

THE EFFECT OF MIND MAPPING METHOD TO THE LEARNING ACTIVITIES OF VII CLASS STUDENT IN SCIENCE

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ABSTRACT

This research aims to know the influence of method of Mind Mapping to learning activities of students on classification of living things material in VII Class at one of Junior High School in Palembang. Research methods used in this research is a Quasi Experimental Design. The population in this research is the whole students in VII class of Junior High School that consist of 2 classes numbered 64 students. Sampling that used is purposive sampling technique. The sample of this research is VII.1 class with 32 students as experiment class and VII.2 class with 32 students as a control class. On the process of learning, experimental class taught by using Mind Mapping method and the control class by using the conventional methods (discussion group). Data collection is using the observation sheet of student learning activities that have been tested using the formula of Aiken's v. The results of this study showed that the average student learning activities on the experimental class in 2 meetings i.e. 79, 2% of students who have been active with very active category. On the control class that the percentage of liveliness is 73,90% students with active category. The results of data analysis is using t-test with significant level 0,05 obtained $t_{\text{arithmetic}} = 3,775$ while $t_{\text{table}} = 1,671$ so $t_{\text{arithmetic}} > t_{\text{table}}$. Therefore H_a is received and H_0 is rejected. It can be inferred that Mind Mapping methods can affect to student learning activities.

Keywords: *classification of livings learning activity, mind mapping, science*

INTRODUCTION

Learning activities is activities of students who produced a typical changes, i.e. the results of the study will appear through the learning achievements will be reached. Activity in the learning process is a series of activities that includes the liveliness of students in following lessons, thinking, reading, and all activities conducted. Natural science is synonymous with biodiversity, natural growth and also living beings. In the field of plant and animal biology, this becomes the object of study of man. Each type of plant or animal is composed of a number of individuals, so that all types of it consist of millions of individuals.

Based on the observation, it is known that the low student learning activities because the method that is applied by the teachers are still not optimal in improving student learning activities, resulting in less active learning process, some students tend to be passive, so that only a few students are active. Based on the above issues, in innovations required the use of a learning mind mapping method that supposedly can improve student learning activities. According to Buzan (2008), a method of mind mapping is one of cooperative learning that emphasizes on special structures designed to affect patterns of interaction of students, gives the opportunity to students to mengkontruksi the idea or concept, encourage students to improve morale and have a goal to increase the activity of learning. Classification of the material being classified fairly difficult to understand by most students, students are required to describe a complex materi and identify living things. Students can better understand the material when they have discussion activity, respond to the concepts expressed by the teachers, make mind mapping and image gives the conclusion at the time of the learning process. Because of that, the activity and the result of student learning can be better.

RESEARCH METHOD

The research method used was experimental design method of artificial posttest research-only control group design. The independent variable in this study is a method of learning Mind Mapping. The dependent

variable in this study are the learning activities of students. The population in this research is the VII class students in one of junior high school in Palembang which is composed of two classes with a total of 64 students. Sampling technique is using purposive sampling. Selected research samples are two classes among others VII class. One as experiment class with 32 students and number of VII.2 as a control class with a total of 32 students. Data collection techniques is in the form of observational learning activities of students. The instruments used in this research is the instrument students with learning activities sheet contains indicators on the enthusiasm of the students in a learning activity, the interaction of students with teacher, student interaction with students, cooperation a group of students in learning activities, group discussions, student activities in implementing the learning and participation of students in the concluding material. Activity sheet instrument students can study the instrument validity criteria by using the formula *Aiken's V*.

RESULT AND DISCUSSION

Learning activities of students in the class of experiments is higher than in the control class is shown in Figure 1. Based on these seven aspects, the percentage of the observed activity of students in group discussions are extremely high percentage. Then the average overall results of the activity of the students stated that the activity on the classes that use a higher mind mapping model.

