

Implementation of Active Learning in Indiana Secondary Schools, USA

By: Maria Montessori

Abstrak

Artikel ini menggambarkan hasil penelitian mengenai implementasi konsep belajar aktif di dua sekolah menengah di Indiana, Amerika Serikat. Tujuan penelitian ini adalah untuk mengetahui prosedur dan proses pembelajaran menggunakan konsep belajar secara aktif di sekolah-sekolah menengah di Indiana dan mengkaji kemungkinan penerapannya di sekolah menengah di Indonesia. Temuan penelitian ini menunjukkan bahwa konsep belajar aktif di sekolah menengah Indiana diterapkan dengan menggunakan berbagai pendekatan dan strategi belajar mengajar yang juga mungkin dan bisa dilaksanakan di sekolah menengah Indonesia, misalnya mengaktifkan siswa dengan menggunakan pertanyaan guru.

Key Words: *constructivism, active-learning, Civic Education, Competency-Based Curriculum, Teacher's Questioning*

I. INTRODUCTION

Citizenship education is one of school subjects taught in Indonesia schools. This subject is considered as important for building future Indonesia citizen, especially for national character building. Therefore, government to increase the quality of civic education program has taken so many policies. One of them is launching a new curriculum for citizenship called "Competency Based Curriculum" in 2004, which tries to cover some problems found in civic education. Based on that curriculum, it seemed that civic education teachers have to treat students as active learners in order to obtain the goals of civic education. Moreover, the curriculum documents also stated that teaching and learning process in the classroom should be arranged into learner-centered instruction, in which students have to be involved in learning actively. Several teaching strategies and instructions were suggested in the curriculum to guide teacher in running their tasks (The Centre of Curriculum Development 2003). However, a large number of researches

about citizenship education show that traditional approach to teaching still to be the dominant approach used by teachers. This situation caused to lower level of students involvement in learning. Some frustrated Indonesian Social Studies teachers said that most of high school students did not want to learn the Social Studies subject, but we had to teach them as a part of our job as teachers

In order to obtain civic education goals, teachers should be able to shift their teaching approaches from traditional to the new one, such as constructivism approach, which emphasizes student active learning. The most important thing that teachers have to do is to eliminate their resistances to the changes that may occur in their lives as teachers. For that reason, teachers need to have guidance and example of how to apply the theory of constructivism into classroom practice.

Indiana Social Studies teachers have long-term experience using constructivism approach to learning and instruction, therefore, the study of how teachers implemented student active learning in Social Studies classroom will be conducted in Indiana secondary schools, in order to find the ways of the Indiana schoolteachers dealing with the student active involvement in learning

Active learning is a principle of constructivism. As a concept, active learning means that the student develops construct knowledge through active physical and mental activity. As a process, active learning means that students are actually engaged in a variety of meaningful problem setting and problem solving activities with real world application. Active learning is a part of constructivism approach and it found in any area of teaching. The focuses of this study were teachers' planning and student's involvements in learning and learning environment in which lesson take place.

The purpose of this research is to gain knowledge and to describe the implementation of student active learning principle in Social Studies teaching, especially in secondary schools. This study also attempt to think and to find the ways the active learning principle could be implemented in Indonesia schools.

Constructivism View of Learning

The central heart of constructivism is the source of knowledge. According to this tradition, knowledge is not represents something that an independent world, or something that only stands by itself which come from out of there. However, knowledge is represents something

that relate to our self's, our experiential life as human being that it could be dealing with physical object and ways of thinking with abstract concepts (Glaserfeld, 1995). So, knowledge is regarded as being constructed by human, such that human creates meaning of the world rather than discover meaning from the world. (Hausfather, 2003).

Knowledge may be received from any sources, but the strongest and deepest ways of knowing come from individual's active construction of meaning through their interaction with physical and social environment. Therefore, learning is an active process of knowledge construction and sense making, and constructing knowledge will give the ways to building conceptual understanding, which considered as an important factor for problems solving (Brown, 1994)

Active learning denotes learning activities in which students have considerable autonomy and control of the direction of learning activities. How do teachers move from passive learning to active learning, and to find better ways of engaging students in learning process, guided by the model below, which offers a way of conceptualizing the learning process in a way that may assist teachers in identifying meaningful forms of active learning? (Dee Fink, University of Oklahoma, Instructional Development Program, 1999).

