THE EFFECT OF THE MODELING METHOD ON THE 7TH GRADE STUDENTS' LEARNING OUTCOMES IN DRAWING ANIMALS

I Gusti M. Ferdiyana[1], Ruddy Pakasi[2], Meki J. Katoppo[3]
Program Studi Pendidikan Seni Rupa, Fakultas Bahasa dan Seni
Universitas Negeri Manado, Tondano, Indonesia
Email: gustimadeferdiyana@gmail.com

Abstract : This study aims to determine the effect of the application of the modeling method on the learning outcomes of drawing animals of seventh grade students at SMP Negeri 13 Dumoga. The pre-experimental design used is static group comparison design. In this study the treatment was given to the experimental class and the control class as a comparison. Data collection was carried out by giving a drawing test after treatment, the assessment was carried out twice by an assessor. Data analysis or statistical tests in this study were carried out using SPSS. The results of the statistical group showed the average experimental data of 15.9250 with a standard deviation of 1.16161, and the control class averaged 14.5250 with a standard deviation of 0.52503. The independent samle t test results show a t_{value} of 4.912 with a significance level of -0.000 smaller than 0.05. The statistical test results show that at p (α) 0.05 with *df*38, the t_{count} of 4.912 is greater than the t_{table} of 2.021 based on the results of the study there is a difference in the learning outcomes of drawing animals in using the modeling method and students who use conventional methods, it can be concluded that the use of the modeling method has a more significant impact on the results of drawing animals.

Keywords : *Learning Outcomes, Animal Drawing, Modeling Method*

INTRODUCTION

In the teaching and learning process carried out in the classroom, students need to be actively involved in order to interact with the teacher and between students so that the teaching and learning process runs effectively (Bada & Olusegun, 2015). Active interaction involves students in discussions, sharing ideas, asking questions, and participating in learning activities. Through these interactions, students can gain a better understanding, develop social skills and increase their learning motivation. Classroom activities that actively involve students can also create a collaborative and inspiring environment, where students feel involved and have responsibility for their learning process (Sammons, *et al*, 2016).

Choosing the right learning method is the initial strategy in designing an effective learning process (Nisbet & Shucksmith, 2017), because the chosen method will affect student learning outcomes. Teachers need to consider the learning objectives to be achieved and the characteristics of students in choosing the most appropriate method. Learning methods can include expository, collaborative, group discussion, simulation or hands-on approaches.

The results of the initial observation observations at SMP Negeri 13 Dumoga show that conventional teacher-centered learning methods are still widely used in cultural arts subjects, especially drawing lessons. The emphasis on theoretical explanations from the teacher with limited practice causes students to be less active,

less attentive, and less understanding of the material taught. As a result, students' technical skills in drawing and their learning outcomes in cultural arts subjects, especially drawing, are low.

In learning art, there are various methods that can be used, but only a small number of students have talent in art. The methods of creative work, free expression, demonstration-experiment, modeling, and group work are some of the methods that can be applied in learning fine arts. It is important for teachers to choose methods that suit the learning objectives as well as students' abilities and interests. Based on the above background, this study identified several problems in learning to draw animals at SMP Negeri 13 Dumoga. These problems include the appropriate learning method to improve learning outcomes in drawing animals, how to improve technical skills in drawing animals, and the effect of modeling method on learning outcomes in drawing animals. By identifying these problems, this study aims to provide solutions and recommendations that can improve learning to draw animals.

In this study, the focus is limited to the effect of using the modeling method on the drawing results of seventh grade students of SMP Negeri 13 Dumoga. The modeling method was chosen as the variable to be studied because it has the potential to improve students' technical skills in drawing animals. This study will compare the drawing learning outcomes of students who use the modeling method with students who use conventional methods in learning to draw animals. The purpose of this study is to describe the impact of using the modeling method and the conventional method on the results of drawing animals of seventh grade students of SMP Negeri 13 Dumoga. With the results of this study, it is expected to provide a better understanding of effective learning methods in improving learning outcomes in drawing animals. In addition, the results of this study are expected to

provide benefits for schools in formulating learning policies that can improve the quality of the learning process and student interest in cultural arts subjects.

