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THE EFFECT OF GAMIFIED LEARNING METHOD ON STUDENTS THEMATIC LEARNING OUTCOMES IPS LOAD

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ABSTRACT

The purpose of this study was to determine the effect of the Gamified Learning method on student learning outcomes on social studies content, theme 7, sub-theme 3 class V at UPTD SDN Gili Barat, Kamal District, Bangkalan Regency. This study uses quantitative research methods with Quasi Experimental Design (pseudo-experimental) form of non-equivalent Control Group Design. The population in this study were all students of class V UPTD SDN Gili Barat Kamal Bangkalan, totaling 43 students divided into classes V-A and V-B. The sampling technique used in this study is non-probability sampling, saturated sampling. Data was collected using multiple choice test questions with a total of 20 questions and observation. The results showed that the results of statistical calculations using the Independent Sample T-Test formula (T test) at a significant level a = 0.05 with the results of Tcount = 5,630 and Ttable = 2,020. Based on the results of these calculations, Tcount ≥ Ttable then H0 is rejected and Ha is accepted. So, the Gamified Learning method has a positive influence on student learning outcomes.

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A. Introduction

Education is an activity carried out with an emphasis on the development of a person's potential, skills and personality, as well as the skills needed by himself (Novianti, 2021: 35). Education in its position has a very important role in advancing a nation through the formation of the quality of its human resources (Saniyah et al., 2022; Subagiono et al., 2022). Therefore, the quality of education from the elementary school stage to high school exposure must be continuously improved. One of the content materials that has been taught since the elementary school stage, namely Social Sciences (IPS). According to Siska & Yulia, 2016 (in Novianti 2021: 35) explains the purpose of social studies learning in elementary schools, namely as an effort to emphasize and identify individuals as social beings who know themselves and their social environment. IPS education is very important to be taught in the basic explanation of schools so that students can get to know the life of the community and the environment which is supported by learning media and through the experiences of everyday life that occur in society. Through social studies learning, it is hoped that students will have some understanding of several concepts about attitudes, values, morals, and skills that will be used in living their daily lives. IPS learning taught in the school's basic chart is presented in an integrated or integrated manner. According to Fogarty & Pete, 2009 (in Mutiani et al, 2021: 2028) explains that the purpose of social studies learning is to form citizens who are able to socialize well and have confidence in their lives amid social and physical strength, so they can become responsible citizens. Social studies learning does not aim to become rote material, but is able to foster awareness of responsibility for the rights and obligations of each student towards himself, society, nation and state.

Based on the literature study that has been carried out by the authors found several common problems in social studies learning in elementary schools, namely only pressure on information, facts, and memorization, emphasizing content rather than process, students are very less directed at thinking processes and learning that is meaningful and functions for their lives (Rahmawati & Zidni, 2019: 2-4). Therefore, social studies learning will not be able to help students live effectively and productively in their future lives. Apart from that, there are also several assumptions that social studies learning tends to be less interesting, the approach is indoctrinative, considered trivial, boring, and various other negative impressions. The above problems are also found in Class V SDN Gili Barat Kamal Bangkalan. Based on the results of interviews and observations, it was found that

there were some students who did not like the content of social studies material which was considered just rote material, students also had difficulty focusing during the learning process because students did not understand the material being presented. In the learning process the teacher uses conventional methods. Social studies learning in class is still dominated by teachers while students also tend to be passive. This resulted in around 55.8% of students admitting to being bored, unfocused, and not understanding the material well. This has an impact on social studies learning outcomes of students. Based on student learning outcomes tests, the number of students who completed KKM (71) in VA and VB classes was only around 30.4% and 30%, respectively. This shows that the lecture method is not enough to help students understand social studies material so that social studies learning outcomes for students are low.

Therefore, there is a need for other methods that can improve social studies learning outcomes for students. Based on the results of the preliminary study conducted, the majority of students, namely as many as 79% of students, liked the group learning method and 100% of students liked the variety of games with rewards. Therefore, the authors chose to use the gamified learning method which combines all of these elements to be applied in the learning process on the social studies material for class V UPTD SDN Gili Barat Kamal Bangkalan.