A Model of Active Learning

EXPERIENCE OF:

DIALOG WITH:

DOING

SELF

OBSERVING

OTHERS

This model suggests that all learning activities involve some kinds of experience or some kinds of dialogue are dialogue with self and dialogue with others. Dialogue with self happens when a learner

thinks reflectively about a topic. Whereas, dialogue with others can and does come in many forms. A much more dynamic and active form of dialogue occurs when a teacher create an intense small group discussion on a topic. Sometimes teacher can also finds creative ways to involve students in dialogue situation with people other than students

The other two main kinds of experience are observing and doing. Observing occurs whenever a learner watch or listens to someone else doing something that relate to what they are learning about. This might be such things as observing one's teachers do something, listening to others professional perform, or observing the phenomena studied. On the other hand, doing refers to any learning activity where the learner actually does something such as investigate local historical resources.

Engaging students in active learning and give them autonomy in their learning and constructing knowledge, teachers do not have to be information provider for students. Since students do not record information, but create new knowledge by themselves and with others, learning is much more complex. Therefore, teacher roles are even more important than they were once believed to be.

Promoting Students Active Involvement In learning

The most important step involving students in the learning process is to design lesson intended to involve students in learning as much as possible. According to Jacobsen et all (2002), there are three aspects of instruction, which relate to this purposes. These are the need to clear goal, the role of high quality representation of content and the important of teacher questioning. Being able to guide students with question is the most important teaching skills that teacher can possess. Research support this assertion (Wang, 1993), effective teachers ask more questions than they less effective colleagues, and a large number questions are indicator of effective organization and clear goals.

Recent development to teaching approach for better students understanding underline the power of teaching by asking instead by telling. According to Garlikof (2000), teaching students by asking questions to them and let them to answer questions, not only show the students capacity in answering question correctly in a varieties of ways, but also show the students motivation in learning. Students are eager to solve the problems encountered to them, and involve in learning maximally.

Classroom Learning Environment for Engaging Student Active Involvement in Learning

Constructivist learning requires that students feel free to offer conclusions, conjectures, and evidence without fear of criticism or embarrassments. It also requires students who are willing to listen to each other, wait their turn, and consider and reconsider their own ideas while others are talking. Creating a productive learning environment can promote as much learning as possible and develop students' ability to manage and direct their own learning. (Kauchak and Eggen, 2003). A responsibility model of management helps students make appropriate choices and learn from their action and decision. Therefore, managing a productive learning environment for students is an important task that teachers must pay attention to.

Frazer and Rudnitski (1995) suggest that the following steps can help teachers to establish that environment. These are: establish rules and procedures, avoid using questioning as a form of punishment, use a variety of instructional strategies in order to keep students' interest, encourage student-to-student interaction, encourage and promote thinking through modeling, and use small groups for questioning.

II. METHODOLOGY

This research was conducted using qualitative inquiry, in which it involves an interpretive naturalistic approach to the subject matter. The reasons for doing this approach are based on the characteristics of the study e.g. this study attempts to see the way the Social Studies teachers run their lessons, in their natural setting and then describe the findings in narrative ways. So, it would be worth using a qualitative approach to find out the goals (Bogdan, C.R. & Biklen, S.K. 1992).

The primary data of this research are relying on the two of Social Studies Teachers in a middle school and one of Social Studies teachers in a high school. The other data gained from the school personnel where research was conducted. Meanwhile secondary data entirely got from school documents and library resources, which relate to the topic. The data were collected through classroom observation while lessons took place and interviews with the teachers interchangeably whenever there is time for doing that. Whereas interviews with the authority of schools' personnel was done in their office.

Analysis of the data followed the procedures of data analysis for qualitative approach. Firstly, data are reduced into information that needed by researcher and match with the research purposes. Secondly, data were displayed narrative based on category, and then discussed by contrasting and comprising with the framework in literature.

III. FINDING AND DISCUSSION

1. Student Active Learning in Social Studies Classrooms.

Three times observations at the seventh Social Studies classroom in Batchelor Middle School found that teacher taught Geography subject about Japan and Korea in series of lessons. Each lesson contained activities that have to be followed by students intensively. At the first lesson, Teacher designed activities for students that are, watching video about Japan and Korea, answering some questions about the picture and narrative, reading textbook about the topic and writing in their agenda books in order to answer the questions of their journal.

The next lesson, students took reading for 20 minutes about the topic, and then working in groups. The groups have to work together in completing their task. The last sequences of Geography lesson for seventh grades students were conducting a research project. All of students had to spend time in media center and worked on their former group to find out more information about China's neighbor.