The modeling method is a way of learning art activities through the process of making duplicates of an existing form of artwork. Tarjo (2004:26) explains that this method was originally used to train the skills of offspring in the artist recruitment system in the past. It has become the oldest method that remains relevant today. In using the modeling method, there are several theoretical views that support its use. According to Tarjo (2004:138), this view is based on several things. First, children instinctively learn through imitation. Secondly, modeling is easy and light work, because it requires less involvement of taste and intellect. Third, modeling involves eye activity, so it can sharpen visual observation. Lastly, the model is usually stationary and unchanging, so modeling can be done repeatedly under the same conditions.

However, the use of the modeling method also needs to pay attention to several things. Tarjo (2004:139) states that there are several things that need to be considered in using the modeling method. First, the modeling method should be used for basic training of physical skills, such as obtaining the same shape even though the size is enlarged or reduced, or producing traditional objects. Second, students need to understand the exact proportions and anatomy of the object to be followed. Thirdly, modeling activities should have meaning for the students' learning process. Finally, modeling should not be a habit, but should be adapted to the learning context and the objectives to be achieved.

Drawing animals is one of the activities that can be done in teaching cultural arts. Drawing fauna can provide students with more knowledge about the various types of fauna that exist around them and even in the world. There are various types of animals that live in the

world, such as animals that live in water (fish) and animals that live on land (cows/birds), as well as some animals that belong to the mammal, reptile, and amphibian groups. With so many types of animals to choose from, teachers can choose one or more animals as examples in practicing students' drawing skills, starting from the easiest to the more complex ones.

RESEARCH METHOD

This research is classified as experimental research. It is said so because this research aims to describe the cause-effect relations (Gay, 2012: 250) between the independent variables, the modeling method, and the method without examples (conventional method) to the dependent variable, the students' results of drawing animals. This experimental research is classified as pre-experimental research because the sample was not randomly selected and the class groups were formed long before this research was conducted. Grouping students randomly has the opportunity to disrupt the teaching and learning process. The pre-experimental design chosen was static group comparison design because this research involved two parallel classes that had been formed before this research was conducted. The design is described as follows:

$$X \quad O^1$$
$$--------$$
$$----$$
$$X \quad O^2$$
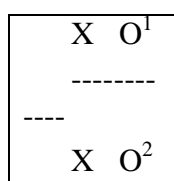
Picture 1. *Design static group comparison*

Where:

X : treatment

$O^{1/2}$: Observation (posttest)

----- : Pre-experiment

The population for this study were seventh grade students of SMP Negeri 13 Dumoga who were enrolled in the 2021/2022 school year, consisting of 2 classes, namely VIIa and VIIb classes with a total of 20 students each. Both classes served as samples in this study.

In this study, the validity test was carried out in two ways: expert judgment for logical validity, while empirical validity and reliability through test data, test tryout. The test tryout was conducted on students who had the same characteristics as the students involved in the experiment. For this reason, the test was conducted in class VII of Swadarma Mopugad Junior High School.

The validity test used in this study is expert judgment, namely the review of instruments carried out by people who are competent in the field concerned. Reliability test, questions and assessment rubrics that have been declared feasible by the validator are then tested on respondents. Respondents for the rubric test of this research were students of class VII Swadharma Mopugad Junior High School totaling 20 people.

Because the sample response to the instrument question items is in the form of a range (rank) so that the test results are tested using the Cronbach alpha formula with the help of the SPSS computer program. If the Cronbach alpha value is greater than 0.60, the instrument is declared reliable or consistent. The following are the results of the research instrument reliability test. The statistical test results with Cronbach alpha show that the test reliability is 777. This means that the test used in this study is reliable.

As already mentioned, data from both treatment groups were collected using tests. The test in question was a fauna drawing test. The test is classified as a group of subjective tests, meaning that the assessment results are highly dependent on the assessor's understanding/interpretation of what is being assessed. Assessment of tests like this is usually done using a certain assessment rubric and intra-rater (assessment carried out twice by one assessor) or inter-rater (assessment carried out by 2 assessors) techniques. The results

of the assessment are combined and divided by 2 to get a final score that represents the student's drawing ability. The use of one of these techniques is intended to minimize the subjectivity of the rater. In this study, the intra-rater technique was used because there was no other cultural arts teacher at the school.

