



## The Effect of Applying the Outdoor Learning Method on Student Learning Motivation in the Museology Course, History Education Study Program, IKIP PGRI PONTIANAK

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### ABSTRACT

The purpose of this study was to see the effect of the outdoor learning method on student motivation in the Museology course of the History Education Study Program at the IKIP PGRI Pontianak. This research method used is experimental, with a research design that is Quasi experimental. The experimental class is A and the control class is B. The location is on the IKIP PGRI Pontianak campus. Data collection techniques with learning motivation questionnaires, observation sheets and documentation. Data analysis techniques used descriptive statistics, parametric statistical tests, and used the Effect Size formula. The results of this study are 1. The average learning motivation of students who are not taught using the History Education laboratory is 66.33 which is classified as sufficient. 2. The average learning motivation of students who are taught or the experimental class using the outdoor learning method is 77.42 which is classified as good. 3. There is a significant difference in the average learning motivation of students in the control class and students in the experimental class. 4. Based on the calculation using the effect size obtained  $E_s < 80$ , or  $E_s = 0.55$ , it can be concluded that the use of the outdoor learning method on learning motivation in Museology courses is classified as moderate.

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## 1. INTRODUCTION

Education has always been a role model in supporting a better lifestyle. In the current era, education continues to experience developments that occur dynamically and we are required to have the ability to adapt to educational developments that occur. Many of us still don't realize that education is getting more interesting and modern day by day. Education in Indonesia is supported by a curriculum, in which the curriculum itself is made so that education can be carried out according to a strong foundation and is expected to achieve the desired educational goals.

Education is the right of every citizen, with optimal implementation, the achievement of targets can certainly be achieved optimally. One of the components that must be addressed to achieve this maximum target is process improvement in operational aspects at school, namely the learning process in class. Actions to improve the process to be carried out by applying learning methods that are in accordance with the demands of current developments, for example regarding the presence of students with a student center approach. This approach certainly has implications for the application of the method to be used and no less important is the competency characteristics that must be achieved regarding the material or teaching materials to be delivered (Holton, 2006; Celce-Murcia, 2007; Karim, et al., 2021).

Learning is an activity that is inseparable from human life, it is also one of the most important needs of human life in an effort to survive and develop oneself (Hanifah and Suprijono, 2020; Hanasuddin, 2020; Rehalat, 2014). This happened because it was driven by the needs and goals to be achieved in a dynamic, constructive and organic systemic process. Learning is also a form of interaction experience between students and their environment. In essence, learning is a process of communication (Mulyana, 2014; Susiloningsih, 2016). A communication that occurs between teachers and students usually occurs in the classroom through the teaching and learning process. In the world of education learning is the main activity carried out. Through learning students can understand a new concept or experience changes in behavior, attitudes and skills (Widiastuti, 2017).

Learners According to (Mezirow, 1997) "Learning is any relatively permanent change in behavior that is the result of past experience". The essence of this opinion emphasizes the achievement of permanent behavior change in students because there is a process of experience during the interaction.

Integration in planning learning methods is a focus on packaging the effectiveness of the learning process in the form of applying appropriate methods and strategies that can increase the attractiveness of students so that they are motivated. This condition will be a stimulus for students to be active and interactive during the learning process as according to (Kurniangsih, Darsiharjo and Maryani, 2015; Purnomo, 2015) that: Active learning is carried out by processing experiences by listening, reading, writing, discussing, reflecting stimulation, and solve problems. Thus, efforts to develop process skills can be carried out by carrying out a learning process in which there are problem-solving-oriented activities.

So the learning process that is student oriented certainly needs learning scenarios packed with stages that are able to stimulate the activeness of students in an effort to achieve competencies that must be mastered in the form of an understanding of the environmental conditions of students. The packaging of learning scenarios must be a focus that must be addressed, one of which is that the teaching materials that we compile must be oriented to real life. This form of learning must be oriented to contextual problems that exist around the learner's environment. The concept of teaching material sources from the environment is interpreted in terms of drawing learning activities in the classroom (indoor) to outside the classroom (outdoor) by utilizing existing teaching material sources in the environment and

then students make direct observations. In this form, students are oriented to real-life problems, while at the same time there is a process of activity and creativity of students in understanding the problems surrounding the competencies that must be mastered. It is hoped that the basic form of this method will be able to facilitate the process of mastering the competencies that must be mastered, because the activities of students directly make observations in the field.

