

Discovery Learning to Increase Motivation in Writing Indonesian Students of Education FKIP UMSU

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Abstract

In the learning process, there are many students who do not pay attention to the lessons delivered by the teacher. This is because students have very little interest in the subject. Students who are classified as few because many students like the lessons to be studied. To foster motivation so that students can be interested in these lessons. It is hoped that it can motivate students in writing. By using discovery learning model that emphasizes understanding and ideas that students will be interested in following the lesson well so that the expected learning achievement can be achieved. Education is a conscious effort that involves educators and students to carry out the learning process, in this case students are actively involved in order to be able to develop their potential to think and understand learning concepts and be able to apply them in everyday life. So, discovery learning can be used in any learning process, especially when later students will become teachers and can practice with students at school. This study aims to determine discovery learning to increase writing motivation, as a sample of two classes taken randomly, one class as an experimental class and the other class as a control class. The research variables are discovery learning and writing motivation.

Keywords

discovery learning, motivation, writing



I. Introduction

Education is one of the efforts to improve the ability of human intelligence, thus he is able to improve the quality of his life. So, to create the highest quality of human resources, education is becoming an important factor to be considered. The importance of education is also reflected at MPR No. II/MPR/1993 which states that the national education aims to improve the quality of Indonesia people that is religious people, and pious to God Almighty, noble character, has high personality, discipline, work hard, responsible, independent, smart, healthy, physically and mentally healthy. (Sugiharto in Harahap et al, 2020)

Education is considered to have a very important role in promoting the civilization of a nation. Good quality education can encourage the creation of a quality society, creative and productive until finally able to achieve welfare. Through this national education system, the government should be able to ensure equal distribution of educational opportunities, as well as the relevance and efficiency of education management to face challenges in line with the changing demands of local, national and global life. (Saputra, 2018)

Education is an obligation of every human being that must be pursued to hold responsibilities and try to produce progress in knowledge and experience for the lives of every individual. Indonesia is a developing country that also prioritizes and tries to develop all aspects of the education world. (Astuti et al, 2019)

Education plays a very important role in ensuring the survival of the state and nation. This is because education is a vehicle for improving and developing the quality of human resources. The Ministry of National Education as the institution responsible for the implementation of education and has made reforms in the education system. These efforts include improving the curriculum, improving facilities and infrastructure, and improving the quality of teaching staff.

Writing is an integral part of the entire learning process that students experience while studying at school. Writing requires xxii skills because it requires continuous, continuous and earnest practice (St.Y.Slamet, 2009: 98). With so many writing learning exercises, it is hoped that it can improve students' writing skills even more. With their writing skills, students can develop creativity and can use language as a means of channeling their creativity in everyday life.

Educational problems have always been an interesting topic of conversation, both among lecturers or teachers, parents, especially education experts. Because everyone has an interest and wants the best education for students or students, children or the nation's future generations. Moreover, the problem of Indonesian language education education is always in the spotlight because of the low motivation to write in this field of study.

One of the learning writing skills that students need to learn is narrative writing skills. In learning to write, it is hoped that students will not only develop the ability to make essays but also need accuracy to make arguments, have the ability to express ideas or ideas by making interesting essays to read. Among them they must be able to compile and connect one sentence to another so that it becomes a complete composition.

According to Hosnan, Discovery Learning is a model for developing active student learning methods to discover for themselves, to investigate for themselves, so that the results obtained will be loyal and long lasting in memory, students will not easily forget. Children can also learn to think analytically and try to solve their own problems. Activities in the Discovery Learning model are stimulation, problem statement, data collection, data processing, verification, generalization (Hosnan, 2013).

Through the discovery learning model students become closer to what is the source of their learning, students' self-confidence will increase because they feel that what they have understood is found by themselves, cooperation with their friends will increase, and of course add to the student experience (Putrayasa, 2014) .

From these two opinions, a good lesson is learning that involves students actively. So that the learning process should be changed, in which the role of the lecturer is more dominant than the students. Therefore, the teacher-centered learning process should naturally be changed to become student-centered.

Thus learning is no longer teacher-centered but more student-centered, in other words, learning takes place actively, that is, teachers and students are both active. Through this discovery learning model, students can develop in their entirety, meaning that they are not only developing cognitively, but students will also develop in the affective and psychomotor fields automatically through the problems at hand.

The formulation of the problem in this study is: Is the discovery learning model effective on the writing motivation of Indonesian language education students, FKIP UMSU? and Can the discovery learning model-based learning tools increase the motivation to write Indonesian language education students at FKIP UMSU?

