

## The Effect of the Guided Discovery Learning Model on Students' Creative Thinking Abilities in the Subject of 7th Grade Social Sciences, SMP Negeri 1 Peusangan

Asri Audi <sup>1\*</sup>, Hariki Fitrah <sup>1</sup>, Surya Darni <sup>1</sup>

<sup>1</sup> Universitas Almuslim

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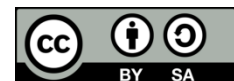
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### ABSTRACT

Creative thinking ability is a process of thinking imaginatively and originally in generating new ideas, formulating unusual solutions, and developing various alternative possibilities of a problem. This ability includes flexibility of thinking, fluency in generating ideas, elaboration, and originality. The low creative thinking ability of students is one of the challenges in the world of education today. One effort to improve creative thinking ability is to choose and apply the right learning model, which is able to stimulate students to think openly, explore ideas, and be active in a meaningful learning process. The purpose of this study was to determine the effect of the Guided Discovery Learning model on students' creative thinking ability in the Social Studies Subject of Class VII SMP Negeri 1 Peusangan. This study uses a quantitative approach. The type of research used is a quasi-experimental design. The sample in this study were students of class VII.4 taught using the Guided Discovery Learning learning model and referred to as the experimental class and class VII.5 taught without using a learning model or conventionally and referred to as the control class. Data collection techniques are observation, testing, and documentation. Based on the results of the hypothesis analysis, it shows that the Guided Discovery Learning learning model has a significant effect on students' creative thinking skills in class VII of SMP Negeri 1 Peusangan. This can be seen from the results of the significant test of the value obtained, the Sig <@ value is  $0.000 < 0.05$ . This means that  $H_a$  is accepted and  $H_o$  is rejected, which means that there is a significant influence between the use of the Guided Discovery Learning Model on students' creative thinking skills.

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### Corresponding Author:

Asri Audi | Universitas Almuslim

Email: asriaudi@umuslim.ac.id

## 1. Introduction

Education is a crucial factor in a nation's progress. Essentially, education is a process that helps people develop their potential, enabling them to face challenges and achieve the changes that frequently occur in real life. Education is known to improve the quality of human resources. Therefore, with the rapid development of science and technology, humans are expected to develop superior skills and abilities (Hidayati and Supriyadi, 2019).

According to Sari and Rahmawati (2020), the primary goal of the educational process is to optimize and actualize human potential. Essentially, education can develop aspects of learning that have been provided from an early age, through adolescence, and into adulthood. In general, every child will experience development based on the experiences gained through a process called learning. Therefore, education can be said to be the key to the development of quality knowledge, both for individuals and society.

Education is also said to be a vehicle for developing human resources (HR) that can build the character of the nation and state. Education also aims to build a generation that is intelligent, has good abilities and character, in order to encourage changes for the better from one generation to the next. To achieve the desired goals, education must be implemented optimally. Education also plays a fundamental role in fostering independence for students in facing the problems and challenges of the 21st century (Nabila, Zainuri, Ayub, Doyan, et al., 2022).

The 21st century is often referred to as the century of knowledge, namely the century of a knowledge-based economy, the century of information technology, the century of globalization and the century of the industrial revolution 4.0. In this century, changes are occurring very rapidly in aspects of life which include several fields, namely, economics, transportation, technology, communication and education. This change is the main key in the 21st century industrial era which demands that the entire world of education can shape its students to have the ability to think creatively, critically, collaboratively and communicatively.

The phenomenon of students' lack of creative thinking skills often occurs at all levels of education. According to data from the Global Creativity Index, Indonesia is ranked 115th out of 139 countries based on its creativity level (Florida et al., 2015) in Anggraini & Zulkardi (2020). Research conducted by Safaria and Sangila (2018) shows that 85.7% of 35 students have low levels of creative thinking skills, and research conducted by Septi et al. (2019) shows that 24 out of 36 students have poor creative thinking skills. Based on these data and studies, it shows that students' creative thinking levels are still quite low. (Sari et al., 2024). Furthermore, the results of the pre-study showed that most students had not fully met the indicators for creative thinking skills. Most students were unsure of the questions or answers they would provide and relied on only one solution. This is in line with the statement (Di et al., 2016) which states that most students tend to follow the procedures that have been taught by the teacher without looking for other different solutions. Based on the research data, posttest data from the experimental class and the control class were obtained, namely with an average value of the experimental class of 81.25 and an average value of the control