The outdoor learning method is an activity outside the classroom that makes learning outside the classroom interesting and fun, can be done anywhere by emphasizing the learning process based on real facts by means of learning material directly experienced by students through direct learning activities with the hope that students will grow more meaning and impression in learning (Asrizal, et al., 2018; Wahyuni, et al., 2017). The outdoor learning method is the use of environmental media as a source of learning because the environment is a real media source, not an imitation or model so that learning becomes more interesting, with the above method it is hoped that it can increase students' motivation and learning motivation (Purnomo, 2016; Rasmilah, 2016; Widodo, 2017).

Based on this opinion, it can be concluded that the outdoor learning method is a method that utilizes the environment in the learning process and helps increase student activity, motivation and learning motivation. In general, a laboratory is defined as a place of work, namely a building or room equipped with equipment to carry out scientific work such as research, demonstrations and discussions. Laboratories are often found in various places, such as: hospitals, factories, large projects, and educational institutions. Each of these laboratories has different functions and tasks, so that when defined it will produce a different definition. One type of laboratory is an educational laboratory. A place where a person can carry out practicum activities to gain practical knowledge in accordance with the field of knowledge he is studying. Laboratories are not only found in the field of exact sciences (science and technology) but also in the field of social sciences (history). As for what is meant by a history laboratory is a center for teaching and learning activities in history courses, both carried out by lecturers and students.

The History Laboratory is an effective historical learning media, because in the History Laboratory students can conduct history lessons, scientific studies, presentations, discussions, practicums and so on. In addition, in the History Laboratory various historical learning tools are presented, for example: teaching aids, mock-up collections, repro collections, numistic collections, map collections, artifact collections and so on, making it easier for students to go deeper into the material being studied (Adela, 2019; Adela, D and Permana, 2020; Nisa, 2015).

The learning process can occur anywhere, inside or outside the classroom and even outside the school. The learning process that is carried out outside the classroom or outside the school has a very important meaning for student development, because such a learning process can attract students' attention and directly add to their experience with the real situation (Anzai and Simon, 1979; Rescorla and Solomon, 1967). Then with this it also makes them aware that in the surrounding environment there are many things that can be used as objects for learning so that the learning process becomes more meaningful. This learning process can be applied by a history lecturer where the material in the museology course is related to the environment, such as about interactions, social conditions, social relations and much more. With materials like this it is more precise to use learning methods outside the classroom or called outdoor learning, where this method uses the surrounding environment as a medium in the learning process. The outdoor learning method makes students directly learn from their own environment and the teacher can overcome the problems of the learning

process which is only teacher-centered, and the learning process does not become monotonous and can make students motivated to learn without being bound in a room. Based on the background above, the researcher is interested in examining the effect of the application of the outdoor learning method on student learning motivation in the History Education Study Program Museology course.

## 2. LITERATURE REVIEW

### 2.1. Outdoor Learning

Outdoor learning is a learning method that utilizes nature as a learning resource. According to (Prince, 2019) in his paper states that "Outdoor learning really becomes a more integrated learning mode in the early years, there needs to be a closer conformity between educational goals and how success is evaluated", that outdoor learning really being a more integrated mode of learning in the early years, there needs to be a close fit between educational goals and how success is evaluated.

Outdoor Learning activities are also very influential in the formation of student character, where student character can be seen when they carry out activities outside of school with their friends and teachers. Characters that are expected in the application of the Outdoor Learning method include the character of curiosity and responsibility from students.

### 2.2. Motivation To Learn

Motivation to learn is the overall driving force within students that causes learning. The same opinion was expressed by (Prince, 2019) which emphasized that learning motivation is the overall driving force that exists within students which causes learning activities and ensures the continuity of learning activities, so that the goals desired by the learning subject can be achieved. Based on the understanding of motivation to learn above, it can be concluded that the notion of motivation to learn is a series of encouragement or driving force that comes from within oneself and from outside to carry out learning activities so as to cause change so that what is the goal desired by the subject of learning can be achieved.

## 3. METHODS

In this study the method used is experimental. experimental research is research in which the independent variable is manipulated to investigate the causes and affect relationships between the independent and dependent variables. Experimental research is research that is intended to find out whether there is a result of "something" imposed on the investigated subject. The form of research that will be used in this study is an experiment (experiment) in which this experiment is carried out to test or test hypotheses, with a research design that is quasi-experimental. Quasi Experimental is a development of True-experimental Design. With the Posttest-Only Control Design research design. The form of this research design can be described in the following table 1:

**Table 1.** Research Design

<b>R</b>	<b>X</b>	<b>O<sub>2</sub></b>
<b>R</b>		<b>O<sub>4</sub></b>

Information :

X = Treatment in the experimental class using the outdoor learning method while in the control class the conventional method.