In accordance with the formulation of the problem above, the objectives of this study are as follows: To determine the effectiveness of the discovery learning model on the writing motivation of Indonesian language education students, FKIP UMSU. To increase the motivation to write Indonesian language education students, FKIP UMSU through a discovery learning model.

II. Review of Literatures

2.1 Understanding Learning Model

The learning model has characteristics in the learning model that can affect the learning process which is supported by learning behavior and environment. According to Karnadi and Nur in Trianto (2007, p. 6), the characteristics of the learning model are as follows:

1. Logical theoretical rationale compiled by the creators or developers
2. The basis for thinking about whether or not students learn (learning objectives to be used)
3. The learning behaviors required for the model to be implemented successfully
4. The learning environment necessary for the learning objectives to be achieved.

According to Hamiya and Jauhar (2014, p.58) suggest the characteristics of the learning model, namely:

1. Based on specific educational theories and learning theories
2. Have a specific educational mission or goals
3. Can be used as a guide for improving learning activities in the classroom
4. Has a model part device
5. Has an impact as a result of applying the learning model, both directly and indirectly.

Based on the description above, it can be concluded that the learning model is a design and pattern that is used as a guide in the learning process related to knowledge, attitudes or skills in order to achieve a learning goal

2.2 Discovery Learning

Discovery learning models have learning scenarios to solve problems that they get themselves. In the problem-solving process, students use their experiences or what is better known as constructivists (Widiadnyana, I et al. 2015). From the problems that have been obtained through observations, it is important for researchers to make improvements to student learning outcomes, both in terms of cognitive, affective, and psychomotor.

Discovery Learning is a learning model that emphasizes the importance of understanding or ideas in a learning process. The application of students is expected to be able to find the concept or idea itself. Can also be interpreted as learning with the concept of discovery. Discovery Learning Learning Objectives:

1. Because students are directly involved in the discovery process, they are expected to be active in learning.
2. Students are able to find patterns in concrete situations and abstraction, so that they can make questions that can be used to find information related to the process.
3. With the learning process, students' findings form a way of cooperation, share and receive the information they get.
4. The skills acquired in the discovery learning process in some cases, students find it easier to use in other case applications.

Discovery Learning Learning Steps

1. Students are made into groups, each group consists of 3-4 students.
2. The teacher provides materials and worksheets that will be used as discussion material.
3. Students observe and discuss the material that has been brought by the teacher with the group.
4. Students work on worksheets in groups.
5. Each group presented their findings.
6. The teacher and students correct misunderstandings of the material, after which they make conclusions together.

Advantages of Discovery Learning

1. Students can participate actively in the ongoing learning process.
2. Cultivate and instill a finding-finding attitude so that it can support students' problem solving skills.
3. Students are directly involved with the discovery process so that the knowledge they get is relatively long lasting.
4. Self motivated and easier to express opinions.
5. Menigkatalkan students' reasoning and the ability to think freely.
6. Train students' cognitive skills to find and solve problems.

2.3 Characteristics and Purpose of Discovery Learning

According to Hosnan (2014), the characteristics or characteristics of Discovery Learning are:

1. Explore and solve problems to create, combine and generalize knowledge;
2. Learning;
3. Activities to combine new knowledge and existing knowledge. Meanwhile, according to
4. Bell, the Discovery Learning method has the goal of training students to be independent and creative, including the following (Hosnan, 2014):

In the discovery students have the opportunity to be actively involved in learning. The fact is that the participation of many students in learning increases when the invention is used. Through discovery learning, students learn to find patterns in concrete and abstract situations, and students extrapolate a lot of additional information provided. Students also learn to formulate question-and-answer strategies that are not ambiguous and use question and answer to obtain useful information in finding.

Discovery learning helps students form effective collaborative ways of working, share information with one another, and listen to and use the ideas of others. There are several facts that show that the skills, concepts and principles learned through discovery are more meaningful. Skills learned in discovery learning situations are, in some cases, more easily transferred to new activities and applied in new learning situations.

a. Definition of Writing Motivation

In this case, what is meant by writing motivation is something that encourages someone to do writing activities to achieve a goal. Motivation grows because there is a need. Broadly speaking, according to

Akhmad Sudrajat (2008: 1) theory of motivation dcan be grouped into two categories, namely: (1) Satisfaction Theory (Maslow, Herzberg and McClland); (2) Process Theory (Vroom).

