self-evaluation is an instrument of characterized behavior. The sheets contain process of identification, feeling, response and plan for future based on experiences of a child in his or her learning process.

Basically, evaluation of character education can be conducted for performance of educator, teacher, and learner. Performance of educator or education staff can be seen from various



aspects according to various rules to which the educator or staff can be subjected to, among the others, are: (1) working result: working quality, working quantity, timeliness of completing a work, agreement with procedure; (2) working commitment: initiative, quality of presence, contribution to working success, availability of completing job assigned by leader; (3) working relationship: cooperation, integrity, self-control, capability of directing and inspiring other. Activities of educator and education staff related to character education can be seen from portfolio or daily note.

2. Portfolio Evaluation

Portfolio or daily note can be made based on developed values, namely: honesty, responsibility, smart, creative, clean and healthy, caring and mutual assistance. In addition, their activities in development and application of character education can be observed too. Chief or other person who is in charge can perform the observation based on predetermined values in order to know if they had implemented the values. In addition to evaluate educators and education staff, the evaluation may be applied to learner based on several indicators. For example, indicator of honesty during a semester is formulated by “saying or writing truthfully his or her feelings about what had been seen/observed/learned/felt”. Then, educator can observe (through varied ways) what had a learner said is truly represented his or her feeling or not. The learner’s feeling can be expressed either verbally or in writing.

The evaluation is performed continuously, when an educator presents at a classroom or a formal and informal education unit. Anecdotal note model (note made by an educator when he or she is seeing a behavior of a child that is related to value of interest) is always usable by educator. Additionally, the educator may provide a task containing a problem or an incident to which a learner has opportunity to show values he or she possesses.

Portfolio evaluation is one trying to explore, to collect, to report and to use authenticity of appearance or performance of learning activities of a learner. Portfolio evaluation must use varied procedures and it is clear that attention and creativity of teacher are necessary (Dharma Kesuma, Cipi Triatna, Johar Permana, 2011: 148).

From results of the observation, anecdotal notes, task, report and etc. educator may provide conclusion/consideration about achievement to an indicator or, in fact, a value. Conclusion of the consideration can be expresses in qualitative statement and has meaning about development of character building as follow:

- a. NS: Not Seen, if a learner is not showing initial marks of behaviors expressed in the indicators, because he or she is not understanding meaning of the value yet (Stage of Anomy)
- b. SS: Start to Seen, if the learner starts to show inconsistent, initial marks of behaviors expressed in the indicators, because there is an understanding and getting an enforcement from immediate environment (Stage of Heteronomy)
- c. SD: Start to Develop, if the learner has showing various indicators of behaviors expressed in the indicators and they begin to be consistent, because in addition to understanding and awareness, there is enforcement from broader immediate environment (Stage of Socionomy).
- d. GH: Get into Habit, if the learner is continuously showing behaviors expressed in the indicators consistently because in addition to understanding and awareness, there are enforcement from broader immediate environment and moral maturity is achieved (Stage of Autonomy).



There are two types of indicator that can be developed: The first is indicators for formal and informal education unit, and the second one is indicators for learning materials. The former is marker used by leaders of formal and informal units, educator, and education staff in planning, implementing, and evaluating formal and informal education unit as institution of character education enforcer. The indicator is related to both programmed activities of formal and informal education unit and daily activities (routine) of formal and informal education unit.

Indicator of learning material represents a characterized behavior of learner in terms of specific learning material. The indicator is formulated by taking form of behavior of a learner at classroom and formal and informal education unit that can be observed by educator. It can be seen from what action is a learner doing in formal and informal education unit, ask and answer activity with the learner, response of the learner to task and question from educator, as well as writing of the learner when they complete report and homework. Behavior that will be developed in the indicators of character education is progressive in nature. It means, the behavior develops to more complex one across one grade to other higher one, or even in one grade. The indicator functions as criteria by which an educator provides consideration about whether the behavior for the value has been character of the learner or not.

In order to know if a formal and informal education unit has been performing learning for characters development, specific assessment instrument should be developed. Then, assessment is conducted by observation and it continues with implementation monitoring and reflection. Assessment for character education has goals of: (1) behaving honestly so that it becomes an ideal; (2) placing himself or herself proportionately and responsibly; (3) behaving and appearing smartly so that it becomes an ideal; (4) being able to make self-assessment (doing self-reflection) so that he or she can act creatively; (5) being care to other so that it becomes an ideal; (6) behaving in hygiene so that it becomes an ideal; (7) behaving healthy so that it becomes an ideal; (8) behaving in mutual assistance so that it becomes an ideal.

Based on discussion above, it can be stated definitely that character education is attempts designed and implemented systematically to help learner in understanding values of human behavior related to God, self, other, environment, and nations that are realized in mind, attitude, feeling, saying, and conduct based on religious, legal, etiquette, cultural and customs norms.

Values of Character

Based on review on religious values, social norms, rules/law, academic etiquette, and human right principles, items of values had been identified and they are grouped into five main values, namely, values of human conducts in relation to God the One, to other, to environment as well as to nation. Then, according to Agus Wuryanto in (<http://aguswuryanto.wordpress.com/2011/03/11pendidikan-karakter-di-smp/dat,budaya,suku,dan-agama>), below is a list of main values:

1. Value of character in relation to God
 - a. Religious
2. Values of characters in relation to self
 - a. Honest
 - b. Responsible
 - c. Healthy life style
 - d. Discipline



- e. Hard work
 - f. Self-confidence
 - g. Spirit of entrepreneurship
 - h. Thinking logically, critically, creatively and innovatively
 - i. Self-sufficient
 - j. Curious
 - k. Knowledge-minded
3. Value of character in relation to others
- a. Awareness about rights and obligations of self and others
 - b. Obey social rules
 - c. Appreciate other's work and performance
 - d. Courteous
 - e. Democratic
4. Value of character in relation to environment
- a. Care about social and environment
 - b. Values of nationalism
 - c. Nationalist
 - d. Respect to pluralism

CONCLUSION

A character cannot be assessed in one time (one shot evaluation), but it should be observed and identified continuously in daily activities of a child at classroom, school, and home settings. Therefore, evaluation of character should involve the three components. Evaluation at classroom involves teacher, a learner himself/herself, and other learners. Evaluation at school involves the learner himself/herself, their peers, other teachers (including principal and vice principal), librarian, administrative staff of the school, security staff of the school, and other staffs. Evaluation at home involves the learner himself/herself, parent (if they present) or a guardian, big brother/ sister, and little brother/sister (if they present).

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The Effective Biblical Design Pattern of Child Education within the Years from 7-12 to Process the Disciples' Character Building

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Abstract

In this skeptical postmodern era, the rising of Christian leaders who have strong integrity and character to be God's mouthpiece through the living the life that can be set as an example is one of the answers for this postmodern society who has skepticism of the true Truth and morality standard. The Bible taught us that the faith and character training must be taught since little children are in their very early age. It is quite important for parents to know which process design of children education is applying the whole teaching and full principle of the Scriptures. First, by learning the biblical principles of children education, based on the Old and New Testaments, to know the principles, purpose, focus, methods, process, and the basic of God-centered children education. Second, to reflect and to review the biblical education process from some Bible characters, in their childhood stage, whose life can become good examples, having bold characters with integrity, and showing strong faith and loyalty in responding God's call. Besides the above biblical examples, we, too, learn from the spiritual discipline of Child Education pattern applied by some spiritual leaders who have wonderful characters and good reputations in church history. Their ministry has shed blessings throughout generations. Based on Biblical principles; reflects the system of child education and learn the spiritual discipline during very young age which some of Bible figures and Christian leaders who have Bible godly characters, and spiritual leaders' pattern of Child Education throughout church history, will make the biblical design pattern of Child Education within the years from 7-12 to process the disciples' character building.

Keywords: Biblical pattern, Children Education, Integrity

INTRODUCTION

Christian parents need a guideline to educate their kids based on Biblical principles. What is the Biblical foundation about this? First, in Deuteronomy 6:4-9, God has said that His people must teach their kids to love God with whole heart, soul and might.¹ It means that the kids must be taught to love the one and only God more than anything or anyone on earth and put God as their center since they are very young.² Alexander sees that this God's Commandment requires parents as the husband and wife to love each other as their love to God. In that way, they can love their kids as the way God wants. When the parents love each other and love their children as their way to love God, they already teach their children to love

¹Deuteronomy 6:4-9, "Hear, O Israel: The LORD our God is one LORD: And thou shalt love the LORD thy God with all thine heart, and with all thy soul, and with all thy might. And these words, which I command thee this day, shall be in thine heart: And thou shalt teach them diligently unto thy children, and shalt talk of them when thou sittest in thine house, and when thou walkest by the way, and when thou liest down, and when thou risest up. And thou shalt bind them for a sign upon thine hand, and they shall be as frontlets between thine eyes. And thou shalt write them upon the posts of thy house, and on thy gates." (KJV)

²Howard A. Hanke, *Numbers and Deuteronomy* (The Wesleyan Bible Commentary (Charles W. Carter, ed; Massachusetts: Hendrickson, 1979, 1986) 1.494. According to Hanke love God with whole heart:



God, not only words, but as a living example.³ In the New Testament, Jesus taught people who followed Him to teach their kids in loving God with whole heart, soul, mind and might.⁴ When Jesus was on earth, He welcomed every parents who wanted Him to bless their children (Mark 10:13-14). He laid his hands upon them and blessed them.⁵

Second, it has the based on Proverbs 22:6, “*Train up a child in the way he should go, and when he is old he will not depart from it*” (NKJV).⁶ The Hebrew words for “train” in Proverbs 22:6 use the imperative verb *chanak* or *hanak*.⁷ This word means begin or initiate. Moreover, the word *chanak* can be translated as *inaugurate*.⁸ According to Doughlas, this verse can be translated that God order the parents to educate their children since they are young so that the children can start their lives at the right path (“*Start a boy on the right road.*”).⁹ Henry believes that every kids need to be taught by the wisely committed parents who direct their children to follow the paths that are being planned by God not their own will. In this case, the children will not go astray from God’s plan in their lifetime.¹⁰

Third, we can found in Ephesians 6:4 that God has asked each father to be responsible in teaching his children in the counsel and God’s teachings with not raising the anger on his children’s heart. Bruce Lockerbie assumed that the word “educate” which is used in this verse is the Greek word *paideia* which means the way of educating kids which focus on character and principles or values. If the parents educate their children wisely, not raising anger in their children’s heart, they will grow the beautiful character in them.¹¹ According to William Hendriksen, as the one important mission of a father, is to bring his children to know his Savior, Jesus Christ.¹² Moreover, Hendriksen encouraged the fathers to teach the Biblical truth to their children wholly with the guidance of Holy Spirit. This learning rocess will help the childrens to trust Bible with the pure faith and to build themselves to obey God in all of their way like what Jesus has taught.¹³

ready to give life to make God happy; whole soul: ready to give life to suffer for Christ.; whole mind: ready to serve God wholly, whole might: ready to know Him and decided to follow Him.

