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THE EFFECT OF THE USE OF MIND MAPPING ON STUDENTS' LEARNING INTERESTS IN SOCIAL STUDIES CLASS VII AT SMPN 6 KOTA SOLOK

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ABSTRACT

Students' interest in learning is very important in education, and mind mapping is an effective method of organizing information visually. This study aims to determine the positive and significant influence of the use of mind mapping on students' learning interest in social studies class VII at SMPN 6 Solok City. This type of research is quantitative with an associative approach, involving 64 students from grades VII.2 and VII.3 through total sampling techniques. Data were collected using questionnaires and analyzed by classical assumption tests, including normality, linearity, homocedasticity, and simple linear regression t-tests. The results of the study showed that the significant value of mind mapping was 0.000 < 0.05 and t_{hitung} 6.532 while t_{tabel} 1.669 was rejected, so it was H_0 rejected and H_1 accepted. This means that there is a positive and significant influence between the use of mind mapping on students' learning interests. About 40.8% of the variation in learning interests was explained by mind mapping, while 59.2% was influenced by other factors. The regression model was obtained with the formula: Y = 23.163(a) + 0.405(X), showing that an increase of 1 unit of mind mapping use increased students' learning interest by 0.405 points, assuming other factors were constant. Based on research, it can be concluded that the use of mind mapping has a positive influence on students' interest in learning. This method helps visualize information and increase participation. Students are advised to continue to develop skills in making mind mapping more interesting and easy to understand.

Keywords: Mind Mapping; Interest in Learning; Social Studies.

INTRODUCTION

Quality education has a great impact on students' interest in learning. When the learning process is carried out with interesting and relevant strategies, students will be more motivated to engage in learning. In addition, the aspect of the educational environment also has an important role in developing students' interest in learning. Support from family, friends and the surrounding community can strengthen students' motivation to learn. When students feel support and reward, they tend to be more enthusiastic about exploring new knowledge. Therefore, it is very important for teachers and parents to design an environment that supports the learning process, which is not only oriented to academic results, but also to the development of one's interests and talents. With this method, education can be a key driver that inspires students to achieve their best abilities.

Students' learning interests have a very important role in the world of education. One way that can support this interest is the mind mapping method. Mind mapping serves as a visual tool that allows students to organize information in a structured way, so that they can more easily understand the relationships between different concepts. By using mind mapping, students do not only listen or read the material, but also actively engage in the learning process through visual depictions. This method can increase students' interest in learning, as they feel more creative and participatory in learning activities.

Mind mapping is a method used to compile and describe information in the form of diagrams. Mind mapping can be a very effective tool in social studies learning. Using this method, students can organize information in a more structured way, making it easier for them to understand and remember complex concepts, such as history, geography and sociology. Through mind mapping, students can connect various ideas and facts, such as interrelated historical events or factors influencing social change. In addition, the visualizations generated from mind mapping can help students see the big picture of the material being studied. Thus, the use of mind mapping in social studies learning not only increases students' insights, but also improves students' thinking skills.

From the observations that the author has made on Monday, October 21, 2024 at SMPN 6 Kota Solok on one of the social studies teachers in grade VII, that out of five grade VII classes with a total of 159 students, two classes (64 students) have applied the mind mapping method. Meanwhile, the other three classes (95 students) are not familiar with this method due to differences in teachers. In an interview, the social studies teacher revealed that he has been using mind mapping for three years, so this method is familiar. The enthusiasm of the students can be seen from their interest, who feel that they understand the material better with mind mapping than with summarizing. Assessing the effectiveness of mind mapping needs to consider the content and form that students make. Social studies learning is carried out twice a week, with one special meeting for mind mapping.

Then from the results of the second observation that the author has made on Tuesday, November 12, 2024 at SMPN 6 Kota Solok on one of the social studies teachers in grade VII, the author got the observation that only some students understand how to make mind mapping. Some students do not fully understand the meaning, and their ability to relate concepts depends on attention during learning. Students who focus on the teacher's explanation are better able to connect concepts. However, many simply copy information from books without identifying the core material, making organizing information less effective. Students' creativity when creating mind mapping is generally low, with only a few using coloring tools, which can increase the attractiveness of the work. Mind mapping media helps students reflect on their understanding; If there is a material that they have not mastered, they tend to ask the teacher to improve their understanding.

