

Application of Games-Based Memorization Models in Improving Students' Critical Thinking Skills in Learning Social Studies

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ABSTRACT

The low interest of students in social studies subjects is possible because the teacher's efforts have not been optimal to increase the creative thinking of students' learning. Students' critical thinking skills are still low, seen during the current learning process, students are not encouraged to improve their thinking skills. The purpose of this study was to identify an increase in students' critical thinking skills after applying the games-based learning model of memorization. Study This using quantitative methods, this type of research uses quasy experiments, the sample in this study were class VII students at SMPN 1 Tarogong Kidul, the instrument Which used For ability critical thinking is pretest and posttest, observation and documentation study. Based on research results and data management using the Mann Whitney test obtained Sig.0.021 and $\alpha = 0.05$ means Sig. $< \alpha$, then the game-based memorization learning model can improve students' critical thinking skills. So that students have the skills and abilities to think critically in the social studies learning process.

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1. Introduction

Basically social studies learning is related to human life which includes all behavior and needs. Social Studies is a training program that aims to familiarize students with concepts related to community life and the surrounding environment, basic logical and critical skills, curiosity, research, problem-solving and social skills, as well as communication skills, collaborating and competing in society, being involved and aware of social and human values. Critical thinking skills are very meaningful to be developed and become a goal in education. Critical thinking skills as skills that must be mastered by students in dealing with the demands of the times, critical thinking processes are also factors that support successful learning. students who have critical thinking skills will help them understand the material being studied. However, students' critical thinking skills are still low, seen during the current learning process, students are not encouraged to improve their thinking skills. In the learning process it is only directed at memorizing and hoarding information, so students are only theoretically capable but weak Social Sciences (IPS) is one of the subjects taught in junior high schools (SMP). Among students there is a tendency that these lessons are less attractive. This is in line with Uno's opinion (2016, p. 45) which states that learning strategies are things that teachers need to pay attention to in the learning process, there are at least three types of learning delivery strategies and learning management strategies.

Basically, the low interest of students in social studies subjects is possible because the teacher's efforts have not been optimal to increase the creative thinking of students' learning. Most teachers still dominantly use the lecture method in teaching so that it does not create a fun and varied learning process that can increase students' enthusiasm for learning, as a result teaching and learning activities are less interesting and boring because students are not stimulated or challenged to learn to think critically. Critical thinking is briefly a mental process for perceiving the world using our existing knowledge (Susar et al., 2015).

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Then the Stereotype problem which considers IPS as a rote subject greatly influences the learning conditions in the classroom. students become less motivated when learning social studies because they are haunted by the amount of material that must be memorized. Interactive learning environment in social studies classes to enhance students' learning achievement (Tetep & Arista, 2022) . Subjects with a myriad of materials are ultimately carried out with demands that they must complete the material without considering how the potential of students develops. Such a situation is actually not entirely the student's fault, as explained earlier, the selection of appropriate learning methods and models will affect the condition of the class during learning.

The conception of critical thinking as a process of producing new mental representations through the transformation of information that involves complex interactions including reasoning, imagination and problem solving activities. Through the memorization model as a learning pattern or design that uses memory to increase understanding with strategies to build relationships between the objects being studied and their conceptual relationships. This study intends to investigate students' perception on their critical thinking and problem solving skills (Azreen & Mohamed, 2015) . Memory is the core of cognitive development, because all forms of learning from individuals involve memory, the process of memorizing students can build relationships so that the objects they learn are not only remembered by rote, but the objects studied can also be remembered through their conceptual relationships. (Irdayanti 2018).

The realization of the memorization learning model is that people can master material faster and retain it longer. that critical thinking is a way of thinking about any subject, problem or problem in which the thinker enhances his thinking by skillfully manipulating the structures of thought and applying intellectual standards to them. The concept of game-based learning fun in social studies learning can be used in the distance learning process, which is carried out for elementary and junior high school students (Tetep & Dahlena, 2021) . Critical thinking is very important in training students to deal with various problems of everyday life. One of students' critical thinking tasks is to come up with solutions or ideas to solve everyday problems (Sd, 2022) . Besides that, improving students' thinking skills is very important for students because the way students acquire knowledge depends on how they think, whether they can interpret a word or writing and evaluate it with or without accompanying arguments (Hestningsih, 2015) .

Based on the context of the memoryization learning model specifically designed to improve the ability to store and retrieve information. The memorization learning model does not only require students to understand, but also memorize the subject matter. So that this model is one of the offers for educators in teaching students. learning activities with a conducive and meaningful classroom atmosphere. To create more meaningful learning for students, a teacher must be able to choose a model that is effective and in accordance with the conditions of students (Hartati et al., 2023) . Thus, students are expected to easily understand and memorize the subject matter that has been delivered by the teacher, so that the planned educational goals are achieved.

2. Method

This study uses a quantitative approach. Based on the design form of the experimental method, the researcher uses one of them, namely the Quasi Experimental Design Nonequivalent Control Group Design. According to Sugiyono (2019, pp. 75-76) reveals that "Quasi-experimental design or quasi-experimental design has a control group, but cannot fully function to control external variables that affect the implementation of the experiment." According to Sugiyono (2019.p.79) said that the nonequivalent control group design is a method that gives a pretest beforehand without randomly selecting either the control or experimental group and the posttest after being given treatment in the experimental class and control class so that the treatment results can be known more accurately.