³W. L. Alexander, *Deuteronomy* (The Pulpit Commentary, H. D. M. Spence and Joseph S. Exell, eds; Melean, Virginia: MacDonald, n.d.) 3.123.

⁴Mark 12:29-30 “And Jesus answered him, The first of all the commandments is, Hear, O Israel: The Lord our God is one Lord: And thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind, and with all thy strength: this is the first commandment.” (KJV).

⁵John Calvin, *Commentary on a Harmony of the E*

⁶Proverbs 22:6 “Train up a child in the way he should go: and when he is old, he will not depart from it.” (KJV).

⁷Robert Young explains that the Hebrew words *chanak* which is used in this verse means “*to train, dedicate, give instruction.*” (Robert Young, *Analytical Concordance to the Holy Bible* [Guildford and London: Lutterworth, 1975] 997).

⁸1 Kings 8:63, “*so the king and all the Israelites dedicated the temple of the Lord.*” (Gleason, Archer, Waltke, eds., *Theological Wordbook* 1.301.)

⁹James Dixon Doughlas, ed., “Proverbs” dalam *The Expositor’s Bible Commentary* (Grand Rapids: Zondervan, 1991) 5.1061.

¹⁰*Matthew Henry’s Commentary on the Whole Bible* (Grand Rapids: Guardian, 1976) 2.544.

¹¹D. Bruce Lockerbie, *A Christian PAIDEIA* (Colorado Springs: Purposeful, 2005) 4.

¹²*Ephesians* (London: The Banner of Truth Trust, 1967) 263.

¹³Matthew 7:24-25, “Therefore whosoever heareth these sayings of mine, and doeth them, I will liken him unto a wise man, which built his house upon a rock: And the rain descended, and the floods came, and the winds blew, and beat upon that house: and it fell not: for it was founded upon a rock.” (KJV).



Fourth, God concludes in II Timothy 3:15-17 that He wants His children to get the salvation in Jesus Christ by faith based on what they have learned since they are young. Alberth Barnes said that teaching the children with the Bible was the most important experience that Timothy had when he was young. His grandmother, Lois, and his mother, Eunike, had taught Timothy valuable principles.¹⁴ Hendriksen explained that there are 2 valuable things that Timothy got from his grandmother and mother. First, Timothy got the character legacy which helped him to apply the Bible principles in his life. Second, Timothy got the wonderful childhood legacy which helped him to know Bible principles since he was young so he could trust Jesus Christ and accepted Him as a Savior.¹⁵ Parents who pray for their children and depend on God, will receive wisdom from above to guide their children to have a willingness to know Jesus Christ and to have a motivated heart to learn God's Bible.¹⁶ The process of learning Bible will help a child to know Jesus Christ and love him. Moreover, the child will know God's will and be prepared to do good work according to His plan before even the world has been created.¹⁷

God has called his servants and made them the blessing channel for their generations. Bible has noted some of God's faithful heroes such as: Moses, Samuel, Joshua, John the Baptist, and Timothy, who had good character and good spiritual lives. In addition, the world has witnessed the spiritual leaders who became the blessing for their generations such as Madame Guyon, Dwight Lyman Moody, Evan Roberts, Oswald Chambers, Adoniram Judson, Martin Luther, James Dobson, Abraham Lincoln, Hudson Taylor, Jonathan Edwards and Charles Haddon Spurgeon. Their parents applied the Biblical pattern in educating them to have Jesus Christ-like characters. How the parents applied the Biblical pattern in them so they have wonderful character? By reflecting their lives especially when they were young, we can learn something valuable and meaningful.

The Application of Biblical Pattern in Educating Children

To apply Biblical Pattern in Educating Children so that they can have Christ-like characters, Debbie Keeler¹⁸ assumed that to have a Christ-like character a child must go through a training of "a life of preparation".¹⁹ The heroes in Bible had gone through a process of *a life of preparation*. For example, Samuel had a *very short life of preparation* under her mother's care, Hannah, who had a very good prayer life. Apparently, Samuel's mother had given positive effect on Samuel's young life. Samuel also had a *life of preparation* in Shiloh under the minister of Eli the priest until he was ready to serve God. The example of Samuel's mother and worship prayers that young Samuel had witnessed had shaped young Samuel to be one of God's powerful and integrity prophets.²⁰ Moses had a *life of preparation* when he was only about three or four years old under the care of his biological father and mother. Then,

¹⁴Barnes' *Notes on the New Testament* (Grand Rapids: Kregel, 1962, 1975)1180.

¹⁵William Hendriksen, *I and II Timothy and Titus* (Carlisle: The Banner of Truth Trust, 1957, 1976) 295-296.

¹⁶C. H. Spurgeon, Children Brought to Christ, and Not to the Font (a sermon, July 24, 1864, at the Metropolitan Tabernacle, Newington) <http://www.spurgeon.org/sermons/0581.htm>; July 1, 2010.

¹⁷Ibid. See Ephesians 2:10.

¹⁸"*Shaping Character through Spiritual Formation*" dalam *Christian Early Education* (Colorado Springs: Association of Christian Schools International, March, 2008) ix, 13.

¹⁹To be a great musician or a great athlete need a hard work and time. It is the same as when the person decided to grow Christ-like character. It needs "a commitment to have character like Christ and a process of education and habits through some amount of time to build up the character" It is called as *A Life of Preparation – Debbie Keeler*.

²⁰J. Parker, "1 Samuel" in *The Bible Illustrator* (Exell) 4.53-54. See 1 Samuel 3:1-21.



Moses had *a life of preparation* for forty years as one of Egyptian Princes and forty years in exile of Midian before he finally got his calling to be the leader of Israelites. He served the stubborn Israelites and succeed doing God's calling with all his might and Christ like characters.²¹ John the Baptist has a committed parents who gave him to God since he was born. He only had short *a life of preparation* with his parents, and years of *a life of preparation* in the wilderness before he got his calling. He was remembered as a great prophet with humble heart and loyal who served God till his last breath.²² Timothy had *a life of preparation* under the care of his grandmother and mother by educating him to focus on God's Words. He grew into one of great early Church leaders with the character that can be set as an example and became the minister that support the Apostle Paul's ministry.²³

This *a life of preparation* also can be found in the lives of church leaders in history. One of them is Abraham Lincoln. Young Abraham Lincoln had the *a life of preparation* in poverty, full of misery, independent and lost his father since he was 9 years old. All the misfortune made him to depend on God and to build his faith on the God's Words. He got his education through doing home-schooling with Bible as his first book to learn to write and read. His *life of preparation* had made him into one of the great leader who loved God and one of the best American presidents.²⁴ D. L. Moody had *a life of preparation* full of misery because of his family's poverty. However, the spiritual experience that he had with his mother, who depended on God and a prayer warrior, had shaped him into one of great Church leader in the Church history. *A life of preparation* during his youth under the minister of Kimball had shaped his mind and character to have the heart to love lost souls and to be humble servant of God who was willing to give anything for God's work.²⁵ Young Martin Luther had a painful and sad childhood. However, by God's grace, his heart was softened so that he could forgive his parents and teachers. As a result, his life was being restored by God's love. Martin Luther was remembered as a warrior of God and the reformed leader in the Church history.²⁶ Evan John Robert was one of God's servant whom God had used to do great awakening his time. Young Evan John Robert got *a life of preparation* of spiritual discipline, praying life, memorizing the Bible verses based on his own decision. Young Evan John Robert had shown the Christ-like character and mature spiritual life. He was remembered as one of the God's servants who had the vision of Great Awakening for his people and he was very depending on Holy Spirit's guidance.²⁷ Young Oswald Chambers had *a life of preparation* which full of joy based on his relationship with God. He accepted Jesus as his Savior when he was ten years old. He showed a Christ like character since he was young. He had good relationship with his mother and he used to do ministry in the house of the Lord to help his poor family in finance. He was known as the leader who had a very close relationship with God and became a blessing for his generation and generations after him.²⁸ Young Jonathan Edward had *a life of preparation* which full of spiritual experience. His father was a priest who paid good attention on spiritual matters. Young Jonathan Edward had already got a good prayer life and good

²¹Abrahama J. Malherbe, *The Life of Moses* (New York: Paulist, 1978) 55.

²²Ronald Browning, *Who's Who in the New Testament* (London: Routledge, 2002) 64.

²³J. Jowett, "II Timothy" in *The Biblical Illustrator* (Joseph S. Exell, Grand Rapids: Baker n.d.) 20.7. See 2 Timothy 1:4-5.

²⁴ Francis Fisher Browne and John Y. Simon, *The Every-Day Life of Abraham Lincoln* (Lincoln: University of Nebraska, 1995) 4-6, 33.

²⁵John Charles Pollock, *Moody* (Chicago: Moody, 1983) 122-126.

²⁶Frederick Nohl, *Martin Luther, Hero of Faith* (n.p: CPH Saint Louis, n.d.) 8-17.

²⁷Wesley L. Duewel, *Heroes of the Holy Life* (Grand Rapids: Zondervan, 2002) 134-136.

