

The Implementation Of Constructivism Learning In Islamic Religious Subject At Senior High School Plus Bina Insani

Oktavita Sari

Institut Agama Islam Negeri (IAIN) Salatiga

zahrahumairasinaga@gmail.co.id

Abstract: Constructivism approach in teaching and learning is based on a synthesis of several research in cognitive psychology and social psychology, as well as techniques of *operant conditioning* theory in behavioral psychology. The basic premise is that individuals must actively "build" their knowledge and skills from information obtained in the process of building a learning framework from the environment outside. Teachers will not be able to give all knowledge to their students. Students must construct knowledge in their own minds. The essence of constructivism theory is 'ideas'. Students must find and transform complex information into other situations. With that basis, teaching and learning process must be designed into a process of 'constructing' rather than 'receiving' knowledge.

Keywords: Implementation, Constructivism Learning Theory, Islamic Religious Education

INTRODUCTION

Background

Education is a very important thing in human life, because education will develop the potential of human. In its implementation, it needs a continuous process in every type and level of education. In schools, there are many components that are interrelated and determined the success of the teaching-learning process in the classroom. These components are the students, the teacher, the learning material, the facilities used, the learning outcomes, the learning environment, and the direct policies taken by the principal.

The development of science and technology has become one of the most influential factors in the teaching and learning process. Teachers are required to be able to use and innovate the tools available at school. In addition, the teacher should be able to choose learning methods and approaches that provide space for students to be creative and actively involved throughout the learning process.

One of the principles of educational psychology is that teachers do not simply provide knowledge to students, but students must actively build knowledge in their own minds. There are many kinds of learning models that are formed in a process

of developing learning models; one of them is constructivism learning.

Constructivism approach in teaching and learning is based on a combination of several studies in behavioral modification that is based on the theory of *operant conditioning* in behavioral psychology. The basic premise is that individuals must actively build their knowledge and skills as well as the information they obtain, so that it becomes a framework of thinking that is obtained from outside. In other words students are active participants in learning activities by building their own knowledge based on the experiences they have (Baharuddin, 2007).

As is the case in the Islamic High School Plus Bina Insani, several efforts have been made in the development of Islamic religious learning, one of them is by adapting learning styles through constructivism approaches in accordance with the characteristics of Islamic religious education.

Therefore, the learning process at Islamic High School Plus Bina Insani is designed and managed to be able to encourage students to building their experiences into meaningful knowledge. So the role of students here is very important to build *constructive habits of mind*.

History of Constructivism

The development of constructivism in learning is inseparable from the hard work of Jean Piaget and Vygotsky (Piaget, 2002). The following will discuss the concept of Jean Piaget and Vygotsky about learning that become the basis for a constructivism approach (Baharuddin, 2007).

a. The concept of Jean Piaget's constructivism learning

In the view of constructivism, knowledge grows and develops through experience. According to Piaget, humans have a knowledge structure in their brain, like a box, each of which has a different meaning. The same experience will be interpreted differently by each individual and stored in different boxes. Therefore, there are two processes when humans learn, namely the process of organizing information and the process of adaptation.

The Organizational processes are processes when humans connect the information they receive with the structures of knowledge that have been stored or already exist in the brain. So humans can assimilate or accommodate the information or knowledge.

The adaptation process is a process that contains two activities. *First*, integrating or combining knowledge received by humans or called assimilation. *Second*, changing the structure of knowledge that has been existed with the new structure of knowledge, so that there will be a balance (*equilibrium*). In the adaptation process Piaget put forward four basic concepts namely schemata, assimilation, accommodation, and balance (Baharuddin, 2007).

First, the schemata. A schemata can be seen as a collection of concepts or categories that individuals use when they interact with the environment. Schemata are cognitive structures that always develop and change. The process that causes these changes is assimilation and accommodation (Baharuddin, 2007).