3. Result and Discussion

RESULTS

Based on the results of the study by giving treatment to both classes where class VII-A as an experimental class with learning using approaches scientific and class VII-B as the control class at SMPN 1 Tarogong Kidul with learning to use method Conventional Instruments pretest which aims to determine the ability of students before learning takes place. In the experimental class, the results of the pretest were obtained as follows: number experimental class students as many as 21 students obtained the smallest value of 10 And mark highest is 46, whereas average mark as big 27,42 whereas from control class the smallest value is 10 and the highest value is 50 and the average value as big 27.80. Based on the processing results of the normality test data, it can be interpreted through the following table:

**Table 3.1 Result Normality Test Data
In Experimental Class and Class Pretest control**

Class	Sig.	A	Criteria
Experiment	0.020	0.05	Distributing No Normal
Control	0.105	0.05	Normal Distribution

Source: IBM SPSS data processing results 22, 2023.

Pretest data analysis of the experimental class are not normally distributed on class control distributed normal, For more he explained calculation test normality can seen on attachment. Furthermore Because data experiment not normally distributed and the control data is normally distributed then it is continued to test Mann Whitney . Based on normality test data because Wrong One No distributed normal, so For test the hypothesis using non-parametric statistics, hereby using test Mann Whitney.

Table 3.2 Data Results Test Mann Whitney Data Test Initial (Pretest)

	Thinking Ability Critical
Mann-Whitney u	184,500
Wilcoxon W	374,500
Z	-.409
asymp. Sig. (2-tailed)	.035

Source: IBM SPSS data processing results 22, 2023

Based on the calculation results, the asymp value is obtained. Sig. (2-tailed) of 0.035 and α of 0.05, meaning $0.035 \geq 0.05$ then H_0 is rejected. From these data can concluded that there is difference results pretest Which significant between class experiment and control class before learning begins.

Table 3.3 Results of Normality Test Data in Experimental Classes and Classes Posttest control

Class	Sig.	A	Criteria
Experiment	0.970	0.05	Distributing Normal
Control	0.433	0.05	Distributing No Normal

Source: IBM SPSS data processing results 22, 2023

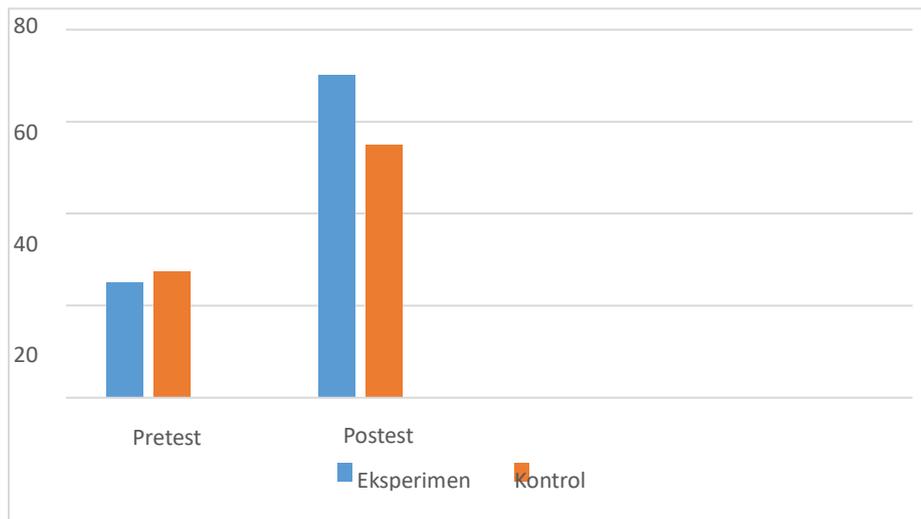
So the experimental class posttest data is normally distributed while in control class is not normally distributed, for more details test calculations normality can be seen in the attachment. Furthermore, because of the control class data is not normally distributed and the experimental class data is normally distributed next to test Mann Whitney.

Table 3.4 data results test man whitney data test end (posttest)
test Statistics^b

	Students' critical thinking skills
Mann-Whitney u	132,500
Wilcoxon W	322,500
Z	-.825
asymp. Sig. (2-tailed)	.028

Source: IBM SPSS data processing results 22, 2023

Based on results calculation, obtained mark asymp. Sig. (2-tailed) of 0.028 and α of 0.05, meaning $0.028 \geq 0.05$ then H_a is accepted. From these data it can be concluded that there are differences in the final results significant between class experiment and class control showing there is the influence of the use of the memorization model in increasing students' critical thinking skills at SMPN 1 Tarogong Kidul. In analyzing the improvement of students' critical thinking skills in the experimental class and control class, a normalized N-Gain test was then carried out done interpretation in accordance gain index classification and calculate the percentage increase in the class experiment and class control or enhancement ability think critical before and after learning included into categories tall. Meanwhile, based on the results of the analysis of the normalized N-Gain test, the results of processing and analysis of the data can be interpreted through the following graph:



Source: Results of Microsoft Excel 2010, 2023 data processing

Based on the calculation results obtained Sig. of 0.021 and α of 0.05, means Sig. $< \alpha$ then H_0 is rejected and H_a is accepted. It means "There is an increase which is significant to the critical thinking skills of students who use games-based memoryization models with conventional models". From data it can be concluded that there is an effect of using the memoryization model to participant's critical thinking skills educate.