²⁸David McCasland, *Oswald Chambers, Abandoned to God*, <http://www/ccel.org/c/chambers>; 13 November 2009.



relationship with God. He seek and found God through science experiments that made him wonder of God's greatness. He became a servant of God who committed himself to live a holy life, faithful in telling others about God's Words, and submitted to God's authority in whole of his life.²⁹ Young Adoniram Judson had the first crush on Bible as his first book that he read. A young Adoniram Judson experience his *a life of preparation* in his father's family who did family altar faithfully.³⁰ Though once he was lost from God when he was teen, he was captured again by God and he was remembered as his loyalty and dedication to God when God called him as a missionary in Burma.³¹ Young *Charles Haddon Spurgeon* had *a life of preparation* under the care of his parents and grandparents who loved him and disciplined him in God's love and Biblical principles. Since he was young, Charles H. Spurgeon has shown his attention to things that was spiritual and eternity. He learned Bible dilligently and he meditated on God's Words days and nights.³² He was known as one of great evangelists in many countries and be a blessing for many generations. Young James Dobson had started his *a life of preparation* since he was one year old by learning to pray. He received God as his Savior when he was only three years old. The spiritual training from his father and mother that gave the balance between love and discipline had strong effect in his life which inspired him to follow Jesus and be a true man.³³ Young Hudson Taylor had his *life of preparation* in the priest family which continually prayed for him and dedicated him since he was in the womb. Though he became doubtful with Christianity when he was teen, he finally got his answers and he got back to God. He was remembered as one of God's servant who dedicated his life to open the mission field in China.³⁴ Young Madame Guyon had her *life of preparation* full of misery and loneliness. The example of dedicated and love of a nun who took care of her had inspired her since she was young to commit to Christ.³⁵ She lived in her prayers and poured it into her writings. She was known as spiritual leader who had Christ-like character and one of great Christian writer who paid her writing with tears, prayers and blood. She was remembered in the church history because of her holy life and kindness heart who followed her Savior's path.³⁶ Jesus Christ had the *life of preparation* for twelve years old under the care of his father and mother. He got through the process of being the Torah's child and years of prayers before he started his ministry when he was thirty years old.³⁷

Keeler advised that every Christian parents who want to have Christ-like character children to invest *a life of preparation* in their children's life and wisely design it.³⁸ Keeler argues that the effective way to nurture the character and faith growth of a child is to discipline the child consistently in the daily activities.³⁹ Hess and Garlett said that invest *a life of preparation* as the spiritual discipline in some aspects which are:

²⁹Alexander V.G.Allen, *American Religious Leaders, Jonathan Edwards* (Boston, Houghton: Mifflin,1889) 1-22.

³⁰Irene Howat, *Ten Boys who Changed the World* (Scotland: Christian Focus, 2001, 2005)106-107.

³¹Irene Howat, *Ten Boys who Changed the World* (Scotland: Christian Focus, 2005)106-107.

³²*Biography Charles Haddon Spurgeon* (<http://www.tlogical.net/biospurgeon.htm>; September 11, 2009.

³³Rolf Zettersten, *Dr. Dobson, Turning Hearts Toward Home* (London: World, 1989)11-20.

³⁴Kuykendall, *Profiles* 30.

³⁵Duewel, *Heroes* 65-68.

³⁶This is the commitment of Madame Guyon, "From this day, this hour, if it is possible, I will be wholly the Lord's, the world shall have no portion in me."

³⁷Ralph Earle, Harvey J. S. Blaney and Charles W. Carter, eds., "Matthew, Mark, Luke, John, Acts" dalam *The Wesleyan* 4.226. See Luke 2:51-52.

³⁸Debbi Keeler, *Shaping Character* 13.

³⁹Hess dan Marti Watson Garlett, *Habits of a Child's Heart* (Colorado Springs: NavPress, 2004) 16.



First, the personal relationship with God. Hess and Garlett put the personal relationship with God as the main spiritual discipline. Mara Lief Crabtree⁴⁰, who studied about the Celtic Christian tradition,⁴¹ parents who succeed to help their children to have the prayer life since they are young, will bring positive side to the children's spiritual life. Praying faithfully gives the ability to a child to have wise point of view to reality and to respond according to God's principles. Besides that, the closeness between a child to his parents and teachers at school can be the important factor for a child to shape his Christ-like character. A child who can develop good relationship with parents and his surrounding will develop a good relationship with God.⁴²

Second, living example to shape obedient heart. Keeler explained that the parents who give spiritual discipline with consistently giving a living example, they can help their children to have obedient heart. When a child sees his parent's example, the child will be motivated to do the same things like his parents have done.⁴³ Marilyn Boyer who had experience of nurturing fourteen children, recommended that the process of obedient heart is a fundamental matter. As a parent who did home schooling for her children, she believed that the greatest blessing that can be the legacy for a child is the obedient heart to God who got three aspects: *cheerfully, immediately and thoroughly*.⁴⁴

Third, Building a close relationship with God, parents and community. When a child have a good and close relationship with God and his surrounding, the process will grow the feeling and heart to love God. Tod Hall's research has recommended the importance to help a child to have close relationship with his surrounding in order to grow the love to God and others. The close relationship with others can enrich soul, develop faith and spiritual life also grow the character to be like Jesus Christ.⁴⁵ Hall revealed that the experience that a child has for his first fifteen months will shape *gut level memory* which can be the main filter for a child to develop direction and identify his feelings whole of his life.⁴⁶ It means that if a child gets the positive, warm and love relationship during his first fifteen months, the child will grow with the ability to accept and to do the right respond in the interpersonal relationship to himself,

⁴⁰"Forbid Not the Little Ones: The Spirituality of Children in the Celtic Christian Tradition" *Christian Education Journal*, Talbot School of Theology, (Fall 2007, IV/2) 239-240.

⁴¹On 4th-12th century there was a Christian tradition which was know as *Christian Celtic Tradition* which focused on the growth of faith and spiritual life as the blessing of God who gave the blessing for an individu or community and saw the daily reality in the frame of eternity.

⁴²Debbi Keeler, *Shaping Character* 14-15.

⁴³Ibid.

⁴⁴*Parenting from the Heart* (Rustburg: The Learning Parent, 2004) 24. the obedient heart will produce the grateful heart. Therefore, the attitudes and actions from the obedient heart, which are not results of rules or other motivations, will be valued with joy, readiness and loyalty.

⁴⁵"There are different ways of knowing, head knowledge and gut level knowledge. Knowing truth about God in your head is not the same thing as knowing God at gut level. Our gut level knowledge of relationships operates in the same way with God as it does in our human relationships. Our gut level knowledge drives the quality of our relationships with both God and others. Gut level memory is a completely different type of memory that supports gut level knowing. The parts of the brain that support gut level knowledge are the same parts that support gut level memory. These parts are online at birth and fully developed by fifteen months. The amazing things about gut level memory that make it so important to our spiritual transformation are that it does not require conscious attention to be recorded in the brain and we are not aware of it when it is operating, it is not conscious. It means that we remember all of our relational experiences from day one in gut level memory, and these memories act on us without us knowing it. In short, memories of relational experiences with important people are etched in our souls and become filters that shape how we feel about ourselves, God and others, and how we determine the meaning of events in our lives." [Todd Hall, *Furnishing the Soul, How Relational Connections Prepare Us for Spiritual Transformation* (Colorado Springs, Leadership Academy Seminar 2007)].

⁴⁶Ibid.



God and others. It also gives the right perspective in seeing and valuing every event in his life. However, if a child gets a bad relationship during his first fifteen months of his life, the experience will be his *gut level memory*, which becomes his negative filter in his interpersonal relationship to himself, God and others, also it becomes the negative filter in his life perspective.⁴⁷

Zumwalt supports Hall's comment, he wrote that "*The secret of Christianity is not asking Jesus into your heart, it is Jesus asking us into His heart. God wants to mature us past our inviting Him to be involved in our life and dreams. He is inviting us to be involved in His life and dreams.*"⁴⁸ Training a child to love God, it means bringing the child into God's heart and helping the child to have trust⁴⁹. This trust is the spiritual experience when a person truly believe and give his life to God. Trust is also the spiritual fruit for every believers who asks Jesus Christ to come to his heart.⁵⁰ Zumwalt⁵¹ added that a child who has trusted his parents since he was still in his mother's womb will be easier to have trust in God and grow in Christ-like character.⁵²

Fourth, seeing and experiencing life in humble and limited life. Having a tough and hard reality is shaping a child's character to keep showing the spirit of hard work, faithfulness and depending on God's love and care. D. L. Moody, Abraham Lincoln and some others had this kind of experience that shaped them into the spiritual leaders who had Christ-like characters.⁵³

Fifth, Serving God continually and consistently. Paul Gieschen supported that living the chance for a child to serve God with joy continually and consistency base don their age will help the child to develop the Christ-like character.⁵⁴ Involving a child in ministry of serving others who need God's love is one of the learning process in developing the Christ like character. Geischen recommended that every parents and Christian educators to design the spiritual training with the activities that give a chance for a child to involve in mission trip in order to build the child's heart to love and care of others. This training will be good for *buinding a heart of service.*⁵⁵ Geischen underlined that it is not easy to build the child's character because it is the work of Holy Spirit.⁵⁶ The mission ministry is a 'God's heart' ministry, so the effective way to help a child in growing the Christ-like character is involving the child in the mission ministry. A child will actively learn to hang on Holy Spirit to witness God's love, learn to pray and develop a merciful heart for the lost.⁵⁷

Sixth, Living joyfully, gratefully and putting God as the center. Michael A. Zigarelli,⁵⁸ recommended three approaches which is like seeds that grow the Christ-like character which

⁴⁷Ibid.

⁴⁸John W Zumwalt, *Passion for the heart of God* (Choctaw, OK: HGM, 2000), as quoted by Geischen in *Faith in Action* 30.

⁴⁹Erik H. Erikson, *Childhood and Society* (New York: Norton, 1963) 249. "*Trust is essential not only for self control and human relationship but also for faith.*"

⁵⁰John Mac Arthur, *Kiat Sukses Mendidik Anak dalam Tuhan*, (Surabaya: Immanuel, 2001) 23.

⁵¹Zumwalt, *Passion* 36.

⁵²Ibid.

⁵³Kenneth O. Gangel dan James C. Wilhoit, eds., *The Christian Educator's Handbook on Spiritual Formation* (Canada: Victor, 1994) 240.

⁵⁴Faith in Action, *Helping Students Develop a Heart for God's Mission* (Colorado Springs: ACSI, 2005) 10.

⁵⁵Marilyn Boyer, *Parenting from the Heart* (Rustburg: The Learning Parent, 2004) 24. *Buinding a heart of service is to build the heart of a servant.*

⁵⁶Geischen, *Faith in Action* 13.