1) Satisfaction Theory

a) Maslow

Maslow's theory (hierarchy theory of needs) is often used to predict the behavior of people in groups or organizations, and how to manipulate or shape these behaviors in a way that meets their needs, although Maslow himself never intended to predict behavior. It only starts from two basic assumptions, namely:

b) Herzber

Hezberg's theory (two-factor theory of motivation), namely:

The factors that make people feel dissatisfied (dissatisfiers-factors);

- A series of extrinsic conditions, conditioned by external factors, namely the expected work conditions, if not available make people feel dissatisfied, but if these conditions

are available it will not motivate people to work better. Conditions that are considered "should be available" like this are health factors (hygiene-factors).

- Factors that make people feel satisfied (satisfiers-factor)
- A series of intrinsic conditions, conditioned by a person's internal factors, namely a work condition, which if available will encourage work motivation, and further increase work productivity, but if not available, it will not cause excessive dissatisfaction or damage the work situation. , such as: the opportunity to achieve the best work performance (achievement), recognition of achievements (recognition), giving full responsibility for the assigned task (responsibility), the opportunity to continue to achieve progress in work (advancement), the opportunity to continue developing in a career (growth), the suitability of the type of work with the abilities they have (work).

2) Process Theory

a). Process theory of motivation seeks to answer questions about how to strengthen (energize), direct (direct), maintain (maintain) and stop (stop) individual behavior.

- Vroom (1964) suggested that there are two levels of results in every job, which:
- first-level results are the product of behavior,
- second-level results in the form of events caused by or as an impact of the first-level results, for example if a person can complete his job well (first-order results / behavioral products), he will receive promotion promotions or additional bonuses (second-tier results / impact of first-rate results)

From the various theories mentioned above, only Maslow based the concept of a hierarchy of needs on two principles, namely first, human needs can be arranged in a hierarchy from the lowest to the highest needs. Second, a need that has been satisfied ceases to be the main motivator of behavior.

b. Types of Motivation

In its development, motivation can be divided into two types, namely: (1) intrinsic motivation and (2) extrinsic motivation (Martinis Yamin, 2007: 226). Intrinsic motivation is meant by motivation that comes from within a person who is based on his own awareness to do something learning work. While extrinsic motivation is meant by motivation that comes from outside a student which causes the student to carry out learning activities.

The motivation of an individual is greatly influenced by various factors, both internal and external. Including internal factors are:

- 1) one's perception of oneself,
- 2) pride,
- 3) personal expectations,
- 4) need,
- 5) desire,
- 6) job satisfaction,
- 7) The resulting work performance.

Apart from internal factors, external factors also affect a person's motivation. External factors include:

- 1) type and nature of work,
- 2) a work group where a person joins,
- 3) organizations where work,
- 4) the general environmental situation,
- 5) The applicable reward system and how to apply it (Akhmad Sudrajat, 2008: 4).

Psychologists put a different emphasis on motivation. As a result, suggestions about learning also vary. Mc Dougall and Freud emphasized the importance of intrinsic motivation. Skinner and Bandura stress the importance of extrinsic motivation. Maslow and Rogers show that both motivations are equally important.

c. Motivation Function

Motivation to learn not only gives strength to learning powers but also provides clear direction. Oemar Hamalik (2001: 161) states that the function of motivation is (1) encouraging behavior or an action, (2) motivation functions as a guide for actions to achieve the desired goals, (3) motivation functions as a driving force.

The principles of motivation are to provide reinforcement, support, and direction to behavior which are closely related to the principles in learning that have been encountered by learning scientists. With the motivation to write, students are expected to actively participate in learning writing skills.

III. Research Methods

Before doing a search, the author uses the work table to look for the standard deviation by using the following formula:

$$SD = \frac{\sqrt{n\sum X1^2 - (\sum X1)^2}}{n(n-1)}$$

The next step is to calculate the standard deviation value with the following formula:

$$SD = \frac{\sqrt{n\sum X1^2 - (\sum X1)^2}}{n(n-1)}$$

$$SD = \frac{\sqrt{35.272800 - (3095)^2}}{35(35-1)}$$

$$SD = \sqrt{\frac{9548000 - 9579025}{35(34)}}$$

$$SD = \sqrt{\frac{-31025}{1190}}$$

$$SD = \sqrt{-26,07}$$

$$SD = 5.10$$

From the results above, it can be seen that the standard deviation of the experimental class is 5.10.