DISCUSSION

The density of the concepts given can result in students not being able to capable control material Which taught. Knowledge Which obtained through model it is quickly forgotten. Lectures cause student

learning to become Study memorize Which No resulted emergence understanding No using learning that requires students to ask questions so that ability think critical participant educate No trained, matter This cause response or question Which highly submitted to the teacher seldom. Strategy iteration that is aware of reoccurring settings by memorization. He introduced the notion of snare and showed that the cyclic structures of our exponential lower bound belong to this subgame type (Friedmann, 2013) . Implementation of learning is getting better than the previous meeting. In conveying goals and issuing statements is also good. Students already understand and are starting to be able to follow the game-based memorization model with Good. Participation participant educate in process learning Already start active, students' thinking abilities have begun to increase, this can be seen from Many of the students asked questions when the teacher explained learning materials.

Learning will greatly affect the learning outcomes of students, besides that it is necessary to choose the right learning media so that it can attract the attention of students and provide clarity of the object being observed. Learning can be more alive, because learning is not only centered on One direction, start There is participation active from participant educate So learning goes from two directions. Realization of game-based memorization learning models for quality students can be produced by teachers through varied and innovative learning activities, providing different learning experiences so that learning can impress students and learning is more fun and impressive, thereby increasing student interest, teachers are required to make efforts carrying out meaningful learning activities so that students are able to absorb in their long-term memory one of the efforts made by the teacher to make learning more meaningful (Ardianti, et al, 2022).

The game-based memorization learning model in the realization of learning activities is directed at developing the ability to absorb and interrogate information so that students can remember the information they have received and can recall it when needed (Supriyadi et al., 2022) . The syntax for applying the games-based memorisation model in the learning process is carried out through several steps, namely:

- a. Examine the material. This activity can be done by underlining the important parts, marking the necessary parts.
- b. Develop relationships, namely finding relationships between related materials by using keywords, underlined words or by circling certain words.
- c. Develop a sensory image , using funny techniques or perhaps exaggerated words to make them easier to remember.
- d. Practice re-call by paying attention to the previous stages and this must be studied continuously.

Improvement of participants' critical thinking skills students after experiencing the development of critical thinking skills as ability analyze or study something idea or idea after understand something idea or idea the. If think is part from activity Which always done brain to organize information to achieve a goal , then think Critical thinking is part of thinking that is also done by the brain. The information of social skills and social knowledge if used in education (Still, 2021) . Critical thinking includes the ability to read with understanding and identify the material needed with which there is no relationship. Thinking critical is thinking reflective And productive (Effort et al., 2017) . As well as involve evaluation or proof. Participant educate can increase aspect Skills interpret what just Which want to is known so that grow flavor want to know participant educate. Through the memorization learning model as a learning model that is very interesting and provides many benefits for interests in the world of education (Learning et al., 2022) .

Based on the application of the games-based memory model as follows process learning has high significance. At the stage of asking participants students can improve aspects of skills in formulating questions associated with a phenomenon/information encountered, the more participants educate trained in ask so flavor want to know the more can developed. So that question the become base For look for information more carry on. While game interventions have recently drawn the attention of researchers, studies have yet to examine their influence while accounting for the natural, habitual manner in which play activities occur in children's everyday life (Gashaj et al., 2021) . Then improve students' abilities in compiling thoughts, analyzing problems, describing something and expressing an idea in detail which is explained in written form (Faidah et al., 2022) .

Basically the realization of the memorization learning model can create a learning atmosphere and learning process so that students are actively able to develop their potential to have religious spiritual strength, control, personality, intelligence, noble character and the skills needed by students (Permatasari et al., 2014)) . The ability to choose and apply effective and efficient learning methods, the ability to involve students actively participating and the ability to create a learning atmosphere that supports the achievement of educational goals, through the memorization model is a way of imitating and remembering or memorizing or the process of remembering something with the power of memory, by using several stages in the learning process (Hasni, 2020).

Thus different learning is applied to the control class and the experimental class on the subject of the set by using conventional learning methods in the control class and the memorization learning method

in the experimental class, where students are taught using the learning method of memorization on the subject of sets with the ability to represent Mathematics students who are taught without using the learning method of memorization have a significant difference.

4. Conclusion

Based on the results of research conducted by applying the memorization model in social studies learning that there is an increase which is significant to the critical thinking skills of students who use games-based memorization models with conventional models. Students already understand and are starting to be able to follow the game-based memorization model with Good. Participation participant educate in process learning Already start active, students' thinking abilities have begun to increase, this can be seen from Many of the students asked questions when the teacher explained learning materials, then improvement ability think critical before and after learning included into categories tall.

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