class of 62.5. After conducting a hypothesis test using the t test, a significant value (2-tailed) of  $0.000 < 0.05$  was obtained, meaning that  $H_0$  was rejected and  $H_1$  was accepted. These two phenomena can be found in students at MTs Ma'arif NU 04 Tamansari, who on average have low creative thinking skills.

The phenomenon of minimal creative thinking skills also occurs in SMP Negeri 1 Peusangan where researchers have conducted observation activities at the school, which is caused by the learning process activities carried out by educators which are still mostly one-way or conventional and less interesting, so that students rarely interact with educators which causes students to become passive in learning, and can make students' creative thinking skills not grow and develop quickly. To be able to overcome these problems, educators should choose to use strategies that can involve students to actively learn both physically and mentally. This is where educators should be able to apply models during the learning process, which can increase students' interest or desire to learn about understanding to improve their creative thinking skills.

Based on observations and interviews the researcher with one of the teachers at the school, especially the subject teacher at SMP Negeri 1 Peusangan, where the researcher has carried out observation activities, namely in the subject of Social Studies for class VII, It is true that thinking skills are still low, due to The learning process is still one-way and conventional, using the lecture method, where students only pay attention, take notes, complete assignments, and answer questions. Even group study is rarely implemented during the learning process (Nur et al., 2021). Therefore, the appropriate learning model to be implemented here to further enhance students' creative thinking skills is the Guided Discovery Learning learning model.

According to Novita and Hasmy (2024), the Guided Discovery Learning model is suitable for improving students' creative thinking skills. The choice of learning model is very influential, in order to foster a spirit of learning and stimulate students to actively contribute during the teaching and learning process in the classroom, so that students can think creatively and can improve the quality of learning on the material. By implementing the discovery learning model, students are expected to develop their creative thinking skills in the 21st century, where these abilities are highly needed in the context of the current era of globalization. Research (Sari et al., 2024) says that guided discovery learning can help students in understanding learning materials and solving problems when using real contexts.

According to (Di et al., 2016) the Guided Discovery Learning Model is a learning model that facilitates students in improving critical and creative thinking skills, and adds experience in finding concepts from a problem they face through information discovery with a series of scientific activities facilitated by educators. Meanwhile, according to (Di et al., 2016) The Guided Discovery Learning model is a learning model that creates a learning situation that involves students learning actively and independently in discovering a concept or theory, understanding, and solving problems with the teacher as a facilitator and guide.

Based on the problems outlined above, an effective learning model is needed to address the lack of creative thinking skills. Therefore, the most suitable model to improve students'

creative thinking skills is the Guided Learning model. Discovery Learning. This is in accordance with previous research entitled ' The Effect of the Guided Discovery Learning Model on the Mathematical Creative Thinking Ability of Class VIII Students of Mts Ma'arif NU 04 Tamansari '.

Therefore, researchers want to conduct research on the influence of the Guided learning model. Discovery learning on the creative thinking abilities of students in secondary schools, using a quantitative approach model.

## 2. Research Methodology

The approach used in this research is a quantitative one. According to (Ono, 2020), quantitative research methods can be defined as research methods based on the philosophy of positivism used to study specific populations or samples. This research approach uses numerical data and definitive results to test predetermined hypotheses using a quasi- research method. Experiment Design. Types of research Quasi Experiment Design This aims to compare two groups where the groups have the same subjects, so that the differences in the dependent variables of two or more groups are not caused by differences between subjects but are the result of treatment imposed as independent variables on two or more groups.