This research is classified as quantitative research. Because the data is numerical, in this case the score of the drawing results, data analysis is carried out statistically, using the t-test for independent samples technique. The statistical technique is described below.

$$t = \frac{\mu_A - \mu_B}{\sqrt{\left[\frac{\left(\Sigma A^2 - \frac{(\Sigma A)^2}{n_A}\right) + \left(\Sigma B^2 - \frac{(\Sigma B)^2}{n_B}\right)}{n_A + n_B - 2}\right] \cdot \left[\frac{1}{n_A} + \frac{1}{n}\right]}}$$

Where

$(\Sigma A)^2$: *Sum of data set A, squared (Step2).*

$(\Sigma B)^2$: *Sum of data set B, squared (Step2).*

μ_A : *Mean of data set A (Step 3)*

μ_B : *Mean of data set B (Step 3)*

ΣA^2 : *Sum of the squares of data set A (Step4)*

ΣB^2 : *Sum of the squares of data set B (Step4)*

n^A : *Number of items in data set A*

n^B : *Number of items in data set B*

FINDINGS AND DISCUSSIONS

The research data referred to here is data collected using drawing tests from the two treatment groups, the experimental group who drew based on the example drawings given, and the control group who drew without being given example drawings. The assessment of the drawing results of both groups was based on a scoring rubric and conducted using the intra-rater scoring technique. The results of the assessment were combined and divided by two to obtain a final score that represented the ability to draw fauna.

Data analysis or statistical test with t-test for independent samples was conducted using SPSS. The results of the statistical test are presented below.

• The statistical group results show that the average experimental data is 15.9250 with an average standard deviation of 1.16161, while the control data has an average of 14.5250 with an average standard deviation of 0.52503.

• The results of the independent sample t test show the t value of 4.912 with a significant level of -0.000 smaller (<) than 0.05, thus Ho is rejected and Ha is accepted, meaning that there is a significant average difference between the experimental group data and the control group data.

Based on the information listed above, a statistical test using the t-test for independent samples was conducted. The results of the statistical test showed that at p (α) 0.05 with df (degree of freedom) 38, the t_{count} (4.912), was greater than the t-table (2.021). Referring to the guidelines listed in Table 2 (3.4), it can be said that the null hypothesis (Ho), the modeling method does not have a more significant impact on the learning outcomes of drawing of seventh grade students of SMP Negeri 13 Dumoga than the conventional method, is rejected. This also means that the alternative hypothesis (Ha), the modeling method has a more significant impact on the learning outcomes of drawing of seventh grade students of SMP Negeri 13 Dumoga than the conventional method, is accepted.

The results of the above research, as well as a number of other studies, prove that teaching by example is a very effective method. The effectiveness of examples is not only in the field of drawing (Ikhsan Hargo Kusumo (2014) and Mandalaeni (2015), but also in other fields (Dyer, 2014).So, no matter what you want to teach, examples usually

work.Whether it's making up a story, creating a product, using software, going through a process, explaining a phenomenon, conducting a lab experiment, or writing code, and even drawing. Examples tend to be more effective.

The results of this study support Malcom Gladwell's opinion that we humans basically learn through examples and direct experience. Why, according to him, learning verbally or through verbal explanation has limitations. The results of the research and Malcom Gladwell's opinion indirectly want to remind cultural arts teachers to not only present the subject matter verbally but also through examples, for example visual examples related to the objects they want to describe.

CONCLUSION

Based on the results of the study, there are differences in the learning outcomes of drawing fauna from students who use the exemplary learning method and students who use conventional learning models, it can be concluded that the use of exemplary methods can affect student learning outcomes, obtained $t_{(count)}$, 4.912, $\geq t_{table}$), 2.021. The modeling method has a more significant impact on the results of drawing fauna when compared to the use of conventional methods. In other words, the use of the modeling method allows students to produce better drawing results.

Referring to the conclusions of the research results, above, the author feels the need to convey the following suggestions to those who have an interest in the results of this study.

- First, drawing and cultural arts teachers are expected to interpret the conclusions of this study carefully and cautiously because pre-experimental research with the design used has a number of weaknesses. However, there is no harm if they try to apply it in the classroom.

- Secondly, as already mentioned, other researchers, if replicating this study,

are expected to correct the shortcomings of this study so that we can obtain more reliable information regarding the use of sample drawings in learning to draw.