⁵⁷Ibid. 16-17.

⁵⁸*Cultivating Christian Character* (Colorado Springs: Purposeful Design, 2002, 2005) 24-26.



are *gratitude, joyful living dan God-centeredness*.⁵⁹ He said that a person can plant the seed of gratitude by doing spiritual discipline in his mindset, which responds to reality based on what God has said and taught. To have a good response, he recommended the spiritual discipline such as writing the spiritual journal, fasting, self reflecting and self evaluating continually, and praying for people. This spiritual discipline will help the parents to develop a child's emotion to have gratitude in the child's heart. His research proves that Christians who have joy in their lives have more good character than the ones who have lack of grateful heart.⁶⁰ The one that must be applied by Christian parents is to do their responsibility to educate their children in the right education of Biblical principles and let the Holy Spirit works in their children's life.⁶¹

Application of Spiritual Discipline and the Process of Christ-Like Character Building in a Child's

Reflection to the spiritual discipline and process of Christ like character building in students of Pelangi Kristus Christian school.

The writer has made some questionnaire to a number of correspondents⁶² who committed themselves to this research. The directing of the respondents has given in the form of individual in consultation, small group in Bible group study, big group in training seminar, special group in dialogue and discussion with the guideline thesis for teachers and parents.⁶³ To the parents, the writer has recommended some guidelines to be applied for their children between age 7 to 12 years old.⁶⁴

⁵⁹*Gratitude* is a grateful heart, *joyful living* is joyful heart, *God-centeredness* is the life focusing on Jesus. Based on 1 Thessalonians 5:16-18, 16. Rejoice evermore. (*joyful living*)¹⁷ Pray without ceasing. (God-centeredness).¹⁸ In every thing give thanks: (gratitude) for this is the will of God in Christ Jesus concerning you." (KJV)Ibid. 24.

⁶⁰Zigarelli, *Cultivating* 50-56. couple things to grow a grateful hearts are to forgive, to keep not bitterness or anger, to have vision, to avoid stress and to avoid over tiredness.

⁶¹Kenneth O. Gangel dan James C. Wilhoit, eds., *The Christian Educator's Handbook on Spiritual Formation* (Canada: Victor, 1994) 244-245.

⁶²Correspondents are two groups. First group is the parents of Pelangi Kristus Christian School as the main research, who have children age 7 to 12 years old. The second group is the teachers who handle the children of the first group.

⁶³The directing material and teaching is documented in library of Pelangi Kristus Christian School. It is also being saved in the of *Seminari Alkitab Asia Tenggara*, as the special attachments.

⁶⁴Parents are suggested to start the day with the habits of having breakfast and praying together. Parents are encouraged to say good things and blessing for their children, to help the children to give thanks to God and to encourage the children to have spirit to start the day. Parents are encouraged for not saying negative words and avoid conflicts. Parents are encouraged to motivate their children to start the day with joyful and grateful heart. Parents are encouraged to read Psalms and Gospel in turns. Father, mother and their children read and meditate Bible Words together at least three times a week, pray together before they are going to bed, do self evaluation and self reflection on the verse that they have read on that day. Parents motivate their children to build a close relationship with God, do the Bible reading personally, think about God's blessing and tell the parents about the day when they are having night prayer time. Parents motivate their children to express themselves honestly to God in prayer, to depend on God in making decisions and overcome troubles, to give thanks to God everytime they get their prayers being answered, to trust God in every limitness or abundance, to read Bible continually in sequence. Parents help their children to memorize the verses, to listen and sing gospel songs, to make daily schedule with planning the positive and creative activities.

Parents are encouraged to apply the tradition of God's family which is learning to apologize, to apply *basic life* based on their age, to guide their children to go to Sunday School, to help the children in respecting God through faithfully worship God every Sunday, to encourage the children to involve in ministry in church and school, to give good model of love and care to others, and to encourage the children to read Christian books.



The Effective Biblical Pattern in Educating a Child

Berger has proved that the character's development is not just justified by "what" and how the spiritual process is received by a child, but also justified by "who" applied the process of spiritual training. Based on the Bible teachings, the character transformation in a child is the supernatural work of God through Holy Spirit which involved the parents duty and roles.⁶⁵ He explained that the wise and responsible parents have the authority from God and have been more effective in developing good character in a child. The parents who have the unconditional love for their children and do their authority with the consistently live according to God's Words, will very effectively shape the good character in their children.⁶⁶ Berger sees that parents who build their faith in the true relation with God based on His Words, will do their authority as parents as the expression of their fear and respect to God. This will make the parents will have wisdom to teach their children to submit on their authority.⁶⁷ Good and strong character of parents will help the process of building a child's character effectively. Hence, if the parents do not have the characters which can be set as a model, it will cause some problems in the process of building Christ-like character in a child. The parents who understand their weaknesses have to honestly admit their weaknesses and apologize to their children so that there is a balance in the learning process of a building a Christ-like characters in a child.⁶⁸

Principles of educating a child. *First*, Deutronomy 6:4-9 has given us the principle of "how" the parents apply the education for their children. *Second*, Proverbs 22:6 gives the parents "method" of educating children. *Third*, Ephesians 6:4 has explained us the best "process" of educating child which is the wise father role. *Fourth*, II Timothy 3:15-17 shows the "main focus" of a child's education, which is to direct the children heart to God in the true faith of Jesus Christ.

Educating Child Strategy. By learning *a life of preparation* of some church leaders⁶⁹ with six aspects. *First*, parents have built the close relationship with God. *Second*, parents give the living example. *Third*, parents put the priority in relationship with their kids. *Fourth*, parents help their children to see and experience the reality in limited and humble condition. *Fifth*, parents involve their children in mission field ministry. *Sixth*, parents train their children to

Parents are encouraged to take their children to church in order to build the love of God's House and joyfully serve God. Parents are encouraged to appreciate their children with a special occasion of sitting together with the pastor or other spiritual leaders, to give permission for the children to see the Holy Communion and Baptism sacrament. Parents pray and bless their children dilligently and faithfully. Parents communicate the child's *life time line*, dedicate the children to God since they are in their mother's womb, guide the children personally to accept Jesus Christ as God and Savior, help the children in their journey of finding truth and building their faith especially when they have some questions about their faith. Parents give the chance for the children to express their love to God and commit themselves to God, to love and put God as the center for their lives.

Parents teach their children to respect God's blessing in everything including in simplicity, to train their children to live simple and limited also to care for others' needs. Parents teach their children to help the house core and to take care younger siblings. Parents are encouraged to balance love and discipline with the consistent model in order to train their children in consistent way. Parents allow their children honestly live their spiritual lives based on their struggle not based on the demand of parents.

⁶⁵See Proverbs 22:6

⁶⁶Elizabeth Berger, *Raising Kids with Character* (Oxford: Rowman and Littlefield, 2004) 33.

⁶⁷Ibid.

⁶⁸Ibid.38-41.

⁶⁹Strategy material has been delivered to correspondents in the small Bible study group. The material is included in attachments.



develop the spiritual discipline in fasting prayers, writing spiritual journals, daily self reflection and evaluation to have a grateful heart and to thank God for God's mercy and love.

Positive Result of Evaluation which Build and Strengthen the Process of Christ-Like Character

There are some factors which build and strengthen the process of Christ-like character building. First factor is the education in family and church role. The indicator there is an integration of Christian doctrines and children education. There is an integrated curriculum design between church and family, the church play its role as the community which supports the father as the leader of God in the family. The second factor is the factor of parents. The indicator is there are a love relationship with God, qualified relationship with their children, character and living examples, love relation between father and mother, same vision and perspective in educating children, commitment to educate the children based on Biblical principles, God's calling, father role as a leader of God in the family, and the teaching of Christian tradition. The third factor is the children's factor. Indicator is the *gut level memory*, the experience of trusting Jesus Christ, *a life of preparation*, temparement, relationship with the parents during the child's first fifteen months and two recent years, the heart to serve, relationship with God, transcendental orientation, God's calling, responsibility based on age, obedient heart with the honesty and truth orientation, struggled experience, humble and limited lifestyle, and building a relationship with others.

CONCLUSION

There are some recommendations based on the Biblical pattern application for effective character building of children age 7 to 12 years old. The first recommendation is without the faith in Jesus Christ, the process of a child's character will not be effective. Without the grace of repentance and salvation of Jesus Christ, there is no one can shine His glory. The process of child's education must be built in the frame of grace of repentance and salvation of Jesus Christ through the work of Holy Spirit.⁷⁰ The parents do the process based on their faith in Jesus Christ and depend fully to Holy Spirit. The second recommendation, the application of the Biblical character building will only be effective when it is applied to the children who already have good relationship in Christ. Only Holy Spirit is able to change heart and transform the character of a child.⁷¹ The third recommendation is to make the teaching materials for each subjects in each curriculum with focusing in six strategy of child's spiritual training process to be the guidelines for each activities of students' activities in class. The fourth recommendation, the need of parents, teacher and students to be actively involved in student's field study to give the chance to develop relationship with spiritual leaders in each churches. The writer has suggested exclusive dialogue between parents and children about the meaning of sacraments of Baptism and Holy Communion sacraments, also the agreement between the parents and the children of holy life commitment which will reflect Jesus's characters after the children age twelve years old. For the level seven students, they need to learn about the Biblical teaching of character building to be like Jesus Christ, in order to help them to communicate effectively to their parents. All the recommendations are dedicated to Christian schools and universities institutions especially for Christian Education Faculty,

⁷⁰Robert W. Pazmino, *Foundational Issues In Christian Education* (Grand Rapids; Baker, 1997)38-39. See Roma 3:23, John 14:26, 15:5.

⁷¹John Coe, "Intentional Spiritual Formation in the Classroom: Making Space for the Spirit in the University," *Christian Education Journal* Volume 4 NS no 2 (Fall, 2000) 87-88. See Ezekiel 36:26, 27.



which prepares the Christian teachers for serving youth for His Kingdom and for His Glory.
All glory is just For Jesus Christ, the Wonderful Creator, Wonderful Savior who loves us
today to eternity. SOLI DEO GLORIA.