R = Two groups each selected randomly.

O<sub>2</sub> = Experimental class that uses the outdoor learning method

O<sub>4</sub> = Control class without using the outdoor learning method

This study uses one class for the experimental class and one class for the control. The experimental class is A in the morning and the control class is B in the morning. Techniques and data collection tools used are indirect communication techniques with learning motivation questionnaire data collection tools, direct observation with observation guide techniques and documentary techniques with documentation data collection tools. Data analysis techniques using descriptive statistics, parametric statistical tests, and using the effect size formula.

#### 4. RESULTS AND DISCUSSION

The research problems contained in sub-problems 1 and 2 were carried out using descriptive statistical analysis, by describing the learning motivation of the control class and the learning motivation of the experimental class, such as finding the overall score of student acquisition, student learning motivation scores, average student acquisition, average student learning motivation, and standard deviation. The mean and standard deviation of the posttest results in the experimental class and control class are as follows Table 2.

**Table 2.** Summary of Student Posttest Results

Posttest	Experiment Class		Control Class	
	Average	SD	Average	SD
	77,42	10,55	66,33	10,25

Based on the table above, it can be seen that the average learning motivation of the experimental class students after being given treatment was an average value of 77.42 with a standard deviation of 10.55, while for the control class which did not receive treatment the average value was 66.33 with a standard deviation of 10.25.

Judging from the average above, it can be concluded that the learning motivation of students who received treatment, namely the application of the development of laboratory-based learning models there was an increase, so to obtain accurate conclusions the data were analyzed using statistical tests. To answer sub-problem 3, parametric statistical calculations/tests were carried out, such as the normality test for the control class, the normality test for the experimental class, the homogeneity test and the t-test.

##### 4.1. EXPERIMENTAL CLASS POSTTEST NORMALITY TEST

1. Determine the average: 77.42
2. Determine the Standard Deviation: 10.55
3. Make a List of Observation Frequency and Expectation Frequency
  - a. Define many interval classes:
 
$$K = 1 + 3,3 \log n$$

$$K = 1 + 3,3 \log 35$$

$$K = 1 + 3,3 (1,54)$$

$$K = 1 + 5,082$$

$$K = 6,082 \approx 6$$

- b. Range (R) = biggest score – smallest score = 95 – 60 = 35
- c. Class Length (P) =  $\frac{\text{rentang}}{\text{banyak kelas}} = \frac{R}{K} = \frac{35}{6} = 5,8 \approx 6$
- d. Make a helper table for the list of Observation Frequency (O<sub>i</sub>) and Score Expectations (E<sub>i</sub>)
- e. Determine the Degrees of Freedom (db)
 
$$Db = K - 3 = 6 - 3 = 3$$
- f. Determine the value of  $\chi^2$  table (chi squared) significant level with  $\alpha = 5\%$  or 0.05
 
$$\begin{aligned} \chi^2_{\text{tabel}} &= \chi^2 (1 - \alpha) (db) \\ &= \chi^2 (1 - 0,05) (db) \\ &= \chi^2 (1 - 0,05) (3) \\ &= \chi^2 (0,95) (3) \\ &= 7,815 \end{aligned}$$
- g. Normality Testing (draw conclusions)

From the table listing the frequency of observations and expectations, it is obtained from the values for  $\chi^2$  count = 4.053 and  $\chi^2$  table = 7.815. It turns out that the value of  $\chi^2$  count <  $\chi^2$  table so that the data in the Experimental Class are normally distributed.

#### 4.2. CONTROL CLASS POSTTEST NORMALITY TEST

1. Determine the average: 66.33
2. Determine the Standard Deviation: 10.25
3. Make a List of Observation Frequency and Expectation Frequency
  - a. Define many interval classes:
 
$$K = 1 + 3,3 \log n$$

$$K = 1 + 3,3 \log 34$$

$$K = 1 + 3,3 (1,53)$$

$$K = 1 + 5,049$$

$$K = 6,049 \approx 7$$
  - b. Range (R) = biggest score – smallest score = 90 – 45 = 45
  - c. Class Length (P) =  $\frac{\text{rentang}}{\text{banyak kelas}} = \frac{R}{K} = \frac{45}{7} = 6,42 \approx 7$
  - d. Make a helper table for the list of Observation Frequency (O<sub>i</sub>) and Score Expectations (E<sub>i</sub>)
  - e. Determine the Degrees of Freedom (db)
 
$$Db = K - 3 = 6 - 3 = 3$$
  - f. Determine the value of  $\chi^2$  table (chi squared) significant level with  $\alpha = 5\%$  or 0.05
 
$$\begin{aligned} \chi^2_{\text{tabel}} &= \chi^2 (1 - \alpha) (db) \\ &= \chi^2 (1 - 0,05) (db) \\ &= \chi^2 (1 - 0,05) (3) \\ &= \chi^2 (0,95) (3) \\ &= 7,815 \end{aligned}$$
  - g. Normality Testing (draw conclusions)