## 3. Result and Discussion

### Descriptive N-Gain of Control Class and Experimental Class

Based on the calculation of cognitive abilities The post-test and pre-test of the control and experimental classes obtained N-Gain results consisting of N (number of tests), mean, and standard deviation. Judging from the results of the student ability test, it can be seen that the average N-Gain of the experimental class is more prominent compared to the average N-Gain of the control class. The data from the N-Gain calculation results are as follows: for the experimental class and control class are as follows:

Table 1. N-Gain Results of Control Class and Experimental Class

Class	Information	N	Mean	Standard Deviation
Experiment	Pre-Test	32	26.88	14,522
	Post-Test	32	80.31	11,566
	N-Gain	32	72.41	17,348
Control	Pre-Test	32	39.22	15,193
	Post-Test	32	70.16	10,510
	N-Gain	32	42.75	27,227

Source: SPSS Processed Data

Based on table 4.4 it can be concluded that The Guided Discovery Learning learning model applied in the experimental class was more effective in improving students' cognitive abilities compared to the conventional learning model in the control class. This can be seen from the average N-Gain value of the experimental class of 72.41, which is in the high category, while the control class only reached 42.75, which is in the medium category. In addition, the standard deviation of N-Gain in the experimental class was smaller than that of the control class, which indicates that the increase in student learning outcomes in the experimental class was more even. Thus, the application of the Guided Discovery Learning model has been proven to have a positive influence on increasing students' creative thinking skills and cognitive learning outcomes more significantly and consistently.

### Normality Test

The normality test calculation using Shapiro-Wilk was carried out using the SPSS V 22 program with a significance level of 0.05. The data from the normality test results for the experimental class can be seen in the table below.

Table 2. Results of the Normality Test for the Experimental Class

Class		Shapiro-Wilk <sup>a</sup>
		Sig.
creative thinking skills	Experiment Pre-Test	.141
	Post-Test Experiment	.133

Source: SPSS Processed Data

Based on the results of the normality test calculations using the Shapiro-Wilk test at a significance level of 0.05 conducted through the SPSS version 22 program, the results were obtained as listed in Table 4.6 below. The test results show that the significance value (Sig.) for the pre-test data of the experimental class is 0.141, and for the post-test data of the experimental class is 0.133. Both values are greater than 0.05, so it can be concluded that the pre-test and post-test data in the experimental class are normally distributed.

Furthermore, the data from the normality test results for the control class can be seen in the table below.

Table 3. Results of the Normality Test for the Control Class

Class		Shapiro-Wilk <sup>a</sup>
		Sig.
creative thinking skills	Pre-test Control	.186
	Post-test Control	.005

Source: SPSS Processed Data

Based on the significance value for the pre-test data of the control class, it was 0.186, which is also greater than 0.05. This means that the pre-test data in the control class was normally

distributed. However, the significance value for the post-test data of the control class was 0.005, which is less than 0.05. Therefore, the post-test data in the control class was not normally distributed.

### Homogeneity Test

The data used in the t-test for homogeneity are the same learning outcome data as in the previous normality test. The results of the calculation for the homogeneity test for learning outcome data using SPSS 22 are as follows:

Table 4 Results of Homogeneity Test

		Levene Statistics	df1	df2	Sig.
Creative thinking level	Based on Mean	1,088	1	62	.301
	Based on Median	1,015	1	62	.318
	Based on Median and with adjusted df	1,015	1	61,668	.318
	Based on trimmed mean	1,063	1	62	.307

Source: SPSS Processed Data

Based on the table above, it can be seen that the sig value Based on Mean is 0.301. The Sig value is  $0.301 > 0.05$  so it can be concluded that the variance of the post-test data of the experimental class and the post-test of the control class is homogeneous.

### Discussion of Research Results

#### Influence of the Guided learning model Discovery Learning About Thinking Skills Creative students

This research was conducted involving two classes, namely class VII4 and VII5, each consisting of 32 students. Class VII4 was designated as the experimental class which was given treatment in the form of implementing the Guided Discovery Learning learning model, while class VII5 was designated as the control class which used the conventional learning model.

