

## APPLICATION OF CONSTRUCTIVISM THEORY OF COOPERATIVE LEARNING MODEL IN LEARNING

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### **Abstract**

*Learning is a process carried out to change behavior carried out by the learning process. To create a learning process that can be applied and assist students in learning is to use constructivist theory. Constructivistic theory is a learning theory that builds students' thinking and understanding to make it easier to understand learning. One of the models that can be applied is using constructivist theory, one of which is the cooperative learning model. This model involves actively being able to develop oneself and involves good social relations and social interactions in the classroom to create good effectiveness in the classroom. The purpose of this research is to obtain new information and understanding so that it can be applied in the learning process. The research methodology used is a literature study. Based on this research, it is understood that constructivist theory with cooperative learning model is considered appropriate to be applied in learning to achieve learning objectives.*

**Keywords**– Learning, Constructivistic Theory, Cooperative Learning.

## **1. Introduction**

Learning is a business process carried out by individuals to obtain a new and overall change in behavior, as a result of the experience of the individual himself in his interaction with his environment (Suryono & Hariyanto, 2012). Thus learning creates a process called the learning process.

The learning process is an important process in transferring knowledge to students. Often during the process it is less effective because it only focuses on achieving goals and pays less attention to the right way so that the knowledge and knowledge conveyed to students can be absorbed and captured by students. In the learning process, there are many theories that should be applied by educators such as behavioristic theory which pays attention to behavior patterns, cognitive theory which looks at how to receive information and processing it, then socio-cognitive which views social relationships greatly influencing one's mindset. In addition, there is also a theory that is quite popular and very well applied in the learning process, namely the constructivist theory.

The individual constructivist learning method is characterized by actively involving students in experiments to develop meaningful understanding. As a result, individual constructivists tend to favor inductive learning approaches such as discovery-based learning and inquiry. Henson says when teachers apply this method in the classroom, their role consists of asking thought-provoking questions, providing sufficient waiting time for students to ponder potential answers to questions, and guiding students' knowledge construction by using skillful questioning (in Moreno, 2010) constructivism is the idea that students actively construct their knowledge from their personal experiences with other people and the environment (Simpson, 2001). Constructivism theory is a learning theory proposed by Piaget.

Constructivism is an alternative approach model that can answer the shortcomings of behavioristic understanding. In simple terms, constructivism assumes that knowledge describes the construction (formation) of us who analyze something. Someone who learns that means forming understanding / knowledge actively (not only receiving from the teacher) and continuously. Trial and error

procedures, discussion and student participation are very meaningful as a process of making knowledge in learning (Suparno, 2010). For constructivism learning theory, knowledge cannot be transferred from teacher to student. That is, students must be mentally active to build their knowledge structure based on their cognitive maturity.

## **2. Method**

The type of this research is library research, which is a series of studies related to library data collection methods, or research whose research objects are developed through various library information. (Hasibuan, 2007) The research he did was by reviewing and comparing library sources to obtain theoretical data. In addition, by using a literature review, the authors can obtain information about the expected research techniques, so that the work of researchers does not constitute duplication. Thus the research was conducted by analyzing books or scientific journals that examined increasing social interaction with transactional analysis group counseling. (Syaodih, 2009) library research or literature review is a study that critically examines knowledge, ideas, or findings contained in academically oriented literature.

## **3. Result and Discussion**

Education is a conscious and planned effort made by educators to change human behavior, either individually or in groups, to mature these humans through the process of teaching and training. According to Law No. 20 of 2003 Education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively improve their abilities to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves, society, nation and state. country. Thus, it can be concluded that learning is the achievement of values carried out by a process carried out through education. Education is a process of interaction between students and educators as well as learning resources in a teaching and learning environment. (Thobroni, 2015) Efficient education is education that brings students to achieve educational

goals or competencies as expected / intended. Effective learning means that learning takes place using relatively little time and resources (Pribadi, 2011).

Conceptually, the learning process when viewed from a cognitive approach, is not as the acquisition of information that takes place in one direction from the outside to the inside of students, but rather as giving meaning by each event as giving meaning by students to their experiences through a process of assimilation and accommodation that leads to updating their cognitive structures. . Learning activities are viewed more in terms of the process in terms of acquiring knowledge from loose facts. Giving meaning to objects and experiences by that person is not tried by students themselves but through interactions in unique social networks, which are created both in the culture in the classroom and outside the classroom culture. In this educational process linking: student position, teacher position, educational facilities, and assessment (Sumarsih, 2009)

In order to achieve the learning objectives, various theories and methods can be used to support these objectives. One theory that can support is constructivist theory. Constructivism is one stream that comes from cognitive learning theory. The purpose of using the constructivism approach in learning is to help improve student understanding by building on those understandings. constructivism has a strong relationship closely related to discovery learning and meaningful learning (meaningful learning). Both of these learning methods are in the context of cognitive learning theory. Constructivism is learning that provides flexibility for participants students to build their own knowledge of the design model learning made by teachers (Mustafa & Roesdiyanto, 2021).

Constructivism learning theory is a theory that gives freedom to humans who want to learn or seek their needs with the ability to find their desires or needs with the help of others, so this theory provides activity for humans to learn to find their own competence, knowledge, or technology and other things needed. to develop themselves. Constructivist learning theory argues that people generate knowledge and form meaning based on their experiences. In constructivism,

learning is represented as a constructive process in which the learner constructs an internal illustration of knowledge, an interpretation of personal experience.