REFERENCES

Arifin, Z. (2010). *Evaluasi Pembelajaran.* Alfabeta.

Arikunto, A. (2009). *Prosedur Penelitian : Suatu Pendekatan, Praktik.* Rineka Cipta.

Arisanty, D., Adyatma, S., Setiawan, F. A., Kartika, N. Y., & Muhaimin, M. (2018). Peningkatan Pengetahuan Model Pembelajaran Bagi Guru-Guru Geografi di Kota Banjarmasin. Available at http://eprints.ulm.ac.id/8135/1/37.%20 Peningkatan%20Pengetahuan%20Mod el%20Pembelajaran%20Bagi%20Guru -Guru%20Geografi.pdf

Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, *5*(6), 66-70.

Dyer, J. O., Hudon, A., Montpetit-Tourangeau, K., Charlin, B., Mamede, S., & Van Gog, T. (2015). Example-based learning: comparing the effects of additionally providing three different integrative learning activities on physiotherapy intervention knowledge. *BMC medical education*, *15*(1), 1-16.

Gay, L.R., Mills, G.E. and Airasian, P.W. (2012) *Educational Research: Competencies for Analysis and Application. 10th Edition*. Pearson

Herawati, I. &. (1997). *Pendidikan Seni Rupa.* Depdikbud.

Jihad, A. D. (2010). *Strategi Beljar Mengajar .* PT. Raja Grafindo Persada.

Kusumo, I. H. (2014). *Perbandingan hasil pembelajaran extra antara metode mencontoh dengan metode ceritera pada peserta didik taman kanak-kanak.* Pexrumnas Condongcatur Yogyakarta: Aisyiyah Bustanul thfal.

Mandalaeni, R. (2016) *Penggunaan metode mencontoh untuk meningkatkan motivasi dan hasil karya dalam menggambar ilustrasi siswa kelas VIII B SMPN 1 Kasembon / Rovi Mandalaeni.* Diploma thesis, Universitas Negeri Malang. Available at http://repository.um.ac.id/id/eprint/13065

Moore, G. W. (1983). *Developing and Evaluating Educational Research.* Brown & Company: Little.

Nana, S. (2013). *Penilaian Hasil Proses Belajar Mengajar.* PT. Remaja Resdokarya.

Nisbet, J., & Shucksmith, J. (2017). *Learning strategies.* Routledge.

Pamadhi, H. (2012). *Pendidikan Seni.* UNY Press.

Purwanto. (2010). *Evaluasi Hasil Belajar.* Pustaka Pelajar.

Sagala, S. (2010). *Konsep dan Makna Pembelajaran.* Alfabeta.

Sammons, P., Lindorff, A. M., Ortega, L., & Kington, A. (2016). Inspiring teaching: Learning from exemplary practitioners. *Journal of Professional Capital and Community*, *1*(2).

Sanjaya, A. (2011). *Model-model Pembelajaran.* Bumi Askara.

Santoso, S. (2003). *SPSS Statistika Parametrik.* Gramedia.

Septiany, R. K. (2014). *Pembelajaran Relief Plastisin dengan Metode Mencontoh dan Pengembangannya di Kelompok B2 Unggulan TK ABA Mardi Putra Bantul.* Skripsi, Universitas Negeri Yogyakarta.

Slameto. (2003). *Belajar dan Faktor-faktor yang mempengaruhinya.* Gramedia Cipta.

Soehardi. (2003). *Esensi Perilaku Organisasional.* Penerbit Fakultas Ekonumi Sarjanawiyata Tamansiswa.

Sudjana. (2005). *Metode Statistika.* Tarsoro.

Sugiyono. (2011). *Metode penelitian administrative.* Alfabeta.

Sugiyono. (2012). *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Alfabeta.

Sujadjono, S. (1946). *Seni Loekis, Kesenian dan Seniman.* Indonesia Sekarang.

Tambrin, I. (1991). *Metode Belajar Mengajar Umum dan Khusus Seni Rupa.* Jurusan Pendidikan Seni Rupa dan Kerajinan FPBS IKIP.

Tarjo. (2004). *Strategi Belajar Seni Rupa Mengajar.* Bandung: Universitas Pendidikan Indonesia.

Usaman, U. (2006). *Menjadi Guru Profesional.* PT. Remaja Rosdakarya Offset.