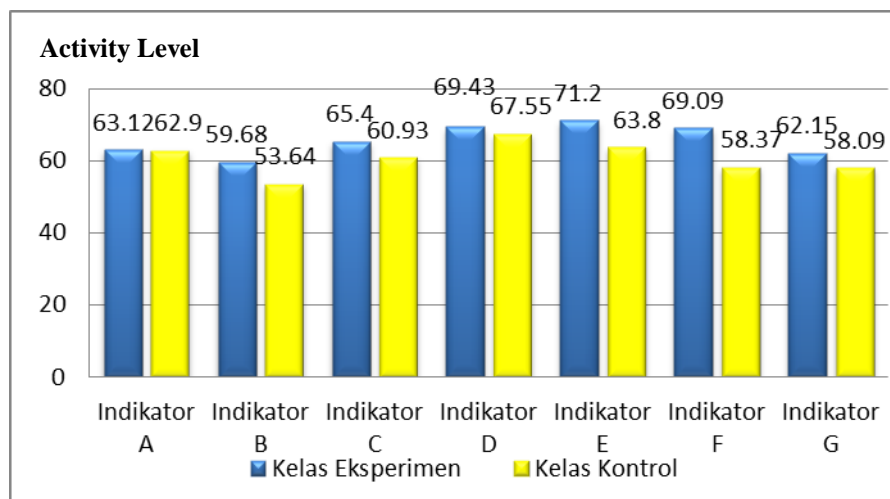


Figure 1. The Observation Percentage of Students Learning Activities

Based on the result of the research analysis so it can be noted that the value of observation on the control class and wants a class, after a test of its homogeneity and normality test and the test-t with the help of the program SPSS 16.0 results obtained are $t_{\text{calculate}} = 3.775 < t_{\text{table}} = 1.671$, then H_0 is accepted and rejected, meaning that H_a class experimentation and grade control on material classification of living things different significant or have different knowledge. Method of mind mapping is a technique that is best in assisting the brain's thought processes on a regular basis because it uses graphic techniques derived from human thought useful to provide universal keys so as to help potential the brain. So the activity and results of student learning can be better (Buzan, 2008) based on the results of the study it can be concluded that there is an influence of method of mind mapping against learning activities of students on Science subjects (Biology) classification of living things in VII class. This can be seen on the observation data analysis of student learning activities, the average percentage of student learning activities in the classroom experiment was 79.2% i.e. by category and is very active and on the class control i.e. 73,90%, which means the active categories. Based on the analysis of hypothesis test indicates that the value of $\text{Sig-}0,000 < 0,05$, then the value $t_{\text{calculate}} > t_{\text{table}} = 3,775 > 1,671$.

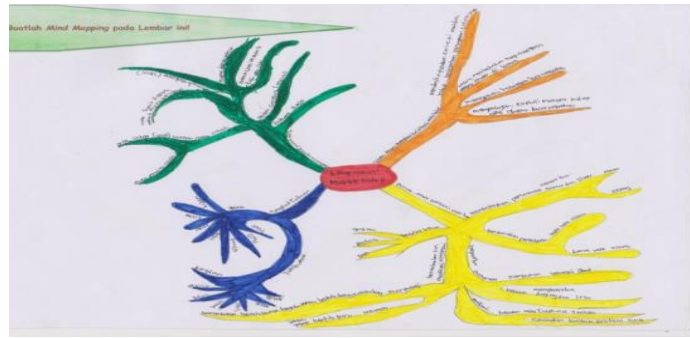


Figure 2. Examples of Mind Mapping with the Good Criteria

Mind mapping product that is produced each group as a result of the discussions is very diverse and is packed with interesting enough. The product is assessed based on the criteria that have been set by previous researchers. On a class of control worked only a question of when it is on and is categorized in the report only. A note is not accompanied by images, symbols, and the use of color was not as diverse as that recorded in Figure 2.

CONCLUSION

Mind mapping learning method is directing students to produce a variety of products from each group as a result of the discussions. This product is very diverse and is packed with interesting enough votes based on criteria that have been set by previous researchers. Based on the results of the research that there is a effect of mind mapping learning method to learning activities of students on material classification of living things in the science VII Class.

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REFERENCES

- [1] Buzan, T. 2008. *Buku Pintar Mind Map*. Jakarta: PT. Gramedia Pustaka Utama
- [2] Nita, E, dkk. 2015. *Pengaruh Penerapan Metode Mind Mapping Terhadap Aktivitas Belajar Siswa dan Penguasaan Materi*. Tersedia di <http://www.e-jurnal.com/2015/09/pengaruh-penerapan-model-mind-mapping.html>. Accesed on October 23, 2016.