Second, assimilation. Assimilation is a cognitive process and absorption of new experiences when a person inserts stimulus or perception into an existing scheme or behavior. Assimilation is the cognitive process of individuals in their efforts to

adapt themselves to their environment. Assimilation occurs continuously, *continues* in the intellectual life of children (Baharuddin, 2007).

Third, accommodation. Accommodation is a process of cognitive structure that takes place in accordance with new experiences. The cognitive process results in the formation of new schemata and changes in old schemata. Here there appears to be a qualitative change, while the assimilation changes quantitatively. The coordination and integration of assimilation and accommodation causes intellectual adaptation and intellectual structure development (Baharuddin, 2007).

Fourth, balance (*equilibrium*). Stability is occurred when there is a balance between the assimilation process and the accommodation process. With this balance, the efficiency of interaction between the developing child and his environment can be achieved and guaranteed. In other words, there is a balance between internal factors and external factors (Baharuddin, 2007).

Table 1. Piaget Cognitive Developmental Phase

No.	Step	Age	Definition
1.	Sensorymotor	0-2	The baby move through the instinct. The baby buid the understanding of the world through the coordination of sensorymotor by having a physica activity.
2.	Operational	2-7	The children start to represent the world through words and pictures. It shows the development of simboic thinking.
3.	Concrete operational	7-11	The children can think logically about the concrete accidents and classified the shape of things.
4.	Formal operational	11-15	The teenagers think abstract and logically. The thought is more idealis.

Source: adapted from (Santrock, 1998)

b. The concept of Vygotsky's constructivism learning

According to Vygotsky's (Elliot, 2000) learning is a process that involves two important

elements. First, learning is a biological process as a basic process. Second, the psychosocial process as a higher process and its essence related to the socio-cultural environment. When a person gets a stimulus from his environment, he will use his physical form of sensory devices to capture or absorb the stimulus, then by using the nerves of brain the information received is processed. The involvement between the senses in absorbing stimulus and the brain's nerves in managing the information obtained is a physical-psychological process as a basic element in learning. Vygotsky believes that learning begins when a child is in the development of the *proximal zone*, which is a level reached by a child when he performs social behavior (Vygotsky, 1978). *Proximal Zone* can also be interpreted as a child who cannot do something alone but needs the help of an adult. The maximum development of *proximal zone* depends on the intensive interaction between a person and the social environment (Baharuddin, 2007). When someone shares knowledge with other people, and eventually that knowledge becomes personal knowledge, it is called "*private speech*". *This private speech* can be observed when a child often talks to himself, especially if he is faced with difficult problems.

According to Vygotsky, the importance of social interaction in cognitive development has established the concept of cognitive development. Cognitive development is closely related to the development of the language. Because language is a power for mental development, for that Vygotsky divides cognitive development based on language development into four stages (Baharuddin, 2007), namely *preintellectual speech*, *naïve psychology*, *egocentric speech*, and *inner speech*.

Pre-intellectual speech is the initial stage in cognitive development when a human is born, aimed at the existence of basic biological processes (crying, babbling, and body movements such as stomping, shaking hands) that slowly develop into a form that is more perfect like talking and behaving. *Naïve psychology* is the second stage of language development when humans explore concrete objects in their world. At this stage, humans begin to give names or labels to the objects and say a few words in speaking.

Egocentric speech is the stage when humans are in three years old. At this stage, humans always

have a conversation regardless of other people reaction. *Inner speech*, this stage provides an important function in directing one's behavior. For example a five-year-old little girl who talks to herself, can provide direction and encouragement for herself. Adults too, often use *inner speech* or *private speech* to direct behavior and complete difficult problems that must be solved.

Another learning idea from Vygotsky's learning theory is *Scaffolding* (Vygotsky, 1978). *Scaffolding* provides support and assistance to humans who are at the beginning of the learning phase. Then gradually reduce the support or assistance after humans are able to solve the problem.

Constructivism Learning Model

One of the principles of educational psychology is that teachers do not simply provide knowledge to students, but students must actively build knowledge in their own minds.