Based on the constructivist view, learning is a process of knowledge formation. This formation must be carried out by individuals who learn. He must actively carry out activities, actively think, formulate concepts and give meaning to the things being studied. (Sarah Apriliani Islamiati, 2016)

In constructivist theory divides 2 categories, namely individual constructivist and social constructivist (Moreno, 2010) individual constructivism focuses on how individuals construct knowledge in their minds. According to this learning perspective, individuals have a natural tendency to seek understanding when they interact with the environment. Social interaction is not emphasized too much and is considered only as one of the mechanisms that facilitate cognitive growth (Palincsar, 1998). A student's discussion with a teacher or peer can create cognitive conflict, motivating the learner to try to resolve the imbalance by individually reconstructing his knowledge structure.

According to the constructivist perspective, the teacher's role should consist of providing teaching materials a learning environment that is supportive and conducive to students' individual knowledge construction rather than the transmission of their own thoughts and beliefs. This implies the following; (a) relinquishing control over student learning, (b) allowing student interests to encourage protest of knowledge construction, (c) allowing students to make intellectual choices for themselves.

Social constructivism emphasizes the role of social context in the construction of knowledge. According to this learning perspective, students share individual perspectives with others to build a shared understanding that is impossible to build individually (Gauvain, 2001). It is also called distributed cognition, which is the distribution of learning across multiple minds with the aim of drawing on various knowledge bases and ideas. Fleming & Alexander said when individuals share their ideas with others, they enhance their understanding as they are encouraged to clarify and organize their own ideas, elaborate on what they know, find flaws in their reasoning, and entertain alternative perspectives

that may be as valid as their own. In addition to these benefits, social constructivists believe that there are other advantages to getting students involved in social interactions, such as promoting their development to higher stages of cognitive and moral development, internalizing the symbolic and material tools of their culture, developing effective interpersonal skills and becoming self-reliant. more motivated to learn. According to social constructivism, the teacher's role is to facilitate social interaction to promote the construction of knowledge and the development of students' skills (Moreno, 2010).

Social constructivity in the classroom can be applied with many methods that can support the learning process. Cooperative learning, in which small groups of students work together to understand new information or solve new problems. It is important to understand that cooperative learning is also supported by other learning theories, namely individualistic constructivism which suggests that interactions with teachers and peers can be new or solve new problems. creates the necessary imbalances for students to engage in cognitive growth. The cognitive view of learning suggests that group discussion can facilitate rehearsal, organization, and elaboration processes, because students explain their thinking to others and listen to new perspectives.,Sociocognitive learning theory suggests that cooperative groups can have a strong influence on social and academic learning because of the motivational forces underlying peer modeling and representative learning. Cooperative learning is an attitude or behavior together in working or helping among others in an orderly structure of cooperation in groups (Mulyana, 2005)

In cooperative learning students are required to be active and can build cooperation with other members. In creating cooperative learning, there are five important elements in learning (Moreno, 2010), namely;

Which positive interdependence? Group members need to feel that they cannot personally succeed unless other group members also succeed. Positive interdependence can be built by creating shared goals, shared rewards, and complementary roles.

Individual accountability i.e. to avoid the typical problem in traditional classroom study groups, where some students do most of the work while others do very little, teachers must have individual assessments in addition to group assessments. In this way, students are responsible for their own performance and will be more likely to contribute to group goals.

Face-to-face interaction means Interaction is the mechanism by which cooperation works. Obviously, having a group of students who are not engaged or quietly sitting together in class will not lead to an increase in academic learning. Therefore, effective cooperative learning requires members to actively assist, support, and encourage group efforts. To maximize the possibility of meaningful and rich interactions, teachers should design their cooperative learning groups to be relatively small and heterogeneous in gender, cultural and linguistic background, and ability.

Social Ability i.e. One of the most challenging tasks for a teacher is to teach and monitor students' proper use of interpersonal skills when interacting with other group members. These skills are necessary for effective group functioning and need to be activated so that all students can build their social relationships.

Management means Effective active learning requires groups to monitor group progress as they develop. This element has two purposes. First, promoting self-regulation by developing metacognitive skills to evaluate future learning processes. Second, helping students get out of the dynamics of group work to do with learning.

Based on the description above, it can be understood that using constructivist theory by using this cooperative learning method is very helpful in the learning process. The explanation above is reinforced by several research results which state that the learning process using the cooperative model can improve student learning outcomes (Triastuti Handayani, 2017), then by using the learning model in cooperative learning there is an increase in student learning outcomes (I Putu Ari Sudana, 2017) and the application of cooperative learning models can improve students' problem solving skills (MA Hertiavi, 2010).

#### **4. Conclusion**

Constructivity theory can play an important role in increasing students' ability to collaborate with each other, create effectiveness in learning and build good social relationships among students and teachers. Constructivism is a theory about how students construct knowledge from experiences that are unique to each individual. Constructivist learning theory argues that people generate knowledge and form meaning based on their experiences. The implementation of constructivist theory can be applied with various models, one of which is cooperative learning. Cooperative learning is learning that involves active students in the learning so that students can think creatively and build good cooperation. In the cooperative learning model, there are five basic elements that must exist, namely positive interdependence, individual accountability, face-to-face interaction, social skills and management. By applying these five basic elements, students can create an interesting learning process and live up a comfortable learning atmosphere in the classroom by involving all existing students. Thus the learning objectives are easy to achieve and can be understood in their own way.

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