According to Moncada, 2014 (in Suarmini, 2019: 43) explains that the gamified learning method is a method that uses game mechanisms in its application to make learning more interesting, where the game has been designed to involve students in various types of challenges and there are rules and feedback to measure results. The important elements in the application of the gamified learning method are clear rules, objectives and results, feedback and rewards, problem solving, stories, players, a safe and challenging environment, and a sense of mastery. According to Anne Lee (2015) the application of the gamified learning method in learning will make students more motivated and have the potential to increase their achievements. So, the gamified learning method is a method used by incorporating dynamics or game elements in learning so that a more enjoyable learning atmosphere will be created and can improve student learning outcomes. The gamified learning method consists of two types, namely structural gamification and content gamification. Structural gamification is a gamification method that is carried out without changing the content of delivery or delivery, in this case educators only incorporate or adopt the dynamics of game elements in their

learning process. Meanwhile, content gamification is a gamification method that uses electronic game-based technology in its application. However, based on the results of observations that have been made by the author, the author

Based on the description of the background above, the researcher then conducted research to test the gamified learning method to improve thematic learning outcomes of fifth grade students at UPTD SDN Gili Barat Kamal Bangkalan on Social Sciences Theme 7 Sub-theme 3. In this study the researchers only used gamified learning with a structural gamification type due to the absence of supporting facilities for using gamified content in the school.

B. Method

This research uses quantitative research methods with Quasi Experimental Design (pseudo-experimental) form of non-equivalent Control Group Design. This design is used because in conducting research, researchers cannot control all variables. The population in this study were all students of class V UPTD SDN Gili Barat Kamal Bangkalan, totaling 43 students divided into classes V-A and V-B. The sampling technique used in this study is non-probability sampling, namely a sampling technique that does not provide equal opportunities for each member of the population to be selected as a sample (Sugiyono, 2016: 66). The type of sampling used is saturated sampling, which is a sampling technique that uses the entire population as a sample. In this study, class V-A will serve as the experimental group with a total of 23 students, while class V-B will serve as the control group with a total of 20 students. The instruments used in this study were multiple choice test questions which totaled 20 questions and observation sheets. The validity of the instrument uses content and construct validity, and is tested empirically. This research was conducted in the period from September 2022 – March 2023. The pre-research was carried out on September 19-20 2022 by making observations, interviewing class teachers, and distributing questionnaires about student needs. Furthermore, data collection was carried out on February 27 - March 2 2023. Data collection was also assisted by class teachers and colleagues as observers.

C. Result and Discussion

1. Research Data Collection Results

a. Results of Data Analysis of Pretest and Posttest Values

The following are the results of the pre-test values for the experimental class and the control class:

Tabel 1. Pretest and posttest results in the experimental and control class

Information	Pretest		Posttest	
	Experimental	Control	Experimental	Control
The highest score	60	50	95	85
Lowest Value	25	30	70	60
Average	41,30	39,25	83,70	71,75
Number of Completed Students	0	0	22	8
Percentage of Completed Students	0%	0%	95,65%	40%
Number of Incomplete Students	23	20	1	12
Percentage of Unfinished Students	100%	100%	4,35%	60%

Before carrying out the treatment, the researcher gave a pretest in the form of a test instrument that had previously been tried out. The questions given to the experimental class and the control class totaled 20 multiple choice questions. The pre-test was given by the researcher to the experimental class and control class simultaneously before the learning process began. The pre-test is given to determine the initial abilities possessed by students before being given treatment. Students are said to be complete individually if the learning outcomes reach the specified KKM, namely 71 and are said to be classically complete if they have achieved 75% learning mastery (Manurung et al., 2021: 2). Based on the pre-test results of the experimental class and control class, it was shown that the highest score was obtained in the experimental class 60 while the control class was 50. Then, the lowest score in the experimental class was 25 and the control class was 30. The overall average score in the experimental class pre-test was 41.30 and the control class was 39.25. In the pre-test of the experimental class and the control class, there were no students who passed with a percentage of 100%.

After being given a pre-test in the experimental class and control class, then given treatment in learning in the experimental class using the Gamified Learning method, while the control class uses conventional learning methods. After learning is completed, post-test questions will then be given to the

experimental class and control class. This post-test question is given to find out student learning outcomes after carrying out the learning process. The results of the post-test scores in the experimental class and control class can be seen in table 7. It can be seen that the highest score obtained was in the experimental class 95 while the control class was 85. Then, the lowest score in the experimental class was 70 and the control class was 60. The overall average score in the post-test in the experimental class was 83.70 and the control class was 71.75. In the experimental class post-test, there were 22 students who passed with a percentage of 95.65% and 1 student who did not complete with a percentage of 4.35%. Meanwhile, in the post-test control class, there were only 8 students who passed with a percentage of 40% and 12 students who did not complete with a percentage of 60%.