Furthermore, the author obtained the results of the third observation that the author has made on Thursday, February 13, 2025 at SMPN 6 Kota Solok on one of the social studies teachers in grade VII, the author obtained the results of observations that students feel happy to use mind mapping in learning, as seen from positive expressions such as smiles and laughter. Although most students understand how to create mind mapping, some still need guidance. They show enthusiasm when given explanations and feel that the material is easier to understand with this method than with summaries.

Students are actively engaged in learning, with some asking questions to clarify understanding and seeking additional information from other sources. In group discussions, all members participate, helping with the understanding of the material. Most students focus when learning with mind mapping, although there are some who have difficulty concentrating. Student engagement in learning activities is also high, especially in groups, where they are more passionate and creative. The freedom in mind mapping allows for the development of interesting ideas. From the discussion

that the author has explained above, the author is interested in raising the title about the effect of the use of mind mapping on students' learning interests in social studies subjects in grade VII at SMPN 6 Kota Solok.

According to Putri et al (2022:123) Interest is an impulse that comes from within the individual, which leads to the emergence of a sense of satisfaction, a strong tendency, and a great desire for certain things. When a person has an interest in an activity, he will usually show behaviors such as high enthusiasm, pay more attention to the activity and get used to being involved in it. Furthermore, according to Slametto in Syahrani et al (2023:64) Learning interests play a significant role in the learning process. Students' interest encourages them to learn, so that material that is considered interesting is easier to understand and remember. There are various factors that affect students' interest in learning, including student status, intellectual ability, motivation, learning habits, teaching quality, availability of learning resources, family support, financial condition, environment, and others.

Then according to Sitorus et al (2023:43) In the context of schools, interests have a very important role in the learning process. This is because interest acts as a driver that draws an individual's attention to a particular person, object, or activity. Fundamentally, interest is one of the factors that affect student learning outcomes who show interest in the teaching and learning situation in a certain subject, so that their attention is maintained during the process. Interests are not innate, but rather develop over time. In order for students' interest to increase, it is important to implement effective learning strategies.

According to Maylitha dkk (2023:2188) Interest is closely related to feelings of happiness and can arise from a positive attitude. Therefore, interest arises from a feeling of pleasure that encourages a person to always pay attention and remember certain things. These desires or interests greatly influence the pattern of actions taken by a person. Although a person can learn something, without interest or desire to learn, he will not be able to follow the learning process well. In this context, interest is also closely related to what a person has, since attention will guide the formation of will. With interest, a person can focus all his physical and mental activities on the things he or she is concerned about. Then according to Suwandi et al (2023:60) Interest in learning is a person's tendency to feel interested, liking and willing to have more of a willingness to various learning perspectives. This can encourage changes in individual knowledge, skills and behavior. Learning interest is very important in the learning process so that students have the motivation to learn, so that learning goals can be achieved optimally.

From some of the above understandings, it can be concluded that interest in learning is a significant internal drive in the learning process. High interest encourages students to be actively involved, show enthusiasm, and pay attention to the material being taught. Factors such as student status, intellectual ability, motivation, and teaching quality play a role in developing an interest in learning. Interests are not innate, but can be enhanced through effective learning strategies. In addition, interest is closely related to positive feelings that affect students' action patterns and learning outcomes. Therefore, interest in learning is essential to achieve optimal educational goals.

According to Buzan (2009:4) mind mapping is the most effective method of storing and excreting information from the brain. Mind mapping It is a creative and efficient note-taking technique, which literally "maps" our ideas. Moreover mind mapping It is also very easy to use. Furthermore, according to Buzan (2005:6) mind mapping is a method of recording that is colorful and visual, can be made by individuals or groups. In the middle is an idea or main image. From this main idea, the search is carried out through the branches that represent important ideas, all of which are reconnected to the idea. Each branch of the "main idea" has "sub-ideas" that delve deeper into those themes. In this sub-idea branch, you can add additional branches to continue exploring the idea further. All the branches are interconnected, as are the ideas themselves.

According to Haryanto (2017:96) mind mapping is a technique for recording and stimulating thoughts. Mind mapping It also functions in solving problems, aiding the remembering process, and supporting actions when we are contemplating something or when ideas arise in our minds. Subsequently, according to Paramitasari and Wahyuni in Warahmah et al (2020:70) explains that mind mapping is a recording technique that describes thoughts in the form of concepts, based on how the brain works in storing information. This method connects one concept with another that complements each other, so that mind mapping It is considered a creative, effective and fun way of taking notes. Meanwhile, according to the Deporter in Agustina (2023:29) also explains that mind

mapping It is a way to maximize the use of all brain abilities by displaying visual images and other graphic elements to create a deep impression.