The constructivism approach of teaching and learning is based on a combination of several studies in cognitive psychology and social psychology, as well as techniques in behavior modification based on theory of *operant conditioning* in behavioral psychology. The basic premise is that individuals must actively "build" knowledge and skills in the information obtained in the process of building a framework from the environment (Bruner, 1990).

In contrast to the behavioristic flow that understands the nature of learning as a mechanistic activity between stimulus and response, constructivism understands the nature of learning is building or creating knowledge according to its experience. Knowledge itself is fictional and unstable.

Philosophically, learning is to build knowledge step by step, which then results are expanded through a limited context. Knowledge is not a set of facts, concepts, or rules that are ready to be taken and remembered. Humans must construct knowledge and give meaning through the real experience.

Teachers will not be able to give all knowledge to their students. Students must construct

knowledge in their own minds. The essence of constructivism theory is 'ideas'. Students must find and transform complex information into other situations. With that basis, teaching and learning must be formed into a process of 'constructing' rather than 'receiving' knowledge.

The Characteristics of Constructivism Learning

According to the theory of constructivism, knowledge cannot be transferred just from the teacher's mind to the student's mind. Therefore, students must be mentally active in building their knowledge structures based on their cognitive maturity. In connection to that, (Tasker, 1992) as quoted by (Hamzah, 2008) put forward three emphases in constructivism learning theory as follows: First, the active role of students in constructing knowledge, Second, the importance of making connections between ideas in meaningful construction, Third, linking ideas with new information that has just been received.

(Wheatley, 1991) at the same source supports the Tasker's opinion by proposing two main principles in learning according to constructivism. First, knowledge cannot be obtained passively, but actively by the cognitive structure of students. Second, the function of cognition is adaptive and helps to organize the scheme through the child's real experiences (Baharuddin, 2007).

Meanwhile, according to (Alit, 2002) the characteristics of constructivism learning are as follows:

- a. Provide learning experience by linking the knowledge that students have through the process of forming knowledge.
- b. Providing various alternative learning experiences, for example a problem can be solved in various ways
- c. Integrating learning with realistic and relevant situations by involving concrete experiences, for example to understand a concept through the reality of daily life
- d. Integrating learning to enable social transmission, namely the occurrence of interaction and cooperation between students and teachers

- e. Make use of various media including oral and written communication so that learning becomes more effective
- f. Involving students emotionally and socially so that it becomes interesting and students want to learn.

Strengths and Weaknesses of Constructivism Learning Model

In using the constructivism model there are several advantages and disadvantages.

- a. The advantages of constructivism learning model include:
 - 1) Providing opportunities for students to express ideas in their own language;
 - 2) Providing opportunities for students to think about experiences so that they become more creative and imaginative;
 - 3) Giving students opportunities to try new ideas;
 - 4) Providing experiences related to ideas that students already have;
 - 5) Creating a conducive learning environment.
- b. The disadvantages of constructivism learning model are:
 - 1) Creating misunderstanding because the students have to construct their own knowledge.
 - 2) Taking a long time because each student need different way to construct knowledge on their own.
 - 3) The difference facilities in school will influence the students' activeness and creativity

Teacher Teaching Methods In a Constructivistic Approach

There are various methods that teachers can use in teaching activities, including: lectures, questions and answers, discussions, assignments, role playing, field trips, inquiries, group work, discovery, demonstrations, and experiments. Due to the limited ability and time, not all methods can be used. However the most important in choosing the method is the linked between the situation and learning objectives to be achieved and the method

should emphasize the activeness of students in building knowledge.