2. Results of Research Data Analysis

a. Prerequisite Test

After analyzing the pre-test and post-test values, then the prerequisite test is carried out. This test was conducted to find out whether data analysis for hypothesis testing can be continued or not. This prerequisite test consists of two tests, namely the normality test and homogeneity test as follows:

1) Normality Test

The normality test was carried out to find out whether the data obtained was normally distributed or not. In this normality test using the Kolmogrov-Smirnov test. The following are the results of the pre-test and post-test normality tests for the experimental class and the control class:

Table 2. Pretest and Posttest Normality Test Results for Experimental and Control Classes

Kelas	Nilai Signifikan	Keterangan
Pretest Experiment	0,2 > 0,05	Normal
Pretest Control	0,06 > 0,05	Normal
Posttest Eksperimen	0,084 > 0,05	Normal
Post-test Kontrol	0,071 > 0,05	Normal

Based on table 11 above, it can be seen that the results of the pre-test and post-test normality tests in the experimental class and control class using the Kolmogrov-Smirnov test, get the result that the significant value obtained is greater than the significant level, which is 0.05. In accordance with the decision making basis for the Kolmogrov-Smirnov normality test, the data above is declared to be normally distributed.

2) Homogeneity Test

Homogeneity test was carried out to find out whether the data obtained was homogeneous or not. In this homogeneity test using the Levene test. The following are the results of the homogeneity test in the pre-test and post-test of the experimental class and the control class:

Table 3. Pretest and Posttest Homogeneity Test Results for Experimental and Control Classes

Class	Significant Value	Information
Pretest Experiment and Control	0,583 > 0,05	Homogen
Posttest Experiment and Control	0,091 > 0,05	Homogen

Based on table 12 above, it can be seen that the results of the pre-test and post-test homogeneity tests in the experimental class and control class using the Levene test, get the result that the significant value obtained is greater than the specified significant level, which is 0.05. In accordance with the basis for Levene's homogeneity test decision-making, the above data is declared homogeneous, which means that there is no difference in variance in the experimental class and the control class. Thus, it can be concluded that the sample comes from a homogeneous population.

b. Hypothesis testing

Once it is known that the data obtained are normally distributed and come from the same (homogeneous) population, then the hypothesis can be tested using a parametric test, namely the Independent Sample T-Test (T-Test). This hypothesis test is carried out to answer the research hypothesis that has been previously determined. Proof in this hypothesis test is done by comparing the learning outcomes between the experimental class and the control class. The Independent Sample T-Test test is used in the sense that the sample in the study has no correlation, in other words, none of the sample members in the experimental class are members of the control class. The following are the results of the Independent Sample T-Test:

Table 4. Hypothesis Test Results (Independent Sample T-Test)

Value Data	T count	T table	Information
Post-test	5.630	2.020	H0 ditolak

Based on table 13 above, it can be seen that the result value of Tcount = 5,630 > Ttable = 2,020., so that H0 is rejected and Ha is accepted. This proves that there is a significant effect on social studies content for class V using the Gamified Learning method on student learning outcomes. So, it can be concluded that after getting learning using the Gamified Learning method in the

experimental class and learning without using the Gamified Learning method in the control class there is a difference in student learning outcomes. So, in this case there is a positive influence of the Gamified Learning method on improving student learning outcomes in class V IPS content, theme 7, sub-theme 3.

The results of this study are in line with research conducted by Alifah Ulfiatul Isnawati and Sofwan Hadi (2021) that student learning activities after using the gamification method show a significant increase, seen from students who begin to actively ask questions and are more enthusiastic about participating in learning activities which can affect the learning outcomes obtained. The learning method has a strategic role and is a tool in presenting and creating a learning process (Saguni, 2019: 31). In line with the theory from Anne Lee (2015) the application of the Gamified Learning method in learning will make students more motivated and have the potential to increase their achievements.

Thus, it can be stated that there are significant learning outcomes in IPS theme 7 sub-theme 3 content between study groups using the Gamified Learning learning method and study groups using conventional methods. Therefore, it can be concluded that there is an influence of the Gamified Learning method on student learning outcomes in social studies content, theme 7, sub-theme 3 class V at UPTD SDN Gili Barat, Kamal Bangkalan.

D. Conclusion

Based on the results of the research that has been carried out regarding the effect of the Gamified Learning method on student learning outcomes in social studies content, theme 7 sub-theme 3 class V at UPTD SDN Gili Barat Kamal Bangkalan, it is concluded that the results of statistical calculations using the Independent Sample T-Test formula (T test) at a significant level a = 0.05 with a Tcount = 5,630 and Ttable = 2,020. Based on the results of these calculations, Tcount ≥ Ttable then H0 is rejected and Ha is accepted. This proves that there is a significant influence between the Gamified Learning method on student learning outcomes. So, it can be concluded that learning on IPS theme 7 sub-theme 3 using the Gamified Learning method has a significant effect on the learning outcomes of fifth grade students at UPTD SDN Gili Barat Kamal Bangkalan.

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