

The Impact of Cooperative Learning Strategy and Learning Interest Toward The Learning Result of Second Year of Senior High School Students in 2016/2017

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Abstract- Cooperative learning is a study method where students study in small groups that have a different skill level. Every members of these small groups are required to be cooperated. Study method that were used in this study are quasi experimental research. Data were collected through a test instrument in the form of an observational assessment. The hypothesis testing is done by using test. This study was conducted on a sample consisting of two classes which each was amounted of 34 peoples, such as second year of science one as experimental class that was taught by using jigsaw type of cooperative learning strategy and second year of science three as control class that was taught by using discovery type of cooperative learning strategy. From the result of experiment, researcher concludes the Information, Communication and Technology (ICT)'s learning result by using jigsaw type of cooperative learning strategy was significantly better than using discovery type of cooperative learning strategy.

Keywords: cooperative learning, jigsaw, discovery, information, communication and technology lesson

I. INTRODUCTION

Education is one of the efforts to improve human intelligences and skills so the quality of human resources depends on the quality of education achieved. The importance of education is reflected in the Constitution 1945 and GBHN which states that education is the right of every citizen who aims to educate the life of the nation, thus the educational program has a very big role to the socio-economic progress and welfare of a nation. The process of education in Indonesia is always changing in the form of improvements that ultimately produce quality output. Various efforts are made to obtain the quality of education by improving learning achievement through learning result. "The learning results are skills, attitudes, and skills that acquire after students receive guidance by teachers so they can construct knowledge in their daily life. Learning strategies is an action plan (series of activities) which includes the use of strategies, methods and application of various resources/strengths in learning. This means that in the preparation of a new strategy until the process of preparing the work plan has not reached the action.

Strategies are structured to achieve a particular goal, which means that the direction of all strategy-making decisions is the achievement of objectives, so that the preparation of learning steps, the use of facilities and learning resources are all directed towards achieving goals. But before that, we need to formulate a clear goal that can be measured its success. To achieve a good achievement, we do not only need an intelligence but also interest, because without any interest, all activities that we do will be less effective and efficient. In everyday conversations the notion of attention is confused with interest. In practical of attention, as if we accentuate the functioning of the mind, whereas in interest it seems to accentuate the function of taste, but the fact that what interests ours also will concern us, and what causes our attention to interest will be interest us". The Information and Communication Technology (ICT) skills will further increase the ease of obtaining information that will improve students' learning result. The purpose of this study are to know the students ICT learning result which were taught by using jigsaw type of cooperative learning strategy and the students ICT learning result which were taught by using discovery type of cooperative learning strategy, to know the ICT learning result of students who have high learning interest and know the ICT learning result of students who have low learning interest , and to know the interaction of cooperative learning strategy and learning interest against the students ICT learning result.

II. JIGSAW AND DISCOVERY

Strategy provides guidance for teachers in conveying learning and helps students to achieve learning objectives so that learning can be done effectively and efficiently. Learning strategy is an action plan which will be implemented, including the use of method and the application of various resources for learning. The jigsaw model was developed and tested by Eliot Aronson and his friends at the University of Texas United States and later adapted by Slavin and his friends at the University "John Hopkins" (Sugianto, 2010: 45). In learning, teachers have to understand the lesson materials and various learning strategies which stimulate students skills

to learn with teachers' teaching plan. Jigsaw type of cooperative learning strategy is one of learning strategies which support contextual learning, and this type of jigsaw cooperative teaching system can be defined as a structured learning system. Slavin (1995 : 30) expressed that jigsaw type of cooperative learning strategy is a cooperative learning strategy that focuses on small group work consisting of 5 or 6 heterogeneous students, and students cooperate positively and responsible interdependence.

According to Majid (2015: 182) in the application of jigsaw type, students are divided into groups of 4 or 6 members of heterogeneous learning groups, lesson materials is given to students in text form, all members are responsible for studying a particular part of the given material. Other group members who get the same topic of assignment will gather and discuss about the topic. This group is called the expert group. Jigsaw is designed to enhance student sense of responsibility to their own learning and others. Students do not only study the given materials but also be ready to teach that materials to every members of group. Thus, "students are interdependent with one another and must cooperate cooperatively to study the assigned material". According to Slavin (1995: 4), discovery type of cooperative learning strategy is that in deep of learning, students are encouraged to mostly learn through their own active engagement with concepts and principles, and teachers will encourage students to have experience and experiment which enabling them to find principles for them selves. The under lying theory of discovery learning is John Dewey, he stated that learning is an activity where knowledge and ideas appear as a result of one student's interaction with other students and they are able to build their own knowledge through their experience. Dewey believes that students are naturally motivated to actively study and school is limited to provide learning services. He believes that mental development can occur through social interaction.

III. RESULTS

The main data obtained in this study is the students ICT learning result. From the results of data analysis, researcher obtained the following data, such as : Normality test is done to determine whether the data is normally distributed or not. This study used chi-square table. Based on the calculation result, researcher obtained χ^2_{count} for jigsaw type of cooperative learning strategy is 0.00181 while for discovery type of cooperative learning strategy is 0.0423. For χ^2_{table} is 0.886. Based on that result, researcher conclude that $\chi^2_{\text{count}} < \chi^2_{\text{table}}$ and data is normally distributed. Homogeneity test was conducted to obtain the assumption that the study sample were from the same condition. Homogeneity test was also conducted to find out whether both data had the same sample variance. Based on the calculation result, researcher obtained F_{count} is 1,42 while F_{table} is 1,82. Based on that result, researcher conclude that $F_{\text{count}} < F_{\text{table}}$ and data is homogeneous. The hypothesis formulated in this study is the students ICT learning result by using jigsaw and discovery

type of cooperative learning strategy. To know whether the students ICT learning result by using jigsaw type of cooperative learning strategy is better than the students ICT learning result by using discovery type of cooperative learning strategy, researcher conducted calculation by using T test and the criteria are :

$F_{\text{count}} < F_{\text{table}}$, then H_0 accepted and H_1 rejected.

$F_{\text{count}} > F_{\text{table}}$, then H_0 rejected and H_1 accepted.

Based on the calculation that used T test, researcher obtained F_{count} is 4,34 while F_{table} is 3,99. Researcher conclude the ICT skills of students who are taught by using jigsaw type of cooperative learning strategy is better than the ICT skills of students who are taught by using discovery type of cooperative learning strategy.

IV. CONCLUSION

The purpose of this study are: to know the students ICT learning result which were taught by using jigsaw type of cooperative learning strategy and the students ICT learning result which were taught by using discovery type of cooperative learning strategy , to know the ICT learning result of students who have high learning interest and know the ICT learning result of students who have low learning interest , and to know the interaction of cooperative learning strategy and learning interest against the students ICT learning result. Based on the results of research, processing and data analysis and hypothesis testing, researcher concludes that there is a significant difference between the ability of ICT students who taught by using jigsaw and discovery type of cooperative learning strategy in this study.

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