The Use of Issue Driven Approach through Children Story: A Way of Teaching Multicultural Literature to Young Learner

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Abstract

This paper is focused on the multicultural literature in teaching English to young learner. The main purpose as well as become the framework of this paper is to raise awareness regarding multicultural issues. It is obviously easy for this day to find academically smart even brilliant students around the world. They are success in school, get good mark; moreover, they are beyond the expectation of parent and teacher. However, this pride can not generally be used as a measure of success in their social life. It is already patented that the value of life, morals, and beliefs as well as the points of character building must always be nurtured in the midst of their education so that the objective can be reached. What objectives? The harmony, peace and love in the midst of cultural differences, beliefs, race, and ethnicity. this paper shows how an approach which is called issue-driven approach will help to reach this objective through multicultural children story and also show the example of the use of it into the EFL classroom lesson plan. Hopefully this can be an effective way with regard to teach multicultural literature for young learner.

Keywords: multicultural literature, teaching English, young learner, issue-driven approach, EFL classroom

INTRODUCTION

Today, multicultural literature has been integrated into curriculum in some countries. Although this kind of literature is still rarely used by teacher, but if we take a look at the condition of countries nowadays and the happening, it is essential to be applied on account of its benefits. In order to prepare better quality of human kind, as well as been prepared in our curriculum which is called character building, one thing that teacher can do is to give a lesson which aims to raise awareness of the students of multicultural issues. As what is cited from Cai (2002), "if students are to be able empowered, those goals (challenging and changing students' perspectives and developing their ability to identify, analyze, and act on social cultural issues) need to be added—goals that highlight the link between the study of literature about the history of an ethnic group and the social historical struggles.."

The root of this all cases is back into (after) the word culture. /Culture/ is always in the background, right from day one /.../ challenging [the good language learners'] ability to make sense of the world around them". (Kramsch: 1993). Here, as *good* language learners and ones who prepared the next good language learners, it is not enough just learning the language without put up with this challenge. It is actually not merely as a challenge, but a duty as the performer in social engagement.

This paper gives an option towards the teaching of multicultural literature for young learner with highlighting the use of issue-driven approach through the chosen children story.



DISCUSSION

Literature for TEYL

First of all, any method or approach towards using literature in the classroom must take as a starting point the question: What is literature? The Macmillan English Dictionary gives the following definition:

literature / noun

1. stories, poems, and plays, especially those that are considered to have value as art and not just entertainment

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A mean of having value of literary work seems the point of the sense of literature. A teacher use literature in their classroom has become an authentic of materials in order to be beneficial of their teaching. In short, Literature is an integral part of teaching English to young learner in EFL classroom playgrounds. It is common for teachers use fictions or narratives as their teaching materials. One of the aims of teaching literature is to evoke interest and pleasure from the language (Clandfield : 2000). As also what Fitch (2009) said, "For many teachers, the most powerful instrument in their school bag: literature as a tool for language learning." The use of literature can be as a window to seek for new things that is brought by the story. The well-chosen stories, aside from the function as an interesting reading material for young (and any ages) learner ,can be a medium to know and act toward other culture apart from their life. Literature, the discover, gives them permission to enter other worlds and ideas and to explore them confidently (fitch, 2009).

Multicultural Literature

In the world of literature, it is shared stories that perform more than one ethnic group or customs. The real life images are adapted in children stories or books. These kinds of stories are so generally called multicultural stories. Multicultural literature reflects the world's myriad voices and it provides readers with a range of perspective (Hoagland, 2010). The voices are brought by the authors from many sides of the world. Some show their own custom, culture, and/or social cultural issues. Some tell other people's cultures. Apart of them mix their culture and other cultures.

The goal of teaching multicultural literature for TEYL focuses on the unity in diversity. It emphasizes on making schools... more inclusive for all ethnic group, socioeconomic statuses, genders, religions, and ability group (Boutte, 1999). The knowledge about differences has become a beneficial point to raise their cultural awareness (and consciousness). Through reading multicultural literature we are exposed to varying perspectives on the world and challenged to look at ourselves and the world differently (Sims in Cai). A friend of mine, Rina Kristiana, 22, who have ever taught in PAUD Tegalrejo Salatiga also share their experience in teaching young learners: "Short stories that insert cultures of some places.. as now a lot of children don't know about their own culture, for example Javanese, moreover other culture, ... I think multicultural literature for young learner is important and can be a good step in teaching due to the introduction of multicultural issue itself to young learner"

Another opinion also included in this paper. It come from a friend, Dewangga, 23, who teach English in Bethany school Salatiga and as impermanent lecturer in FKIP UKSW Salatiga. He agreed that "Multiculturalism, an issue which happen in our country. We'd better consider



this issue because Indonesia consists of many tribes and cultures... and can be beneficial for me as teacher because we can use this to enhanced materials.”

Multicultural literature makes a function for young learner to see the world beyond their ‘save place’ and let them decide attitudes toward their circumstance. Since children in the primary grades are at an impressionable stage of their lives, it is crucial to help them develop the right attitudes towards cultural differences and the ability to deal with socio-cultural issues (Cai: 2000), a way to teach children to understand society in real time. Dewangga also shared : “ it is very supportive for teaching and learning process. ... I use it .. folklore not only from java but also Borneo and many places. I asked my student to read them, retell story from text. They have to use AVA also to present the meaning and anything they found in the text without think little of their mimic, gesture, and pronunciation. My students are very interesting whenever I use multicultural literature material”

What is actually happen among the people so children can apply the moral tales in the book, whether it is implicitly or explicitly into their daily life. For example we can see kind of social conscience book. It is aimed for white children to motivate them to tolerate with color people. White children used to play (life) with people with the same color. This condition makes them know nothing about how to treat other race or skin. To avoid society distinction all around the world someday, it is necessary to give children knowledge about diversity and unity by stories in book which will produce tolerance and understanding. Hopefully such conflict even war will never happen again.

An Issue Driven Approach

Integrating multicultural education into Indonesia’s curriculum is hardly found. Due to the books and sites used as references of this paper, it is shown that the trend of this idea seems spread around US, London, some part of Africa and Australia. This is in propose to unite the life of white and black people who are life in a same place. By teaching multicultural education, they are lead to respect each other as what their ancestors hardly did. This ‘antisipation’ seems also important to be integrated into our curriculum (TEYL in Indonesia) for the reason that the word multicultural are very close with Indonesia’s words *Bhineka Tunggal Ika* means whether we are different, we are one. It reflects on the condition where thousands ethnic group, customs, colors live in Nusantara.

In this paper, there is an approach which is suitable to be used in teaching multicultural literature for TEYL in EFL classroom. As what in common, the activities such as preliminary questions, relating the literary text to the students’ personal world, summarizing, analyze the values from stories regard to gain the points that may be found in multicultural stories. Those are so called an approach which aims to inform student points around multiculturalism. However, here the use of multicultural literature as a mean to challenge the dominant ideologies, affirm the values, and experiences of historically under pressed cultures is not fully reached. Due to this case, we need activities that adopt an issue driven approach. The intention of this approach is to challenge student to think about issue they may face in reality (Cai, 2000). They are asked to identify, analyze act on social cultural issues. For the exemplifications are the issue of social injustice, interracial relationship, discrimination experiences by immigrant, gender equality, feminism, classism, hedonism, and so forth. Rina, also gives comment :

“ .. about discussing social cultural issue is probably as early as well. Not as a direct explanation, but it can be transferred from messages that is inserted in multicultural literature”



Applying Issue Driven Approach into TEYL for EFL Classroom

Here, one of the multicultural stories used as a medium to transfer the approach. This extract is taken from www.apples4theteacher.com entitled *princess Quan Yin*. It seems better if the classroom activities are arranged in 5-phase lesson plan. The format of using this phases suggested by Clandfield (2000). This part explain the description of lesson plan that also been attached in. This is aimed for 3rd grade of junior high school students. The skills that are learned in using this plan are vocabulary, reading, and speaking. Due to the use of issue driven approach, the main issue that is discussed is gender equality. But student can develop and share other issues they may found. These are the stages which are designed in order to make effective of the material.

Stage one: warmer

Teacher devises a warmer that get students thinking about the topic of the extract by a short discussion that students do in a whole class discussion, then brainstorm of vocabulary around the topic. This sort of warmer fits more into the cultural model of teaching literature.

Stage two: before reading

This stage could be optional, or it may be a part of the warmer. Preparing to read activities include:

- Ask students whether they have already know the story of Princess Kwan-Yin or not.
- Show the picture of Princess Kwan-Yin cartoon, Give some background information about Princess Kwan-Yin before they read the text.
- Pre- teach very difficult words. It must be not too much words so it will not take too long time waste in this phase.

Stage three: understanding the text, general comprehension

Teacher distributes the text of Princess Kwan –Yin to the students. He/she divides students into two big groups. Before ask students to start reading, give them after reading instruction that is to make private list of things she/he considers to be “wrong” or unacceptable behavior based on the text for group one, and the acceptable behavior based on the text for group two. The behavior have to focus on the how fair man and woman be treated in the text. If there are other findings, let student to write them down separated from the focused issue. After that, ask students to read the text in 30 minute. It seems better to let student go out side the classroom, probably to the school’s garden, or near the window. This is in order to give student good feeling while reading, so they ought to ‘absorb’ the values from the story. Then, ask students to finish their list in five minutes. Ask students to have a group of 2 students, each group consists of one student from group one, one student from group two. Let them to share their lists and compare it to each member of group. Lead them to present their group discussion result in a group presentation. Each group has three minute to present.

Stage four: understanding the language

Review the material and ask students whether they have question or not. Then teacher tries to look at the connotation of words which the author has chosen. For example, if the text says “Her warm heart was open at all times to the cries of those in trouble.” (par. 2). Ask them what does that say about the princess? Is there any sentence in Bahasa Indonesia which has a same meaning?



Stage five: follow up activities

In group, Ask students to imagine they are working for a big Hollywood studio who wants to make a movie from the story of Princess Kwan-Yin. Asked them to make a group presentation of Movie plan that describes the movie stars who will be the characters, the location and the director of the movie.