Teaching Civic Education subject about values considered important for living in 21st century, designed by teacher using a piece of paper with contain 10 kinds of values. Teacher asks students to work in groups, and each group is given specified values to study and to find it definition from dictionary. Class members discuss every value, and much of the time was spent by teacher to direct students understanding about the values by questioning and discussing with all the students. On the other side, high school teacher's always design lesson to activated their students in learning by confronting students with the problematic issues that have to be solved by students through series of activities in the school

The observations above suggested that there was no one of Indiana Social Studies teachers presented information about topics to their students. It means that teachers realized student capability to gain information from varieties of resources, and then built

understandings that make sense for them. What the teachers did, were guiding students to maximize their learning and facilitating them with several actions and efforts in order to achieve the goals.

Designing lessons about a topic into sequentially time indicated that teacher want to maximize students learning through differential ways. From watching movie, reading a textbook, to conducting research project about the same topic had allowed every student to build a depth understanding of the subject. It was also led students through a step- by- step process of thinking from the lower level to reach the higher-order thinking.

Giving students a packet of problems and questioning about the topic challenged them to work harder than before. Moreover, in order to solve the problems, students encouraged to find the most effective ways for them and it lead students to conclusion that there were many ways to solve problems encountered by human in their life. The ways the teachers designing lesson showed that teachers had incredible knowledge about teaching and learning.

Teaching students abstract concepts such as values without telling them the definition and characters of values had enable students to construct the meaning of values for them, and it was also force them to think more deeply about the values in their daily lives. It means that students had opportunity to enhance their thinking and to gather the meaning of abstract concepts. It supported the theory that concepts could not be delivered but it must be conceived. All the teacher effort to keep students learning implied that the role of students in constructing knowledge was central to the teachers concern.

The second aspect that captured attention was the way the teachers used student prior knowledge to maximize students learning. Keeping them to work on journal before finding information or discussing the topic in groups, had enable students to think that the topics was not something unusual for them, but it was relate to what they had known formerly.

The last concept shown clearly was the student action as active learners in achieving the goals. Putting students to work on journal by them and then solve problems in the small group lead to the realization of facts about human as individual and social creature. This activity had forced students to mentally and physically active in the process of learning. Learning activities designed by teachers not only enable students to have reflection and expansion of their thinking, but also to have dialogue with others, in order to compare and to reshape their thinking. It means that students allowed constructing new knowledge by themselves.

This kind of learning activities had also enable students to observe and to do something that relate to the topic. What the students did to answer the questions or to solve the problems in students' packets challenged the other students to feel more confident in imitating or trying another ways. It means that all students actively engaged in the process of learning without much intervention from the teachers.

The observations suggested that constructivism approach to teaching and learning worked best for the students in the regular classroom. However, it seemed that constructivism approach could not work well for students with special needs, even though they got some help from special educational teachers. It also indicated that implemented this approach to teaching and learning for students with special needs, required special adjustment.

2. Promoting Students Active Involvement in Learning Social Studies.

The involvements of students in learning were fully promoted by teachers through designing many varieties of student activities and teachers questioning. Questioning to students about the topic is a kind of activity that seemed in common in the classrooms. Teachers always asked questions to students before their working on the journal, after reading textbook, and while trying to solve problems in their task, and if they did not fully involve in their work. Whenever students get stuck with their task and then asked teacher for some help, teacher did not provide students with the correct answer instantly, but pushed them to think the some possibilities to solve the problem.

A high school teacher invited students to involve in learning by asking them to solve problems in their task by themselves. The students felt free to choose the way they could handle the problems and that considered interesting for them. Therefore, high school teacher gave students more space and autonomy for their own learning. However teacher always guide her students by asking more questions that relate to the problems and topic.

The observations above told something that teachers deeply understood about the important of student involvement in learning process. Therefore, teachers always tried some varieties way to get students attention to learn. There were three kinds of teacher effort in maximizing students involvement in learning process these; clear

and inform students learning procedures, challenging student's learning task, and the teachers regularly questioning.

Having clear learning procedures in their minds and knowing the teachers demanding to them forced students to have a preparation for their learning. Firstly, they had to pay attention to the situation in the classroom, and prepared their effort to construct new knowledge. This activity made them truly involving in their learning process. Therefore, clear and informed learning procedures were the first step to maximally student's involvement in learning.