Based on some of the definitions above, it can be concluded that mind mapping is an effective and creative recording method for storing and executing information. This technique visualizes ideas in a structured way, where the main ideas are placed in the middle and connected with the branches of important ideas and deeper sub-ideas. In addition, mind mapping serves to stimulate thinking, solve problems, and strengthen memory skills. With a way of working that is in tune with the way the brain stores information, mind mapping is considered a fun and efficient note-taking technique.

This study aims to find out whether there is a positive and significant influence between the use of mind mapping on students' learning interests in social studies subjects in grade VII at SMPN 6 Kota Solok.

RESEARCH METHODS

In this study, the method used is quantitative research. According to Creswell in Amruddin (2022:18) Quantitative research can be understood as an attempt to investigate a problem. From these problems, the researcher will take steps to collect data, determine variables, and make measurements in the form of numbers, so that the analysis can be carried out in accordance with relevant statistical procedures. The main goal of quantitative research is to provide support to researchers in decision-making as well as accurately describe theoretical predictions. This study uses an associative approach that emphasizes causal relationships, namely causal relationships. In this case, there are independent variables that function as influences and dependent variables that are affected.

The location of this research is at SMPN 6 Kota Solok, Jln Tanah Garam, Lubuk Sikarah District, Kota Solok, West Sumatra province. This research has been carried out in the even semester of the 2024/2025 academic year, namely on May 23-27, 2025.

According to Siyoto (2015:64) Population refers to a generalized area consisting of objects or subjects with a certain number and characteristics that are set by the researcher to analyze and draw conclusions. In this context, the population includes not only living beings, but also all objects that can be studied. In this study, the population consists of students at SMPN 6 Kota Solok, especially grades VII.2 and VII.3, which totals 64 people. Furthermore, according to Siyoto (2015:64-65) A sample is a fraction of the number and characteristics possessed by the population. A sample can also be interpreted as a small segment of a population member selected based on a specific procedure to represent the entire population. In this study, the total sample of researchers is 64 students, which means that the researcher will use the total sampling technique.

Data Collection Techniques

1. Observation
   The purpose of observation is to collect valid and objective data related to the subject being studied, so that researchers can understand and analyze existing situations or phenomena. In this study, the author conducted direct observations on all students of grades VII.2 and VII.3 as well as one of the social studies teachers of grade VII at SMPN 6 Kota Solok.
2. Questionnaire
   A questionnaire is a series of written questions that respondents must answer in the same way. In this study, the questionnaire was addressed to all students of grades VII.2 and VII.3 at SMPN 6 Kota Solok.
3. Documentation
   Documentation refers to written records that cover various activities or events that occurred in a relatively short time. All the documentation that the author collected is related to all students of grades VII.2 and VII.3 at SMPN 6 Kota Solok.

Operational Definition

In this study, the variables will be defined operationally thoroughly as follows:

1. Mind mapping
   Mind mapping is a way to maximize the use of all brain abilities by displaying visual images and other graphic elements to create a deep impression. Mind mapping can make the learning process more focused, creative and easy to remember naturally, by using attractive colors and images, so that information can be conveyed in the form of a compelling narrative and encourage

more in-depth, clear and simple thinking related to the material studied. Mind mapping serves as a wonderful tool for improving memory, allowing us to organize facts and ideas in such a way that the brain's natural way of working can be optimally utilized. Mind mapping is measured by several indicators, namely: planning, communication, increased creativity, problem solving, attention focus, organizing and explaining ideas, improving memory and a faster and more effective learning process.

2. Interest in learning
   Learning interest is a very important factor in the educational process, as it reflects students' attention and interest in the subject matter. When students have a high interest, they tend to be more enthusiastic, actively participate and enjoy the learning process, so the learning experience becomes more enjoyable and less boring. Learning interest is measured by several indicators, namely: feelings of pleasure, interest in the learning process, attention while learning and involvement in learning activities.