CONCLUSION

As the conclusion, this paper has shown a way of teaching multicultural literature for young learner. The supports and opinions as well as the lesson plan, chosen story, and comments have reinforced the point that issue driven approach can be an important way in regarding awareness in multicultural issue. “ Students will indeed need to develop knowledge of and about the L2 or FL culture, but this receptive aspect of cultural competence is not sufficient. Learners will also need to master some skills in culturally appropriate communication and behavior for the target culture... cultural awareness is necessary if students are to develop an understanding of the dynamic nature of the target culture, as well as their own culture (Plastina:1999).

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APPENDIXES

Multicultural Literature Lesson Plan

School : SMP ...
 Subject : English
 Grade/Semester : 3/2
 Time Allocation : 90 minutes (1 meeting)
Approach : **issue-driven approach**
 Skills : vocabulary, reading, speaking
 Class members : 20 students
 Teacher : Khurtina
Issue : **gender equality**

I. STANDARD OF COMPETENCE

- Reading :
 - understand short essay in form of narrative
 - Know and understand the issue of gender equality
- Speaking : respond the instruction and information
- Vocabulary: know and remember vocabularies in terms of the story given

II. LEARNING OBJECTIVE

At the end of the class students are able to:

1. Identify the behavior in the text of Princess Kwan-Yin related to the issue of gender equality
2. Discuss about the behavior found in the text related to the gender equality in a group presentation

III. TEACHING MATERIALS

1. Slide princess Kwan-Yin cartoon picture
2. Slide of difficult words in the text of Princess Kwan-Yin
3. Papers of follow up activity instruction

IV. PROCEDURES

No.	ACTIVITIES		Time Allotment
	TEACHER	STUDENT	
PRE TEACHING			
1.	Greeting the students and check attendance	Respond to the teacher's greeting and call	1 minute
2.	Ask students whether they have already know the story of Princess Kwan-Yin or not? Show the picture of Princess Kwan-Yin cartoon Give some background information about Princess Kwan-Yin before they read the text	Answer the teacher's question, and pay attention to the teacher	5 minute
WHILST TEACHING			
3.	Shows the difficult vocabulary found in the text and the translation of bahasa Indonesia	Pay attention to the teacher	5 minute



4.	Distribute the text of Princess Kwan –Yin to the students	Get the text	2 minute
5.	Divide students into two big group. Before ask students to start reading, give them after reading instruction to make private list of things she/he considers to be “wrong” or unacceptable behavior based on the text for group one, and the acceptable behavior based on the text for group two	Sit in their big group and pay attention to the teacher	8 minute
6.	Ask students to read the text in 30 minute	Read the text and do their individual list	31 minute
7.	Ask students to finish their list of number 5	Finish their list	5 minute
7.	Ask students to have a group of 2 students, each group consists of one student from group one, one student from group two	Make a group of two	2 minute
8.	Ask them to share their list and compare it to each member of group	Share their list to members of the group	5 minutes
	Ask them to present their group discussion result in a group presentation. Each group has three minute to present.	Present and listen to other’s presentation	15 minute
POST TEACHING			
8.	Review the material and ask students whether they have question or not	Pay attention to the teacher	3 minute
9.	Give them follow up activity: <ul style="list-style-type: none"> • In group, Ask students to imagine they are working for a big Hollywood studio who wants to make a movie from the story of Princess Kwan-Yin. • Asked them to make a group presentation of Movie plan that describes the movie stars who will be the characters, the location and the director of the movie. • Time submission is one week. 	Still in group of two, pay attention to the teacher	6 minute
	Give closing to class	Greet the teacher	2 minute
	Hoped character <ul style="list-style-type: none"> ✓ Critical thinking ✓ Trustworthines ✓ <i>respect</i> ✓ <i>diligence</i> 	<ul style="list-style-type: none"> ✓ <i>responsibility</i> ✓ <i>courage</i> 	



3

Story

The Princess Kwan-Yin by Norman Pitman

Once upon a time in China there lived a certain king who had three daughters. The fairest and best of these was Kwan-yin, the youngest. The old king was justly proud of this daughter, for of all the women who had ever lived in the palace she was by far the most attractive. It did not take him long, therefore, to decide that she should be the heir to his throne, and her husband ruler of his kingdom. But, strange to say, Kwan-yin was not pleased at this good fortune. She cared little for the pomp and splendor of court life. She foresaw no pleasure for herself in ruling as a queen, but even feared that in so high a station she might feel out of place and unhappy.

Every day she went to her room to read and study. As a result of this daily labor she soon went far beyond her sisters along the paths of knowledge, and her name was known in the farthest corner of the kingdom as "Kwan-yin, the wise princess." Besides being very fond of books, Kwan-yin was thoughtful of her friends. She was careful about her behavior both in public and in private. Her warm heart was open at all times to the cries of those in trouble. She was kind to the poor and suffering. She won the love of the lower classes, and was to them a sort of goddess to whom they could appeal whenever they were hungry and in need. Some people even believed that she was a fairy who had come to earth from her home within the Western Heaven, while others said that once, long years before, she had lived in the world as a prince instead of a princess. However this may be, one thing is certain - Kwan-yin was pure and good, and well deserved the praises that were showered upon her.

One day the king called this favorite daughter to the royal bedside, for he felt that the hour of death was drawing near. Kwan-yin kowtowed before her royal father, kneeling and touching her forehead on the floor in sign of deepest reverence. The old man bade her rise and come closer. Taking her hand tenderly in his own, he said, "Daughter, you know well how I love you. Your modesty and virtue, your talent and your love of knowledge, have made you first in my heart. As you know already, I chose you as heir to my kingdom long ago. I promised that your husband should be made ruler in my stead. The time is almost ripe for me to ascend upon the dragon and become a guest on high. It is necessary that you be given at once in marriage."

"But, most exalted father," faltered the princess, "I am not ready to be married."

"Not ready, child! Why, are you not eighteen? Are not the daughters of our nation often wedded long before they reach that age? Because of your desire for learning I have spared you thus far from any thought of a husband, but now we can wait no longer."

"Royal father, hear your child, and do not compel her to give up her dearest pleasures. Let her go into a quiet convent where she may lead a life of study!"

The king sighed deeply at hearing these words. He loved his daughter and did not wish to wound her. "Kwan-yin," he continued, "do you wish to pass by the green spring of youth, to give up this mighty kingdom? Do you wish to enter the doors of a convent where women say farewell to life and all its pleasures? No! your father will not permit this. It grieves me sorely to disappoint you, but one month from this very day you shall be married. I have chosen for your royal partner a man of many noble parts. You know him by name already, although you have not seen him. Remember that, of the hundred virtues filial conduct is the chief, and that you owe more to me than to all else on earth."

Kwan-yin turned pale. Trembling, she would have sunk to the floor, but her mother and sisters supported her, and by their tender care brought her back to consciousness.

Every day of the month that followed, Kwan-yin's relatives begged her to give up what they called her foolish notion. Her sisters had long since given up hope of becoming queen. They



were amazed at her stupidity. The very thought of any one's choosing a convent instead of a throne was to them a sure sign of madness. Over and over again they asked her reason for making so strange a choice. To every question, she shook her head, replying, "A voice from the heavens speaks to me, and I must obey it."

On the eve of the wedding day Kwan-yin slipped out of the palace, and, after a weary journey, arrived at a convent called, "The Cloister of the White Sparrow." She was dressed as a poor maiden. She said she wished to become a nun. The abbess, not knowing who she was, did not receive her kindly. Indeed, she told Kwan-yin that they could not receive her into the sisterhood, that the building was full. Finally, after Kwan-yin, forgetting her grief, and trying to hide the lines of pain that sometimes wrinkled her fair forehead, she had shed many tears, the abbess let her enter, but only as a sort of servant, who might be cast out for the slightest fault.

Now that Kwan-yin found herself in the life which she had long dreamt of leading, she tried to be satisfied. But the nuns seemed to wish to make her stay among them most miserable. They gave her the hardest tasks to do, and it was seldom that she had a minute to rest. All day long she was busy, carrying water from a well at the foot of the convent hill or gathering wood from a neighboring forest. At night when her back was almost breaking, she was given many extra tasks, enough to have crushed the spirit of any other woman than this brave daughter of a tried to make these hard-hearted women love her. In return for their rough words, she spoke to them kindly, and never did she give way to anger.

One day while poor Kwan-yin was picking up brushwood in the forest she heard a tiger making his way through the bushes. Having no means of defending herself, she breathed a silent prayer to the gods for help, and calmly awaited the coming of the great beast. To her surprise, when the bloodthirsty animal appeared, instead of bounding up to tear her in pieces, he began to make a soft purring noise. He did not try to hurt Kwan-yin, but rubbed against her in a friendly manner, and let her pat him on the head.



All day she was busy carrying

The next day the princess went back to the same spot. There she found no fewer than a dozen savage beasts working under the command of the friendly tiger, gathering wood for her. In a short time enough brush and firewood had been piled up to last the convent for six months. Thus, even the wild animals of the forest were better able to judge of her goodness than the women of the sisterhood.

At another time when Kwan-yin was toiling up the hill for the twentieth time, carrying two great pails of water on a pole, an enormous dragon faced her in the road. Now, in China, the dragon is sacred, and Kwan-yin was not at all frightened, for she knew that she had done no wrong.

The animal looked at her for a moment, switched its horrid tail, and shot out fire from its nostrils. Then, dashing the burden from the startled maiden's shoulder, it vanished. Full of fear, Kwan-yin hurried up the hill to the nunnery. As she drew near the inner court, she was amazed to see in the center of the open space a new building of solid stone. It had sprung up by magic since her last journey down the hill. On going forward, she saw that there were four arched doorways to the fairy house. Above the door facing west was a tablet with these words



written on it: "In honor of Kwan-yin, the faithful princess." Inside was a well of the purest water, while, for drawing this water, there a strange machine, the like of which neither Kwan-yin nor the nuns had ever seen.

The sisters knew that this magic well was a monument to Kwan-yin's goodness. For a few days they treated her much better. "Since the gods have dug a well at our very gate," they said, "this girl will no longer need to bear water from the foot of the hill. For what strange reason, however, did the gods write this beggar's name on the stone?"

Kwan-yin heard their unkind remarks in silence. She could have explained the meaning of the dragon's gift, but she chose to let her companions remain in ignorance. At last the selfish nuns began to grow careless again, and treated her even worse than before. They could not bear to see the poor girl enjoy a moment's idleness.