This research was conducted from May 19, 2025, to May 23, 2025. The research began in the experimental class on Monday, May 19, 2025, during the first hour of learning. At the first meeting, the researcher administered a pre-test instrument to determine the students' initial abilities before receiving the treatment. Furthermore, the second meeting was held on Tuesday, May 20, 2025, during the third hour of learning. At this second meeting, the researcher began to apply the Guided Discovery Learning learning model to the Economic Activities material. The learning activity begins with a stimulus in the form of a problem that students must solve individually. Throughout the learning process, students appear actively engaged and demonstrate creative thinking skills across various aspects. Fluency, for example, is evident in the number of ideas students put forward to solve the problem. Diversity (flexibility) is reflected in the variety of approaches and perspectives used by students in presenting solutions. Originality is evident in the emergence of unique ideas not

commonly expressed by other students. Meanwhile, elaboration is evident in students' ability to develop and detail their ideas in depth. Discussion activities among students also demonstrate positive interactions, where they respond to each other's ideas and strive to refine the resulting solutions collaboratively.

Meanwhile, in the control class, the first meeting was held on Tuesday, April 21, 2025, during the last hour of learning. Similar to the experimental class, in the first meeting, the researcher administered a pre-test to determine students' initial abilities before receiving the treatment. The second meeting took place on Thursday, May 23, 2025, during the second period of instruction. In the control class, learning activities used conventional methods. In practice, students tended to be more passive compared to the experimental class. This was due to the teacher-centered learning approach, where students simply listened to explanations without any reciprocal interaction or active involvement in the learning process.

Furthermore, at the end of both meetings, the researcher administered a post-test instrument to determine the final abilities of students after being given treatment, both in the experimental and control classes. In the experimental class that implemented the Guided Discovery Learning learning model, the average post-test score was 80.31, while the average pre-test score was 26.88. These data indicate a significant increase between the pre-test and post-test scores. This indicates that there is positive development in students' creative thinking abilities after the Guided Discovery Learning learning model was implemented.

Based on these results, it can be concluded that the application of the Guided Discovery Learning learning model has an influence on improving students' creative thinking abilities. This improvement can be seen from the difference in average scores before and after the treatment in the experimental class. This is also supported by observations during the learning process, where students appeared more active, independent, and able to put forward various creative ideas in solving the problems presented.

After conducting the research and obtaining data on student learning outcomes, a hypothesis test was conducted to statistically test the effect of the treatment. Hypothesis testing was conducted using the independent sample t-test. However, before the test was carried out, a prerequisite analysis test was first carried out in the form of a normality test and a homogeneity test on the pre-test and post-test data in both the experimental and control classes. After the data is declared to be normally distributed and homogeneous, an independent sample t-test can be carried out to determine the difference in average learning outcomes between the two groups.

Guided Discovery Learning model is a learning approach that emphasizes active student involvement in independently discovering concepts through thinking and problem-solving. In this model, the teacher acts as a facilitator, providing stimulus, guidance, and direction without directly delivering the material in full. Thus, learning becomes more meaningful because students construct their own knowledge through active learning experiences.

The implementation of this model in the experimental class has been proven to increase student creativity. This is evident in the students' enthusiasm and active participation

throughout the learning process. Students are more free to express their opinions, find alternative solutions, and develop original ideas. In contrast, in the control class, which uses conventional learning methods (lectures), students tend to be passive, simply receiving information from the teacher without actively participating in the concept discovery process. The lack of reciprocal interaction in conventional learning results in students not being stimulated to think creatively.

Thus, the results of this study indicate that the Guided Discovery Learning model has a positive effect on improving students' creative thinking skills in the Economic Activities topic. This improvement can be seen qualitatively through the learning process, as well as quantitatively based on the data analysis in the study above.

According to Novita & Hasmy (2024), the Guided Discovery Learning model is considered appropriate for improving students' creative thinking skills. This model can foster a passion for learning and stimulate students to actively contribute to the learning process in the classroom. This active involvement is one way to hone students' creative thinking skills while improving the quality of learning. A similar sentiment was conveyed by Sari et al. (2024) that the implementation of the Guided Discovery Learning model can help students understand subject matter and solve problems, especially when the material is linked to real-life contexts. This model is also considered relevant to the needs of the 21st century, where creativity, problem-solving, and critical thinking are key skills that students must possess.