Explanation of these methods is follows:

a. Role Playing

Role playing (KBBI) is taking part in doing a fun activity either by using tools or without tools. According to Corsini in (Romlah, 2001) role playing is a learning tool that develops skills and understanding of human relations by acting out situations that are parallel to those that occur in real life. Through the role play, students are invited to learn on how to solve personal problems with the help of social groups. In other words this method seeks to help individuals through social group processes (Baharuddin, 2007).

b. Learning Community (group learning)

Community learning or group learning is learning by the work of a number of students who have been divided into small groups to achieve certain goals (Baharuddin, 2007). Through group activities there is collaboration between students and teacher. Group learning can be used as an arena for fair competition, and can also increase the learning motivation of group members. With a constructivism approach, the teacher carries out learning with study groups. Students are divided into groups of heterogeneous members. Student groups can vary greatly in shape, both in terms of their members and numbers. According to Slavin "an effective group consists of four to six people with a heterogeneous group structure." (Slavin, 2005)

The Implementation of Constructivism Learning Models in Islamic Religious Subjects at Islamic High Schools Plus Bina Insani

Islamic High Schools Plus Bina Insani has applied several ways in the development of educational learning systems, one of which is by adapting learning styles through constructivism approaches that are in accordance with the characteristics of Islamic religious subject. The implementation are: Implementation of constructivism learning model in subjects of Islamic Religious Education class XII IPS. Indicator: Explain the understanding of mahram (people who should not be married); Explain the harmony and

terms of marriage; Explain the types of illegitimate marriages

Opening Activities

- 1) teacher opens the learning activities with greetings and prayers together.
- 2) teacher checks the readiness of the students by checking the attendance, neatness of the clothes, and seating.
- 3) teacher gives apperception to various Muslim activities: success in living and worshipping Allah SWT , especially success in marriage and observing, criticizing and avoiding some of the negative phenomena that occur in social life, including about immoral acts (the negative effect of pregnancy out of marriage).
- 4) teacher provides information on the learning objectives.
- 5) teacher conveys the stages of activities that will be carried out in learning

Main Activities

a. Observing

- 1) Students observe (pay attention to) interactive slide shows.
- 2) Students read material understanding mahram, harmony and the conditions for marriage; as well as the types of illegitimate

b. Marriages Asking

Through the motivation of the teacher, students ask questions about things that are not clear from the results of reading the material "The Beauty of Building Marriage

c. Bonds Exploration

Through the tutorial shows that have been played, here teacher use Demonstration learning methods to make students easily understand, with the following steps:

- 1) teacher appoints some students to practice the marriage procession process in front of the class
- 2) teacher appoints students to play the role of marriage guardians, marriage witnesses, and groom

- 3) teacher gives direction about the marriage contract procession
 - 4) Students practice in front of the class
 - 5) Teacher concludes the material
- d. Associating
- Students discuss and prepare for the marriage ceremony process.
- e. Communicating
- 1) Students who are considered to be the most correct in its modeling, practicing while simultaneously presenting the pillars and conditions of marriage
 - 2) Other students observe and respond to the model that has been shown as well as providing input to the pillars and conditions of marriage.
- f. Closing Activities
- 1) Doing reflections of activities that have been carried out as input for improving the next activities.
 - 2) Conducting reinforcement of today's lesson material
 - 3) Planning follow-up activities: continuing group assessments and daily tests
 - 4) teacher together with the students close the lesson in accordance with the results of the assessment by Nur Solichah as the supervisor of MGPAI:
 - 5) "The learning methods here are in accordance with the vision and mission of the school, namely the teacher is required to apply active, creative and enjoyable learning. In applying it, the teacher must make the situation as conducive as possible so that from the beginning to the end students can absorb a lot of knowledge and they also enjoy it. "

CONCLUSION

After going through the data analysis process, the researchers concluded that the implementation of constructivism learning models in Islamic Religious subjects at the Islamic High School Plus Bina Insani has run well and is in

accordance with the principles and steps. The implementation of constructivism learning models in Islamic Religious Education subjects in Islamic High Schools Plus Bina Insani can be carried out properly and cannot be separated from several supporting factors, including the suitability of the material taught in Islamic Religious subjects, the suitability of the characteristics of learning materials with methods, the support from school principals, teachers, and adequate infrastructure.

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