Data Analysis Techniques

According to Stuart et al. (2021:791) To determine the percentage of students' answers to each statement, the following formula can be used:

$$p = \frac{f}{n} x100\%$$

Information:

p= Percentage
f= Frequency of student answers
n= Number of cases

Table 1. Interpretation of quantitative criteria

Yes	Interval	Category
1	81-100	Very good
2	61-80	Good
3	41-60	Enough
4	21-40	Less
5	0-20	Very Less

Source: As'ad (2022)

Based on the table above, for the very good category 81-100%, the good category 61-80%, the category is quite 41-60% while the category is less than 21-40% and the category is very lacking 0-20%.

Classic assumption test/ Analysis requirements test

1. Normality Test
   Normality testing is a statistical procedure that aims to assess whether a data set follows a normal distribution pattern. According to Pramono et al (2021:214-215) The data normality test using the Kolmogorov-Smirnov method, the criterion is that if the Sig value or significance < 0.05, then the data distribution is declared abnormal. Conversely, if the Sig value > 0.05, the data distribution is considered normal. In this study, the author conducted a normality test using the Kolmogorov-Smirnov test.
2. Linearity Test
   According to Syahputra et al (2022:7) The linearity test is a procedure used to evaluate whether the distribution of data in research is linear. The results of this test will determine whether the analysis technique to be used can be applied. The purpose of the linearity test is to determine whether there is a significant linear relationship between two variables. This test analyzes the influence of variable (X) on variable (Y), both in the form of direct and opposite influences. According to Khairinal in Amarta et al (2022:19) The decision on linearity is determined by the criterion that a relationship is considered linear if the GIS value > 0.05, while if the GIS value < 0.05, then the relationship is considered non-linear.
3. Homoskedasticity Test
   Homokedasticity is a term that refers to a condition in regression analysis in which the variance of the residual (error) remains constant across the entire range of values of independent variables. Homokedasticity signifies that there is no systematic pattern in error variance, which

is crucial to ensure the validity of the regression model. If this assumption is not met, known as heterokedasticity, then the results of the analysis can be invalid, having an impact on the decisions and interpretations taken. According to Stuart (2023:119) The purpose of this homoscedasticity test is to test whether there is a difference in variance from the residual for each observation. In this study, the author conducted a homoskedasticity test using the glycer test.

Then according to Squirrel (2025:201) The criteria for the homocedasticity test using the Gejser test are:

a. If the sig value > 0.05, it can be concluded that there are no symptoms of heteroscedasticity and that the data meets the assumption of homogeneity.
b. If the sig value < 0.05, it can be concluded that there are symptoms of heteroscedasticity and the data do not meet the assumption of homogeneity.

Uji Hypothesis

1. T test

   According to Santoso (2023:96) The t-test is used to partially identify the relationship between independent variables and dependent variables, as well as to determine whether or not the relationship is significant. Here are the conditions:

   a. If the Sig > 0.05 or <, then there is no significant effect.$t_{hitung} t_{tabel}$
   b. If the Sig < 0.05 or >,, then there is a significant influence.$t_{hitung} t_{tabel}$

2. Simple linear regression test

   Simple linear regression is a statistical method used to analyze the relationship between two variables: an independent variable (predictor) and a dependent variable (response). In this approach, the main goal is to find the straight line that best fits the available data. Simple linear regression equation according to Harsiti dkk (2022) that is

$$y = \alpha + bx$$

   Information:

   α = Constant
   b = Regression coefficient
   Y = Dependent variable (bound variable)
   X = Independent variable (independent variable)

RESULTS AND DISCUSSION

Table 2. Summary of the percentage of mind mapping indicators

Indicator	Percentage	Criterion
Planning	72%	Good
Communication	70%	Good
Increased creativity	69%	Good
Troubleshooting	70%	Good
Focus of attention	72%	Good
Organizing and explaining ideas	71%	Good
Improved memory	70%	Good
Faster and more effective learning process	70%	Good
Average	**71%**	**Good**

Source: Primary data processing (2025)

From the calculation of the eight indicators above, it can be concluded that the average mind mapping of students in grades VII.2 and VII.3 at SMPN 6 Kota Solok, is at a percentage of 71% with good criteria. This means that mind mapping is a very useful method to help students organize information, increase creativity, and deepen understanding. By using mind mapping during the learning process, students can hone critical and creative thinking skills that are essential for achieving academic success.