From the table listing the frequency of observations and expectations, it is obtained from the values for  $\chi^2$  count = 1,092 and  $\chi^2$  table = 7.815. It turns out that the value of  $\chi^2$  count <  $\chi^2$  table so that the data in the Experimental Class are normally distributed.

Based on the criteria for the magnitude of the Effect Size, it can be concluded that the application of learning with the use of historical laboratories in the application of the outdoor learning method is included in the medium category. This study aims to determine the comparison of student learning motivation in the control class and student learning motivation in the experimental class using the outdoor learning method with the history education laboratory in the experimental class and conventional learning in the control class. Before the research was carried out, the researcher asked for data on the learning motivation values of students in the Museology course to make it easier for researchers to calculate homogeneity in determining the research sample.

In the control class the researcher applies conventional learning where the teaching and learning process tends to be passive, students only listen to the lecturer's explanation, no student dares to ask about material that is not understood when the lecturer gives students the opportunity to ask different questions from the experimental class, learning activities take place actively, thing This is because using the history laboratory provides an opportunity for students to develop teaching materials independently, so that students feel enthusiastic about learning.

The use of the out door learning method using the History Education Laboratory is an interesting way of learning, because students are directly involved in learning so that learning will take place in a non-boring way.

The existence of a laboratory is a demand in line with developments in teaching and curriculum development which require active students to carry out activities. The laboratory must support activities centered on the development of certain skills, including process skills, motor skills and the formation of a scientific attitude, especially developing an interest in conducting investigations, environmental research and an interest in studying nature in depth. The essence of the laboratory is a learning infrastructure in order to achieve the essential truth.

As mentioned in the previous description, the history laboratory is a place for demonstrating and strengthening history lessons, because it is a place for activities that allow students to experience the meaning of history in depth. In teaching history, real experience can be gained if students are directly confronted with objects of historical relics as depicted in the laboratory. Human life is only a few tens of years, so it is impossible for humans to have all the real experiences directly. Because real experience cannot always be internalized, and experience with words is not always easy to understand, therefore something is needed to bridge the two extremes with real experience.

Based on data analysis, it is known that the learning motivation of students who are taught using the outdoor learning method with the history education laboratory is classified as good with an average score of 77.42 compared to learning motivation with conventional learning which is quite adequate with an average score of 66.33. The statistical test used is the t test. From the calculation results obtained  $t$  count  $t$  table namely 4.43 1.99547. Then  $H_0$  is rejected  $H_a$  is accepted. So it can be concluded that there is an influence of the application of the outdoor learning method in the Museology course on the learning motivation of IKIP PGRI Pontianak students. Based on the criteria for the magnitude of the Effect Size, it can be concluded that the application of the outdoor learning method using the historical education laboratory is moderate with a value of 0.55.

## 5. CONCLUSION

Based on data analysis and discussion, in general it can be concluded that the effectiveness of developing laboratory-based learning models for history education students at the IKIP PGRI Pontianak is classified as good. In particular, based on the calculation results, it is known that:

(1) The average learning motivation of students who are not taught using the outdoor learning method with the history education laboratory is 66.33 which is quite sufficient,

(2) The average learning motivation of students who are taught or in experimental classes using the outdoor learning method with the historical education laboratory is 77.42 which is classified as good,

(3) Significant differences in the average learning motivation of control class students and experimental class students using the parametric statistical test t test. Because  $t_{count} > t_{table}$  or  $4.43 > 1.996$ ,  $H_a$  is accepted at a significance level of 5%. So the conclusion is that there is a difference in the average value of the control class and the average value of the experimental class,

(4) Based on calculations using the effect size,  $E_s < 80$ , or  $E_s = 0.55$ , it can be concluded that the application of the outdoor learning method to student learning motivation in the museology course is moderate.

## 6. RECOMMENDATION

With what has been obtained in this study, it is necessary to increase student learning motivation that need to be increased, especially with the application of media and the natural surroundings as learning resources so student learning motivation could be increased by that because it would not make learning to be something bored, especially if it is applicated in learning History both at school and in tertiary institutions, especially the History Education Study Program.

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