"This is a place for work," they told her. "All of us have labored hard to win our present station. You must do likewise." So they robbed her of every chance for study and prayer, and gave her no credit for the magic well.

One night the sisters were awakened from their sleep by strange noises, and soon they heard outside the walls of the compound the blare of a trumpet. A great army had been sent by Kwan-yin's father to attack the convent, for his spies had at last been able to trace the runaway princess to this holy retreat.

"Oh, who has brought this woe upon us?" exclaimed all the women, looking at each other in great fear. "Who has done this great evil? There is one among us who has sinned most terribly, and now the gods are about to destroy us." They gazed at one another, but no one thought of Kwan-yin, for they did not believe her of enough importance to attract the anger of heaven, even though she might have done the most shocking of deeds. Then, too, she had been so meek and lowly while in their holy order that they did not once dream of charging her with any crime.

The threatening sounds outside grew louder and louder. All at once a fearful cry arose among the women: "They are about to burn our sacred dwelling." Smoke was rising just beyond the enclosure where the soldiers were kindling a great fire, the heat of which would soon be great enough to make the convent walls crumble into dust.

Suddenly a voice was heard above the tumult of the weeping sisters: "Alas! I am the cause of all this trouble."

The nuns, turning in amazement, saw that it was Kwan-yin who was speaking. "You?" they exclaimed, astounded.

"Yes, I, for I am indeed the daughter of a king. My father did not wish me to take the vows of this holy order. I fled from the palace. He has sent his army here to burn these buildings and to drag me back a prisoner."

"Then, see what you have brought upon us, miserable girl!" exclaimed the abbess. "See how you have repaid our kindness! Our buildings will be burned above our heads! How wretched you have made us! May heaven's curses rest upon you!"

"No, no!" exclaimed Kwan-yin, springing up, and trying to keep the abbess from speaking these frightful words. "You have no right to say that, for I am innocent of evil. But, wait! You shall soon see whose prayers the gods will answer, yours or mine!" So saying, she pressed her forehead to the floor, praying the almighty powers to save the convent and the sisters.

Outside the crackling of the greedy flames could already be heard. The fire king would soon destroy every building on that hill-top. Mad with terror, the sisters prepared to leave the



compound and give up all their belongings to the cruel flames and still more cruel soldiers. Kwan-yin alone remained in the room, praying earnestly for help.

Suddenly a soft breeze sprang up from the neighboring forest, dark clouds gathered overhead, and, although it was the dry season a drenching shower descended on the flames. Within five minutes the fire was put out and the convent was saved. Just as the shivering nuns were thanking Kwan-yin for the divine help she had brought them, two soldiers who had scaled the outer wall of the compound came in and roughly asked for the princess.

The trembling girl, knowing that these men were obeying her father's orders, poured out a prayer to the gods, and straightway made herself known. They dragged her from the presence of the nuns who had just begun to love her. Thus disgraced before her father's army, she was taken to the capital.

On the morrow, she was led before the old king. The father gazed sadly at his daughter, and then the stern look of a judge hardened his face as he beckoned the guards to bring her forward.

From a neighboring room came the sounds of sweet music. A feast was being served there amid great splendor. The loud laughter of the guests reached the ears of the young girl as she bowed in disgrace before her father's throne. She knew that this feast had been prepared for her, and that her father was willing to give her one more chance.

"Girl," said the king, at last regaining his voice, "in leaving the royal palace on the eve of your wedding day, not only did you insult your father, but your king. For this act you deserve to die. However, because of the excellent record you had made for yourself before you ran away, I have decided to give you one more chance to redeem yourself. Refuse me, and the penalty is death: obey me, and all may yet be well - the kingdom that you spurned is still yours for the asking. All that I require is your marriage to the man whom I have chosen."

"And when, most august King, would you have me decide?" asked Kwan-yin earnestly.

"This very day, this very hour, this very moment," he answered sternly. "What! would you hesitate between love upon a throne and death? Speak, my daughter, tell me that you love me and will do my bidding!"

It was now all that Kwan-yin could do to keep from throwing herself at her father's feet and yielding to his wishes, not because he offered her a kingdom, but because she loved him and would gladly have made him happy. But her strong will kept her from relenting. No power on earth could have stayed her from doing what she thought her duty.

"Beloved father," she answered sadly, and her voice was full of tenderness, "it is not a question of my love for you - of that there is no question, for all my life I have shown it in every action. Believe me, if I were free to do your bidding, gladly would I make you happy, but a voice from the gods has spoken, has commanded that I remain a virgin, that I devote my life to deeds of mercy. When heaven itself has commanded, what can even a princess do but listen to that power which rules the earth?"

The old king was far from satisfied with Kwan-yin's answer. He grew furious, his thin wrinkled skin turned purple as the hot blood rose to his head. "Then you refuse to do my bidding! Take her, men! Give to her the death that is due to a traitor to the king!" As they bore Kwan-yin away from his presence the white-haired monarch fell, swooning, from his chair. That night, when Kwan-yin was put to death, she descended into the lower world of torture. No sooner had she set foot in that dark country of the dead than the vast region of endless punishment suddenly blossomed forth and became like the gardens of Paradise. Pure white lilies sprang up on every side, and the odor of a million flowers filled all the rooms and



corridors. King Yama, ruler of the dominion, rushed forth to learn the cause of this wonderful change. No sooner did his eyes rest upon the fair young face of Kwan-yin than he saw in her the emblem of a purity which deserved no home but heaven.

"Beautiful virgin, doer of many mercies," he began, after addressing her by her title. "I beg you in the name of justice to depart from this bloody kingdom. It is not right that the fairest flower of heaven should enter and shed her fragrance in these halls. Guilt must suffer here, and sin find no reward. Depart thou, then, from my dominion. The peach of immortal life shall be bestowed upon you, and heaven alone shall be your dwelling place."

Thus Kwan-yin became the Goddess of Mercy; thus she entered into that glad abode, surpassing all earthly kings and queens. And ever since that time, on account of her exceeding goodness, thousands of poor people breathe out to her each year their prayers for mercy. There is no fear in their gaze as they look at her beautiful image, for their eyes are filled with tears of love.

Source:

<http://www.apples4theteacher.com/holidays/chinese-new-year/short-stories/the-princess-kwan-yin.html>



Portrait of *Sadar Wisata* in Surakarta

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Abstract

Sadar Wisata (Tourism awareness) group is a social element as the prime activator in developing tourism. The characteristic of tourism awareness group is self-supporting and spontaneous community in doing their activities for seeking the improvement of the members to promote the development of the regional tourism. This study has two main problems. First are roles of the tourism awareness group and second are problems faced by tourism awareness group in developing tourism sector in Surakarta. The results of this research show that the tourism awareness groups do not understand their function yet. It can be seen from the activities they perform, especially within a district level. The tourism awareness group tends to actualize cultural tourism potency in the form of art performance; in fact not all the districts have cultural tourism potency in the form of art or culture. The groups are in progress of finding the proper forms of cultural tourism potency to be packed for developing the activities of the group. Financial and human resources are the two problems faced by the tourism awareness group and the human resources are considered to be more significant. The existence of the government's funds means nothing if it is compared to the available of human resources with high responsibility in accomplishing their objectives, since the tourism awareness groups function as a mediator and a communicator for developing the tourism sector in Surakarta.

Keywords: Tourism awareness, Tourism development

INTRODUCTION

Marketing activities in this country aims to develop awareness and society understanding about tourism and promote objects and tourism interest to society of Indonesia. Developing socialization and tourism marketing in this country is performed by fostering people with making *Kelompok Sadar Wisata (pokdarwis)* or Tourism Awareness Group in every *kelurahan*. This society group is independent and self-sufficient society that function to encourage tourism building through tourism interest development with promoting *Sapta Pesona* concept; *Aman* (secure), *Bersih* (clean), *Tertib* (orderly), *Sejuk* (comfort), *Indah* (beauty), *Ramah-tamah* (hospitality), and *Kenangan* (memorable).

Geographically, Surakarta city is not classified as agrarian territory. It only has narrow territory and has no more manufacture industries. The developing industries in Surakarta are, commonly, crafts in big and small scales. Among the big scale industries, batik is centered in *Kampung Batik Laweyan* and *Kauman*. Most of the marketing activities are done in trading center of Batik in *Pasar Klewer*. Besides that, Surakarta has rich of crafts center, like inlaid work in making *wayang kulit* or leather puppets, xylograph, cane work etc.

Refer to the local potency that covers historical aspect and society, the government of Surakarta stated vision and mission that is oriented to culture, tourism, commerce, and education. In tourism context, Surakarta has been stated as *Daerah Tujuan Wisata (DTW)* or tourism destination district. To support the development of Surakarta city as *DTW*, many



instruments, physically or non-physically, must be prepared. Adisumarmo airport was built to be international airport.

Supporting facilities for tourism industry, like hotel, restaurant, and garden hall are built. Besides that, dealing with the national program, the government of Surakarta city also strengthen concept of “*Sadar Wisata*”. This paper tries to trace historical background, role and handicaps of *Sadar Wisata* groups in supporting the tourism development in Surakarta.

Community based approach is considered as requirement to reach continuous tourism building. It is based on the hypothesis that local society has knowledge in managing local natural resources from generation to generation. Based on the knowledge and experience, local society commonly have fully awareness to identify many things that is friendly circumstance and acceptable socially, culturally and religiously (I Made Sukarsa, 1999).

Existence or roles of *Sadar Wisata* group seems not fully understood by tourism doer or society member, especially in Surakarta. On the other side, *Sadar Wisata* group activities are inseparable from partner’s relationship and other activator element in tourism. Dealing with the understanding, therefore this research formulate two problems in how is *Sadar Wisata* Group role in developing tourism in Surakarta and what is the problem of *pokdarwis* in developing tourism in Surakarta?

REVIEW OF LITERATURE

I Gde Pitana and Putu G. Gayatri in their book *Sosiologi Pariwisata* stated that tourism is complex activities that can be viewed as a big system that consist of components like economy, ecology, politic, social, culture, etc. Viewing tourism as a system means that analysis about tourism aspects is inseparable from other subsystem like politic, economy, culture, etc in interdependent relationship.