Table 3. Summary of the percentage of learning interest indicators

Indicator	Percentage	Criterion
Feeling good	70%	Good
Interest in the learning process	64%	Good
Attention while studying	71%	Good
Involvement in learning activities	68%	Good
Average	**68%**	**Good**

Source: Primary data processing (2025)

From the calculation of the four indicators above, it can be concluded that the average interest in learning of students in grades VII.2 and VII.3 at SMPN 6 Kota Solok is at a percentage of 68% with good criteria. This means that students already have a good interest in learning social studies using mind mapping. This can be seen in the four indicators, which are all indicators with good criteria.

Data analysis

Classic assumption test/ analysis requirements test

1. Normality test

   The normality test aims to assess whether a data set follows a normal distribution pattern.

Table 4. Normality test results

One-Sample Kolmogorov-Smirnov Test	Asymp. Sig	Criterion	Information
	0,200	>0.05	Normal distribution

Source: Primary data processing (2025)

From the table above, the results of the normality test using the Kolmogorov-Smirnov test are presented. From these results, a significant value of 0.200 > 0.05 was obtained. This shows that the variables of mind mapping (X) and learning interest (Y) have a normal distribution.

2. Linearity test

   The linearity test is used to see if there is a relationship between bound variables and independent variables.

Table 5. Linearity test results

Deviation from linearity	Sum of squares	df	Mean square	F	Sig.
	1109,333	33	33,616	0,948	0,561

Source: Primary data processing (2025)

From the table above, the significant value of Deviation from Linearity is 0.561 > 0.05, for the variable of mind mapping (X) to learning interest (Y). This shows that there is a significant linear relationship between mind mapping and learning interests.

3. Homokedasticity test

   The homoscedasticity test is to test whether the variance of the residual is homogeneous or not. In this study, the author conducted a homocedasticity test using the Glejser test.

Table 6. Homokedasticity test results

Mind mapping	Unstandardized coefficients		Standardized coefficients Beta	t	Sig.
	B	Std. Error			
	-0,057	0,038	-0,186	-1,489	0,142

Source: Primary data processing (2025)

From the table above, the significance value of mind mapping was 0.142 > 0.05, which means that there are no symptoms of heteroscedasticity and the data is stated to meet the assumption of homoscedasticity.

Uji hypothesis

1. T test

   The t-test is used to identify the relationship between independent variables and partially dependent variables.

Table 7. Results of the t test

Variabel	t_{hitung}	Itself.	Information
Mind mapping	6,532	0,000	Signifikan

Source: Primary data processing (2025)

Based on the information from the table above, it can be seen that the significant values obtained are 0.000 < 0.05 and values $t_{hitung} > t_{tabel}$(6.532 > 1.669). This means that there is a partial influence of the use of mind mapping on students' learning interests.

Table 8. Result of the coefficient r

Variabel	R	R Square	Adjusted R Square	Std. Error of the Estimate
Mind mapping	0,638	0,408	0,398	5,871

Source: Primary data processing (2025)

The results of the analysis showed a correlation coefficient value (R) of 0.638, which showed a strong relationship between the use of mind mapping and students' learning interests. The value of the determination coefficient (R^2) is 0.408, which means that 40.8% of the variation in students' learning interests can be explained by the variable of the use of mind mapping. The rest, namely 59.2%, was influenced by other factors outside of the variables of this study.

2. Simple linear regression test

This analysis was carried out to test the influence between independent variables and dependent variables. Thus, the purpose of this simple linear regression analysis is to find out the impact of mind mapping on learning interests.

Table 9. Simple linear regression test results

Model	Unstandardized Coefficients	
	B	Std. Error
(Constant)	23,163	6,364
Mind mapping	0,405	0,062

Source: Primary data processing (2025)

Based on the table, the regression equation model can be formulated as follows Y = 23.163(α) + 0.405(X). This means that every 1 unit increase in the use of mind mapping will increase students' interest in learning by 0.405 points, assuming other factors are constant.

CONCLUSIONS

Based on the research that has been conducted, it can be concluded that there is a positive and significant influence of the influence of the use of mind mapping on students' learning interests in social studies subjects in grade VII at SMPN 6 Kota Solok. With the large influence of mind mapping on students' learning interest is 40.8%. Increasing the application of mind mapping in the teaching and learning process can have a positive effect on students' learning interests. This method helps visualize information, stimulates creativity, increases participation and supports collaborative learning. As a result, mind mapping serves as an interesting tool for creating an effective learning atmosphere. Therefore, it is important to apply this method to improve the quality of learning.

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