Putting students into challenging learning task had proved as another ways to get students involve in learning. As can be shown from the observations, learning tasks substantially needed of students thinking skills in which they had to grasp the main idea of the topic.

When the teacher taught about values concept, the students capacity to use their thinking skills were still remarkable to show. The teacher faced them to find some examples of values in their daily life. It means that students always put in the challenging situations in which they had capacity to handle it moderately, and gave them an opportunity to enhance their thinking as much as possible.

Observations in the two schools and three classrooms could be concluded that the most dominant strategy applied by teachers to get students involve in learning process was the teachers questioning. From the beginning of the lesson, teachers always ask questions to students. In other word, teachers questioning always keep students on the track of their learning.

Being able to answer teachers' questions was an interesting moment for students in the classroom. It was not only opportunity for students to explore their prior knowledge but also to declare to their classmate that they had capability in doing something. Based on psychology perspective, it needed by students in order to build strong self-esteem and self-confident for their future lives, and it was proved in the classroom by the large number of students raising their hands when teachers offered questions to them.

Probing and prompting students to answer question correctly, allowed students to enhance their thinking. The more teachers asked questions to students, the more they tried to answer correctly, and its means the more they got involve in learning process. Therefore, to get involved in learning was an important factor for students in their learning, and the teachers questioning

placed them in that situation from the beginning of the lesson to the end of learning activity.

However, asking students with special needs with a divergent question would not automatically involve them in learning process. These kinds of questions were too often to be ignored by students, and teachers always had to point toward specific students to get answer. Teachers always give opportunity for all students to participate in the learning process, and calling specified students to answer question in a final decision. Therefore, it could be concluded that no matter students ability and capability in learning, questioning is an important tool to direct students active involvement in learning process.

Since the students had already enough prior knowledge about the social studies subject and adequate academic skills in confronting academic problems. Therefore, high school teacher considered teacher question as a dominant strategy used in her classroom. Problematic discussions in the high school classroom proved as a powerful tool for empowering students in their learning.. Letting them to solve problems through answering teacher questions was extremely important factor in building new knowledge for high school students. This activity will lead them to be an active and longtime learner.

3. Classroom Learning Environment for Engaging Student Active Involvement in Learning

In Batchelor Middle School, Social Studies lesson take place in classes, which designed for teaching Social Studies subject. Every Social Studies teacher has her own class and creates or design her class what ever they want. Each Social Studies classroom has 30 to 32 student desks and chairs, which can move to perform a group work or other purposes. The classes are also having modern technology support for teaching practice and teachers can use all this kinds of technology in their effort to teaching and learning process.

The students sat in rows, and moved their desk, if teacher ask them for doing that or when they needed discussion with their peer. In both of classes, teachers had set the rule for their students properly, for example, if student had questions or wanted to speak something's to teachers, they had to raise their hands. All these rules known well by student and they were look like to follow them constantly.

Both of the teachers never said to students that you are wrong, when students gave incorrect arguments about the topic. Nevertheless, they always say something that cannot embarrass

student in front of their classmates. On the other hand, a contrast atmosphere occurs in Harmony high school. There is no grade in this school, so one class can consist of different levels of students, in term of ability, sex, age and socials background. All the chairs arranged into circle, so all persons in the class can enjoy face-to-face interaction.

The Social Studies teachers in Indiana secondary schools suggested that managing and creating learning environment was a valuable afford for teacher. How the living in Indiana's school classrooms could be described into the two broad terms, those were the physical atmosphere and the classroom climate. Both of these factors considered have great impact to student's active involvement in learning.

A class consist of more than 30 students needs a wide space to allow students moving into some area in the classroom in order to search information from textbooks or to discuss some problem in their learning task with groups. Being able to move and interact with each other in the class member or groups was an important factor in creating productive learning environment for student learning. Therefore, the ways the teachers arrange their classroom based on the student needs and the teachers management. This arrangement also showed evidence that teacher possess a sensitive and good taste in arranging their classroom physically and it was base on the deepest knowledge of teachers about the role of learning environment for the successful learning.