Then:

$$SD = \frac{\sqrt{n\sum X2^2 - (\sum X2)^2}}{n(n-1)}$$

$$SD = \frac{\sqrt{37.220425 - (2805)^2}}{37(37-1)}$$

$$SD = \frac{\sqrt{8155725 - 7868025}}{37(36)}$$

$$SD = \frac{\sqrt{287700}}{1332}$$

$$SD = \sqrt{215.99}$$

$$SD = 14.69$$

From the results above, it can be seen that the standard deviation of the control class is 14.69.

The percentage of students who got a score of 100, namely 5 people or 15%, the value of 95 is 1 person or 2%, the value of 90 is 7 people or 19%, the value of 80 is 5 people or 15%, the value of 75 is 1 person or 2% and the value is 70 namely 7 people or 19% the value of 65 is 1 person or 2% the value of 60 is 6 people or 17% the value of 55 is 1 person or 2% the value of 50 is 2 people or 2% the value of 35 is 1 person or 2%.

Based on the table above, the percentage of the value rating in the control class is 49% (18 people) got the very good category, 22% (8 people) got the good category, 19% (7 people) got the enough category and 8% (3 people) got the category less, 2% (1 person) get very poor category.

After calculating the score and the final score for each variable, then the learning effect was sought *discovery Learning* on motivation to write. In this case the researcher makes a comparison between the results of writing skills with Discovery Learning with the results of writing skills. for that researchers use the formula:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} \text{ dengan } S^2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

X1	: 88.42
X2	: 75, 81
n1	: 35
n2	: 37
S12	: -26, 07
S22	: 215, 99

Then the value above is transformed into the following formula:

$$S2 = \frac{(n_1 - 1)S_1^2 + (n_2 - 1)S_2^2}{n_1 + n_2 - 2}$$

$$S2 = \frac{(35-1) - 26,07 + (37-1) 215,99}{35 + 37 - 2}$$

$$S2 = \frac{(34) - 26,07 + (36) 215,99}{70}$$

$$S2 = \frac{-888,38 + 7775,64}{70}$$

$$S2 = \frac{6887,26}{70}$$

$$S2 = 98.39$$

$$S2 = \sqrt{98,39}$$

$$S = 9.91$$

Then the standard deviation value above is transformed into the t test formula as follows:

$$T_{\text{count}} = \frac{X_1 - X_2}{\sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$T_{\text{count}} = \frac{88,42 - 75,81}{9,91 \sqrt{\frac{1}{85} + \frac{1}{87}}}$$

$$T_{\text{count}} = \frac{12,61}{9,91 \sqrt{0,028 + 0,027}}$$

$$T_{\text{count}} = \frac{12,61}{9,91 \sqrt{0,055}}$$

$$T_{\text{count}} = \frac{12,61}{9,91 \times 0,234}$$

$$T_{\text{count}} = \frac{12,61}{2,3}$$

$$t_{\text{count}} = 5.48$$

After the t value t_{count} obtained, then compared with the t table value at the significant level $\alpha = 0.05$ with dk $(n_1 - n_2) - 2 = (35 + 37) - 2 = 70$ contained in table t table = 1.680. Because the value of $t_{\text{count}} > t_{\text{table}}$ is $5.48 > 1.680$. This means that there is a significant influence in the use of Discovery Learning to increase the motivation to write Indonesian language education FKIP students

Hypothesis Test

Based on the results of the hypothesis testing above, it is obtained $t_{\text{count}} = 5.48$, then the price of t_{count} is compared with the significant level $\alpha = 0.05$, so it is obtained t table = 1.680 Ha is accepted with the hypothesis that says "There is an effect of Discovery Learning on increasing writing motivation".

IV. Results and Discussion

The results of the above hypothesis indicate a significant difference in the ability to analyze short story elements in the experimental class and in the control class. This is proven based on the calculation known discovery learning to increase the motivation to write in the experimental class and the control class. Based on the percentage of values obtained in the experimental class, it shows 98% (34 people) get the very good category, 2% (1 person) get the good category. Whereas in the control class it shows that only 49% (18 people) get the very good category, 22% (8 people) get the good category, 19% (7 people) get the enough category and 8% (3 people) get the poor category, 2% (1 person) got very poor category.

V. Conclusion

The results of the study show that, on average, in increasing the motivation to write using Discovery Learning is at a very good level. It can be seen that the student who scored the most from 80-100 was 98%. It can be seen that the most students scored 30-55, which was 10%. Discovery Learning requires an understanding of lecturers both in terms of preparation, implementation, and evaluation and there work between lecturers and students in the learning process so that what is expected is to increase writing motivation to be better.

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