

**The Differences in Historical Social Studies Learning Outcomes Between The Concept Map Learning Model and The Lecture Learning Model Vary**Lya Fransiska<sup>1</sup>**Abstract**

This article intends to examine differences in learning outcomes of IPS history subjects using a concept map of learning models compared with varied lecture models. Concept maps are applied in the experimental classes and lectures, and a varied learning model is applied in the control class. The population in this study consisted of students in grade IX SMP Negeri 1 Kandeman year 2011/2012, which amounted to 240 students. Sampling was conducted using random cluster sampling and obtained class A as class IX experiments (learning model concept map) and class class IX B as a control (lecture learning models vary). Learning outcomes by using a learning model map better than the concept of learning outcomes IPS History lecture on learning models vary. Advice and researchers hope that History Teachers can use the IPS model of learning a concept map as an alternative in teaching history to improve student learning outcomes and make learning history and social studies fun and exciting.

**Keywords:** *Learning Outcomes, Concepts Map, Lectures Vary*

**Introduction**

Education is a process in order to influence students so that they can adapt as best as possible to their environment and thereby bring about changes in themselves that enable them to function strongly in the life of society. Teaching is tasked with directing this process so that the targets of change can be achieved as desired (Hamalik, 2007; Vianata, 2012; Hasnawati, 2012). Schools as formal educational institutions place learning activities as the most important activity. This learning process is where all activities carried out at school originate. All efforts, facilities and infrastructure are devoted to achieving educational goals (Harahap & Harahap, 2012; Jayanti et al, 2014; Eva, 2012).

The National Education System mandates efforts to make the nation's life intelligent and that the government seeks and implements a national teaching system that is regulated by law. The teaching and learning process aims to ensure that students can obtain optimal learning outcomes, namely by actively involving students both physically, mentally and emotionally (Leo, 2012; Ikamah et al, 2012; Mariam, 2013). Students' activeness in learning can provide opportunities and opportunities to acquire knowledge and skills (Fransiska, 2012;

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<sup>1</sup>Teacher of History, SMPN 1 Kandeman, [fransiska@gmail.com](mailto:fransiska@gmail.com)

Setyaningsih, 2012; Abadi & Hanif, 2015). Interactions in the teaching and learning process, mastery of subject matter and learning outcomes that are still less than optimal can be caused by student factors themselves and also a learning process that does not stimulate students to play an active role in it.

History lessons are part of Social Sciences (IPS). This subject presents various facts about incidents or events that occurred in the past (Widiyanti, 2014; Silayusa, 2015; Sari, 2014). Many people think that social studies, especially history social studies, is a boring and uninteresting lesson. Students find it difficult to memorize and understand quite a few historical facts. This is due to the less effective note-taking techniques used by students so that students have difficulty learning the material that has been given (Darsono, 2001; Sari & Suprijono, 2015; Lutfi, 2013). In this regard, Novak and Gowin (1984) stated that the way to find out the concepts that students have, so that meaningful learning can take place can be done with the help of concept maps.

Concept maps were developed in 1972 when Novak conducted a research program at Cornell to search for and understand changes in children's science understanding (Novak, 1985). In education, concept maps can be used as (1) learning strategies (2) instructional strategies in learning (3) strategies for curriculum planning (4) tools for evaluating students' understanding of concepts (McClure, 1999).

It is hoped that the application of the concept map learning model will attract students' attention. The concept map learning model helps students accept and remember history lesson material presented by the teacher. With the concept map learning model, students are free to carry out group discussions, where the groups are heterogeneous in terms of their learning ability level or gender and are free to express their ideas or thoughts about the learning material obtained. Students' boredom in listening to the teacher's lecture will be overcome (Rosana, 2014; Wirahadi, 2012; Siregar & Sentosa, 2015).

### **Method**

The approach used in this research is a quantitative experimental type approach. Sugiyono (2009:72) states that experimental research is a research method used to find the effect of certain treatments on others under controlled conditions. According to Margono (2009: 110) experimental research is an experiment that is specifically designed to generate the data needed to answer research questions. Experimental research aims to examine possible cause-and-effect relationships by providing one or more treatment conditions to one or more experimental groups, and comparing the results to one or more control groups who did not receive treatment.

According to Singarimbun (1985:4) experimental research is very suitable for testing certain hypotheses and is intended to find out whether the experimental variables are effective or not. This research divided the groups into two, namely the experimental group and the control group. One group was given certain special treatment and another group was controlled in a condition whose influence was used as a comparison (Margono, 2009; Sulistiani, 2011, Franedia, 2015). The experimental group was the group that received treatment, namely by using the concept map learning model in learning social studies history. The control group in this study was a comparison group for the experimental group (Ruiz-Primo, 1997). The control group used a variety of lecture learning models. This comparison aims to determine the effect of the concept map learning model on student learning outcomes.

This experimental research uses a Randomized Control Group Pretest-Posttest Design, that is, there are two groups selected at random, then given a pretest to determine whether the initial conditions are any differences between the experimental group and the control group (Sugiyono, 2009: 112). In experimental research, there are two variables of primary concern, namely the independent variable and the dependent variable. The independent variables in this research are learning using the concept map learning model and learning using various lecture learning models in the Social Sciences History subject. The dependent variable in this research is the learning outcomes of class IX students at SMP Negeri 1 Kandeman for the 2011/2012 academic year which were obtained after the learning process.