Physically arranging classroom was not a main barrier for lesson taking place in high school class. As long as the learning process designed by teacher meets with the students need and interest, learning could be fun. The most important thing was maintaining of classroom disciplines. By setting the rule in the classroom, teachers and students were able to create the productive learning environment. Teacher behavior in the classroom interaction became a model for student in their interaction with the class members. As considered by many experts in education and psychology, productive learning environment is one of the important factors needed in constructing knowledge and sense making

4. Possible Application for Indonesia's Schools

Indonesian secondary teachers can implement constructivism approach to teaching and learning in their classes, in order to increase student active involvement in learning. However, Teachers had to adjust it into the schools and classroom situation. Three factors have to consider by

teacher when using this approach, these are, the student's characteristic, local culture and the availability of resources.

Most of classrooms in Indonesian secondary schools usually have 40 to 45 students. Therefore, teachers have to design lesson without demanding too much to student's mobility, for example, special arrangement of students desk which matching with the group members can eliminate the noisy during the group work.

Constructivist approach requires interaction between teachers and students, and among the students in constructing new knowledge. It means that students can talk or argue with their teacher about the topic studied. It is difficult to occur in the Indonesian cultures, which consider arguing with teachers as impolite behavior that one should avoid it. If teachers could not be able to change student's behavior about this, teachers can solve this problem by maximizing students-students interaction. In other words, designing lesson by putting students working with their peer is the main solution to this problem. The last thing is the limited amount of resources for learning available in most of Indonesia secondary schools. How teachers set the constructivist lessons without depending on the modern technologies support is becoming an incredible effort that teachers could do.

Based on the above considerations, the first thing that could be applied in teaching citizenship education to Indonesian students is the constantly use of preview assignment before exploring content material in the class period. Since there is no single formula for a good preview assignment, so teachers can use a wide varieties of ways to make students preview their lesson, such as analogy or reviewing. The most important things is teachers have to share and review with the entire class.

The others thing that could be implemented in Civic education Indonesia secondary schools is the frequently use of cooperative interaction. Teachers can create heterogeneous groups work in classrooms based on student ability, gender, social economic, ethnicity and religious backgrounds. This approach to teaching and learning could be suited appropriately to situation in Indonesia classroom.

The last thing could be applied in Indonesia is the use of teachers questioning to gain students involvement in learning as much as possible. Since most of Indonesia teachers do not used to ask questions to students in their lesson, teachers have to be trained systematically for that purpose, and make preparation by writing some questions on the paper. Systematic approach to this method of teaching will provide teachers with the skills and knowledge, and

finally it will end the era of telling, and move to era of asking everything about the topics to students.

IV. CONCLUSION AND RECOMMENDATION

Constructivism approach has some advantages found in the area of cognitive development theory. The first advantage is the opportunity for students to develop their academic abilities based on their stages of development, intelligent, learning style and personality. The second is the possibility for student to have comprehensive understanding about subject and it will be long lasting knowledge that enables students to become lifelong learners. The last is the power of this approach in advancing students skills needed to live in the 21st century, including academic skills and social skills.

Direct observation of classrooms in Indiana secondary schools found that the comparative advantages of constructivism approach could be seen through social studies lesson designed and taught by teachers in the classroom. Challenging learning tasks supported by a large variety of resources enable students to enhance their academic ability as much as possible. Cooperative interactions allowed students to expand their thinking and social interpersonal skills, and it gave students opportunity to practice these skills regularly. Teachers questioning not only facilitated students to gain deepest understanding about the subject, but also kept students to participate actively in the learning process. While productive learning environment provided students with the feeling good, safe and secure which later lead student toward their goals.

Using this approach to teaching and learning in Citizenship Education require teachers creativities and sometimes an imagination to design and set up learning activities. It means that teachers need a quiet space of freedom for conducting teaching and learning process without too much of control or instruction over their job from the people that has authority for doing that. Whenever teachers have to follow all the teaching and learning procedures set up by authorities strictly, teachers tend to lost their creativity and motivation to do their job as a kind of art, but they will do everything that they have to do just to meet the schools regulation. Therefore, it is best for Indonesia teachers to have a moderate circumstance in the schools leadership system that will lead them to move away from traditional modes of instruction to the more challenging one.

Another recommendation goes to the institutions that hold responsibility to run teachers education programs. Since most of

Indonesian teachers do not have experiences doing constructivism approach in the classroom, students-teacher needs to see examples of the application this approach in the real context. Therefore, it is the responsibility of all academics staff in that institution to give such experiences to their students by conducting teaching and learning process based on constructivism approach, regardless of subject matter that they taught to the student teachers. These experiences will be a kind of background knowledge for students to conduct their teaching in their classroom later.

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