According to Di et al. (2016), Guided Discovery Learning is a learning approach designed to facilitate students in improving their critical and creative thinking skills through directed scientific activities. In this process, students are encouraged to discover concepts or solutions through exploration, observation, and analysis of given problems. The teacher acts as a facilitator, guiding students in discovering the meaning of the learning they experience.

A similar opinion was expressed by Syamsuddin & Marzuki (2021), who stated that guided discovery-based learning can create a learning environment that encourages student independence and increases their activeness. When students engage in the process of discovering a concept on their own, they not only gain a deeper understanding of the material but also develop logical and systematic thinking skills.

Furthermore, according to Jalinus et al. (2020), Guided Discovery Learning is highly effective in facilitating problem-based learning and encouraging students to develop creativity in solving various problems. Therefore, this model is an appropriate approach to developing student character that is adaptive to changing times and the demands of globalization. Thus, the implementation of Guided Discovery Learning is not only beneficial for developing creative and critical thinking skills, but also equips students with important skills that are relevant to the needs of the 21st century.

Therefore, the Guided Discovery Learning model It is highly effective when used in learning compared to conventional learning models. This is in line with several findings obtained by previous researchers who have studied creative thinking skills using the Guided Discovery Learning model.



The same thing was also revealed that Guided Discovery Learning has a positive effect on students' mathematical creative thinking skills. Research by Lestari & Widodo (2022) showed that students who learned with the guided discovery model obtained a higher average posttest score than students who used the conventional learning model. In the study, the average posttest score of the experimental class reached 82.14, while the control class was only 67.89. The t-test showed that the difference was significant with a sig. (2-tailed) value of  $0.001 < 0.05$ , which means this model is effective in improving creative thinking skills.

Similar findings were also obtained by Putri et al. (2023) in their research at SMP Negeri 3 Banyumas. This study used a pretest-posttest control group design, and the results showed that the increase in students' creative thinking abilities was significantly higher in classes using the Guided Discovery Learning model. The average N-Gain value in the experimental class was in the high category, while the control class was in the medium category. The statistical test results showed a significance value of  $p = 0.000 < 0.05$ , which indicated a significant influence of the model.

Referring to the studies mentioned above, it can be concluded that the results of this study strengthen the evidence that the Guided Discovery Learning model significantly influences students' creative thinking skills. This model not only improves student learning outcomes quantitatively but also hones essential thinking skills in learning.

#### **The magnitude of the influence of the Guided learning model Discovery Learning About Thinking Skills Creative students**

The test results above were obtained from testing the SPSS V 22 application. Then in this study, the researcher used a t-test to find out how much influence the Guided learning model had. Discovery Learning In hypothesis testing using the t-test, the data used are the results of the experimental post-test and the control post-test which were given different treatments.

Based on the average post-test scores of both classes, it can be seen that the average post-test score of the experimental class is higher than the average post-test score of the control class. Using the Independent sample t- test, it is known that  $H_0$  is rejected at a significance level of  $\alpha = 0.05$  and the Sig value (2-tailed) is 0.0 00. Thus, the value obtained is  $\text{Sig} < \alpha$ , namely  $0.0 00 < 0.05$ . This means that  $H_a$  is accepted and  $H_0$  is rejected, which means there is a significant influence between the use of the Model Learning Guided Discovery Learning About Thinking Skills Student Creativity in Social Studies Subject of Class VII SMP Negeri 1 Peusangan.

#### **4. Conclusion**

Based on the results of the hypothesis testing that has been carried out in this study, it can be concluded that there is a significant influence between the Guided Discovery Learning learning model on students' creative thinking abilities in the Social Studies subject of class VII of SMP Negeri 1 Peusangan. This is proven through the results of the significance test which shows a  $\text{Sig} < \alpha$  value, namely  $0.000 < 0.05$ . Thus, the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected, which means that the use of the Guided

Discovery Learning learning model has a significant effect in improving students' creative thinking abilities.

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