As a system, elements in the system are interdependent relation. It means the changes on one subsystem will affect the change on the other subsystem until the finding of new harmony. Tourism is an activity that involves people in society, so that it gives impact directly to local society. Tourism, even, has been said to have great impact to local society to experience metamorphose in any aspects. Tourism impact is a review that obtains deep attention in literature, especially impact to local society. On the other side, tourism impact to tourist and/or country of the tourist origin is not focused yet.

Government, through *SK Menhub* No. 52/1969, explains about effort to establish active support and society role in building tourism. Government and society need to perform effort in giving awareness about tourism, either for public or entrepreneur and especially government officials. Existence of *pokdarwis* functions as tourism movement group. It is relevant to *SK Menhub* that rules about tourism (*SK Menhub* No. 52/1969).

President Suharto, during his government, ever stated that tourism development had to be developed in the double because this sector could be reliable as great foreign exchange. Dealing with that, tourism activities stimulates significant impact by creating job opportunity. Wider impact from the fulfillment of new workers in tourism sector also correlates the movement of Indonesian society economy (Anton Soetomo, 1989).



Goal and Benefit of the Research

This research is aimed to obtain actual data about the role of *Sadar Wisata* group in tourism industry and to dig up problems faced by *pokdarwis* and handicaps that limit *Sadar Wisata* group performance in developing tourism sector in Surakarta. Based on those two problems, it is expected that this research will map real condition of *Sadar Wisata* group as inseparable part from tourism industrial development in Surakarta.

Result of the research is expected to be benefited for decision maker to improve tourism building and for references material for any agents that deal with tourism, particularly in Solo city. It is also recommended to be applicable to *Sadar Wisata* group, public society, related institutions or tourism activator in Solo city to optimize performance and to build strong network among tourism activators. Optimizing *pokdarwis* performance should be worked in synergy with other tourism activator in order to strengthen tourism social endurance on every tourism components.

METHODOLOGY

The research has spatial scope of Surakarta because in city strategic plan of Surakarta is stated that society awareness to tourism is declining. City government, nowadays, is ruled by Ir. Joko Widodo who tries to develop and rise up tourism. Some informants who have been contacted by researcher to state that Solo tourism, now, is growing better, but it is still lack of strong “super team”. Each component of tourism activators in Surakarta goes separately, without cooperation. Therefore, tourism component which is not involved in cooperation will feel to be left behind because they could not support their social group potential. This research uses socio-historical method. Historical approach is beneficial to view development and changes in social level dealing with dynamic role of *pokdarwis* from time to time.

Sadar Wisata groups in Surakarta city is formed in every *kelurahan*. A *Sadar Wisata* group consists of 5 people. Total of management and member of *pokdarwis* in Surakarta more or less 255. This research uses qualitative data and collects 102 people as samples of *pokdarwis* managements.

RESULTS AND DISCUSSION

Rencana Strategy (Renstra) or Strategic Plan of Tourism Department of Surakarta city such as: tourism building that accommodates value and participation principle; optimizing *Sadar Wisata* group (*pokdarwis*); growing special activities tourism center; availability of data and accurate information that deal with object potency and tourism interest; and developing professionalism of tourism activator.

Commitment to establish city to be better condition as proclaimed with motto *solo the future-is the past*, then, becomes the base any building agenda of other cities. Remains artifacts of the past are made as part of city building in future and becomes pole of recent building by giving attention to values and spirit that creates this city in the beginning (Solo Pos, 2006).

Solo Festival, *Bon Rojo* Festival, Commemoration of City Birthday, *Bengawan Solo* Festival, any Cultural parades and Festival Keraton Nusantara V are held as annual program by



Tourism Department. It also involves *pokdarwis* role in every *kelurahan* actively. Due to the program, fostering to tourism service agents intensively, teaching *pokdarwis* in every *kelurahan/kecamatan* to *putra-putri Solo* election that is held annually has been made as part of tourism building in Surakarta city.

Sadar Wisata behaviour is obtained when *sapta pesona wisata* was established, that is secure, orderly, clean, comfort, beauty, hospitality and memorable. Even if it is rooted back, the government during President Suharto reign used one of the strategies to reach goals in fifth *PELITA (Pembangunan Lima Tahun)* or Five Year Development program by emphasizing the role and society involvement in order to develop tourism building. It is important because tourism sector is considered to run its role in supporting development.

POKDARWIS Portrait

Sadar Wisata group (*Pokdarwis*) in Solo city was established in 2002 in *Gedung Wayang Orang Sriwedari*. The establishment was legitimated by the mayor of Surakarta, J. Suprpto. The established group consists of 709 people who came from 51 *kelurahan*. They were local prominent figures, cultural observers, artists, scientists and *karang taruna* organizers. *Pokdarwis* name was associated to *kelurahan* name. The mayor J. Suprpto stated that the existence of *pokdarwis* showed society awareness in *handarbeni* (possessing) their city. He hoped the groups to have roles maximally for the advance of society of Solo city, especially in tourism sector. Furthermore, J. Suprpto hoped that *pokdarwis* can also gives understanding to raise up social awareness to keep Solo city to be secured and integrated in order to entertain and comfort tourist visit and to live in Solo (Suara Merdeka, 2002).

Pokdarwis existence is actually aimed to develop potency in local district to be created as tourism object. "Like *kampung batik Laweyan*, *kampung seniman* in Clolo, Kadipiro. It means in this district is potential to be tourism object," said Sutarno, S.J., CN, the *pokdarwis* founder. In sight seeing when entering the *kampung*, the architectural style is similar as in Bali, tourist will feel traditional situation like in Bali. Nevertheless, some people say that the *kampung* is similar with China Town in tourism district, legend city, Cibubur, West Java, complete with its architectural style in strong colourful ornaments. The difference is in Cibubur while the architecture was built to be similar with Chinese style and it is sold to tourist as interesting spot. In Kadipiro, it is similar coincidentally with them. Even, in the entrance of the *kampung* it was completed with monkey statues that was located on the its right and left side as welcome statue for visitors. While, in the left of the great meeting building terraces was modified as art performance district.

Joko Santoso, RT leader in *kampung* Kadipiro said that this building express our art talents. According to Joko, *kampung* or artist housing was built in 1987, in the period of mayor Hartomo. The *kampung* was named with artist housing because the government at the time had initiated to give special attention to artists of Solo. The mayor wished to provide the artists cheap and comfortable simple houses. They just need to pay daily Rp. 315.- or monthly Rp. 10.000,-

Inhabitants of *kampung seniman*, nowadays, are not all of them artists. Some of them are sons of artists, but some other is not artist's family. The inhabitants consist of *kethoprak* dancers, painters, dancers, *jaran dor*, *keroncong*, and *campursari* players, *dalang*, etc. They are professionals. There is a *wayang* group name, Mayanggoro, and *keroncong* grup name *Putra Seniman*. While, other artist groups were established independently, without famous name,



and group. Although some other do not have group, they could not be underestimated. It was proven that the artists without famous name also capable in enchanting audients (Solo Pos, 2009).

In *pokdarwis* organization, government of Solo city hopes its citizen to pack their district potential either as art, economy, or tradition potency in every *kelurahan*. By building district potency, it is hoped to emerge tourism objects complexity with their own characteristics. But, as satated by Sutarno, in realization, there are many *pokdarwis* that have not understood their functions. It can be seen from activities they have done from the beginning of the group making in every *kelurahan*. Almost all *pokdarwis* always perform cultural tourism potency such as arts, although many districts do not have the potencies. Some groups are trying to find their forms or potencies to perform, so that group activities develop. "That condition has to be directed immediately to settle the group in development and upgrade their potencies."

Dra. Febria Roekmi also argued that there is not all *pokdarwis* understand their function. Tourism Department plants to reorganize *pokdarwis* to make their existence beneficial and their activities becomes good tourism object. If all choose art program, other potencies could not be developed (Suara Merdeka, 2005).

Problems Faced by POKDARWIS

Average of tourism awareness group that was built in 2003 had made use cultural potencies basic in developing or introducing tourism. Managers and members of *pokdarwis* consist of more or less five persons. Most of them are from people surrounding in a *kelurahan*. Those five persons rules as managers and members because *pokdarwis* system does not need human resources with particular criteria. Duties and responsibilities are creating and forming cultural potency for each *pokdarwis*.

The potency owned by *pokdarwis* of *kelurahan* Sondakan, for example, is in batik arts, dance, *keroncong*, *gamelan*, painting, and cooper craft. Programs that have been done by Sondakan *Sadar Wisata* group was developing batik, carving, painting, *gamelan*, taking part in 17 August commemoration and fun walking. They were performed as a way in tightening relationship among society members. *Kelurahan* Mojojongo that is located in the northern of Surakarta city has ever performed some programs of *pokdarwis*, such as: organizing *pokdarwis* management and leadership training. Those two programs were held for two days from 31 May to 1 June.

Every program held by *pokdarwis* had been supported financially from center government. Some years before, financial support to *pokdarwis* was originated from building financial through block grant. Nevertheless, in this era, the financial support is obtained from the government of Surakarta city through *Musrenbangkel* (*Musyawaharah Rencana Kelurahan*) or *Kelurahan* Planning Agreement or through government finance that is distributed through Tourism Department. The government role is considered very positive but the financial implementation and human resources are still imbalance.

Two problem faced by *pokdarwis* is human resources, according to some respondents. But according to Sigit Prakosa, *lurah* Sudiroprajan, the handicap is not considered as threat in implementing *pokdarwis* performance. He said that the problem have characteristic. The problem emerges because some elements are unfulfilled, but on the other side the problem



would be eliminated by the power of society elements. In Sudiro, for example, financial problem and the lack of society involvement in *pokdarwis* activities as if covered by the existence of multi-ethnic collaboration power. Sudiroprajan distric is really known as Pecinan Balong distric. In this *kelurahan*, there lives some ethnic such as Java, China and Banjar Kalimantan.

CONCLUSION

Based on rules on statutes and bylaw of *Sadar Wisata* group in each *kelurahan*, the aim to form *pokdarwis* is as motivator and communicator. The role is to make the society conscious and be able to make use tourism potency in their district maximally. Besides that, *pokdarwis* is hoped to be actively role in building and developing tourism in their own district to support *Sapta Pesona* movement.

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