### **Results and Discussion**

The initial stage of research is conducting *pre-test* in the experimental group and control group before the two classes were given treatment in learning. Based on the results of data analysis *pre-test* obtained on average *pre-test* the control group's learning outcomes were 69.17 while the average *pre-test* the experimental group learning result was 70.09. Data analysis *pre-test* includes normality test, equality test of two variants and average difference test. The results of the normality test showed that the data *pre-test* Normally distributed because all data obtained count < table with dk = 2 and = 5%. The results of the equality of variance test obtained Fcount  $1.16 < F_{0.025}(37:36) = 1.97$ , which means the data obtained is homogeneous. Furthermore, the results of the average difference test obtained tcount =  $0.484 < t_{table} = 2.033$ , because tcount < ttable it can be concluded that there is no difference between the experimental group and the control group. The results of the analysis concluded that there was no difference between the experimental group and the control group so that the samples started from the same situation.

The next step in the research is implementing classroom learning according to the research design. The final stage in the research is carrying out a post test. This aims to determine student learning outcomes after learning or after being given treatment. The control group post test average was 74.91 while the experimental group post test average was 80.65. The final stage of post test data analysis includes a normality test, a test for equality of two variants, and a hypothesis test with a difference test between two means. The normality test results obtained for each data are smaller than, this means the data is normally distributed. The results of the similarity test of the two variants obtained calculated  $F = 1.1556$  and  $F_{0.025}(37:36) = 1.97$ . Thus  $F_{count} < F_{0.025}(37:36)$ , it can be concluded that the two groups have the same variance. From the results of the final ability test of the experimental group using the Concept Map learning model and the control group using various lecture learning models, a t test was carried out. Based on the test calculation of the difference between the two parties' averages,  $t_{count} = 2.959$  while  $t_{table} = 2.045$  because  $t_{count} > t_{table}$ ,  $H_0$  is rejected, which means the alternative hypothesis ( $H_a$ ) is accepted. In this case the experimental group and control group have different abilities or the experimental group has higher abilities compared to the control group using a one-sided t test (right side). Obtained  $t_{count} = 2.959$  while  $t_{table} = 2.033$  because  $t_{count} > t_{table}$  then  $H_0$  is rejected which means the alternative hypothesis ( $H_a$ ) is accepted. So that the ability of the experimental group was better than the control group. This provides the conclusion that learning history using the Concept Map learning model provides more effective results compared to learning using various lecture method learning models.

Based on the research results, there are differences in historical social studies learning outcomes between the Concept Map learning model and the various lecture learning models. The use of the Concept Map learning model apparently produces better learning outcomes compared to the varied lecture learning model that has been used by most History Social Studies teachers, especially history teachers at SMP Negeri 1 Kandeman. This means that students who take lessons using the Concept Map learning model have higher abilities compared to the lecture learning model in the history of social studies learning outcomes for class IX students at SMP Negeri 1 Kandeman.

Based on the research results, there are differences in historical social studies learning outcomes between the Concept Map learning model and the various lecture learning models. The use of varied lecture learning models apparently produces lower learning outcomes compared to the concept map learning model. This means that students who take lessons with a varied lecture learning model have lower abilities compared to the concept map learning

model in the history of social studies learning outcomes for class IX students at SMP Negeri 1 Kandeman.

Based on the research and description above, it shows that the results of learning History Social Studies using the Concept Map learning model are better than using various lecture learning models. This can be seen in the average value of the class that uses the Concept Map learning model, it turns out that the learning outcomes are greater, namely 80.65, whereas with the varied lecture learning model, the class average learning outcomes are 74.81. One thing that is very different is that in learning Concept Maps, students use critical thinking skills, are involved in the teaching and learning process and students can also express their ideas which are expressed in the concept maps they make. Meanwhile, in the varied lecture learning model, students passively accept formulas or rules (reading, listening, taking notes, memorizing) without contributing ideas to the learning process. From the description above, it can be concluded that the learning outcomes of History Social Studies using the Concept Map learning model are superior/higher than the student learning outcomes in History Social Studies using various lecture learning models.

### **Conclusion**

The historical social studies learning outcomes of class IX students at SMP Negeri 1 Kandeman using the Concept Map learning model are better than the historical social studies learning outcomes using the varied lecture learning model. The average post test result with the Concept Map learning model was 80.65, while with the varied lecture learning model the average post test result was 74.91. The historical social studies learning outcomes of class IX students at SMP Negeri 1 Kandeman using the lecture learning model varied lower than the historical social studies learning outcomes using the concept map learning model. The average post test results with the lecture learning model varied by 74.91, while with the concept map learning model the average post test results were 80.65. There are differences in history learning outcomes between the Concept Map learning model and the model

lecture learning varies among class IX students of SMP Negeri 1 Kandeman. The results of the two-party t test showed that the calculated t value =  $2.959 > t_{table} = 2.045$ , so there was a significant difference in learning outcomes. By using the one-sided t test (right side), we obtained  $t_{count} = 2.959$  while  $t_{table} = 2.033$  because  $t_{count} > t_{table}$  then  $H_0$  is rejected, which means the alternative hypothesis ( $H_a$ ) is accepted. So that the ability of the experimental group was better than the control group.

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