

The Influence of the Mind Map Based Discovery Learning Model on Student's Historical Thinking Ability in Class XI History Subjects at SMA

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Abstrak

Tujuan penelitian ini untuk mengetahui pengaruh model *Discovery Learning* berbasis *Mind Map* terhadap Kemampuan Berfikir Historis Siswa dalam Pembelajaran Sejarah. Metode penelitian yang digunakan adalah eksperimen kuantitatif. Pengambilan sampel menggunakan teknik *non-sampling*. Analisis data menunjukkan terdapat pengaruh yang signifikan terhadap kemampuan berpikir historis siswa yang menggunakan model pembelajaran *Discovery Learning* berbasis *Mind Map* dan model pembelajaran berbasis Masalah. Hal ini berdasarkan studi hipotesis kemampuan historis dengan perhitungan uji t independen diketahui nilai uji sebesar 11,400 dengan sig. (2-tailed). 001 (sig. 2-tailed) < 0,05. Dapat disimpulkan bahwa terdapat pengaruh media *Mind Map* terhadap kemampuan sejarah siswa SMAN 1 Pontang. Berdasarkan hasil penelitian maka model pembelajaran *Discovery Learning*, dapat direkomendasikan dalam pembelajaran sejarah karena menarik rasa ingin tahu dan meningkatkan kemampuan berpikir sejarah. Siswa mampu memahami suatu konsep dasar dan ide-ide yang baik dalam mempertajam dan meningkatkan keterampilan kognitif dan proses dengan penuh semangat mengikuti pembelajaran sejarah.

Kata kunci: discovery learning, mind map, pembelajaran sejarah.

Abstract

The aim of this research is to determine the effect of the *Mind Map*-based *Discovery Learning* model on students' historical thinking abilities in history learning. The research method used is quantitative experimentation. Sampling uses *non-sampling* techniques. Data analysis shows that there is a significant influence on students' historical thinking abilities when using the *Mind Map* based *Discovery Learning* learning model and the *Problem-based learning* model. This is based on a historical ability hypothesis study with independent *t*-test calculations, it is known that the test value is 11.400 with sig. (2 tailed). 001 (sig. 2-tailed) < 0.05. It can be concluded that *Mind Map* media has an influence on the history abilities of students at SMAN 1 Pontang. Based on the research results, the *Discovery Learning* learning model can be recommended in history learning because it attracts curiosity and increases the ability to think historically. Students are able to understand basic concepts and good ideas to sharpen and improve cognitive skills and processes by enthusiastically following history learning.

Keywords: discovery learning, mind map, history learning.

INTRODUCTION

Advanced civilizations can be seen at the level of quality education held to this day. Education is a deliberate conscious effort to provide guidance or help that fosters the physical and spiritual potential given to adults to the purpose of history learning

to be accomplished indiscriminately with results found in the field, problematic phenomena. The student is to reach his manhood and achieve the goal of the student being able to accomplish his or her task independently (Jawmawati, 2019). Education does not run smoothly,

Good education is embodied by the instructional purpose unit where learning will be achieved through learning activities (Toni, 2018), to create learning activities in individuals called educational learning in learning can be defined as a system of components that relates to one another those components include purpose, matter, method, and inclusion (Alfutry, 2020).

The four components of learning components must be addressed by teachers in possessing and determining which media, methods and strategies and approaches will be used in the learning activities in this case communication in the material transmission between the teacher as the material messenger and the student as the learner receiving materials using the learning medium so that the material, value and knowledge are well received by the student according to the purpose with the learning indicator desired (Hamid, 2020) development efforts in each of the individuals above through education, Which is shown through education, which is devoted through learning activities (Dwijayanti & Soepeno, 2020).

History is an obligatory subject in high school, and the principal principal purpose consists of (Oktavia, 2020): (a) Developing the historical events that occur in the smallest areas of local history to national, (b) Developing critical and creative thinking ability, (c) Building

caring and national passion, (d) Developing the sense of wonder, inspiration and aspirations, (e) Developing the sense of heroism and leadership, (f) In the eyes of history learning continues to develop developmental developmental phenomena in the eyes of history learning to this day, according to interviews directly performed on December 2, 2022, developmental problems that occur around learning processes on (a) Passive students in history study (b) Using methods and innovative and less innovative learning models (c) Views in history study only with names, characters, Nor does the date of events make students feel Bored cannot practice the historical ability that should be held asa basis for historical learning. The primary purpose of history study is to improve academic ability, improve historical awareness, and improve nationalism (Hamid, 2020). It is also referred to by Prasetya Santosa in a journal which is similar to an interview conducted at state high school (Ali, 2005).

According to prasetya santosa in a journal entitled problematic ematica in the implementation of history in high school, there are problems in the learning process that consists of (a) learning over and over again and in one direction. You might say that learning is usually the teacher center and places students as objects of study. The student was learning transfers, but his activities were passive. In the general case, there are still cases

such as (a) students who are not paying attention to the teacher's explanation, (b) lack of learning motivation, (c) busy with each activity (d) doing work and (e) sleeping (Presetya Santosa, 2017).

Continuing inequalities in the use of a teacher-centered conventional model can lead to fatal results especially in history study involving historical ability as the basis for history study in the classroom. Historical or historical thought simply in the measures used by falling to pieces and must be implemented in order for a problem to be solved (Ofianto, & Tri, 2021). It is clear that historical thinking ability is a basic ability that students must have in the historical learning process so that students can understand learning whole, from beginning in the chronological sustainability of causes, as to the meaning and values behind a historical event (Heri, 2014).

Historical thought can be multiplied into two parts, which include basic skills, and high skills, basic skills consisting of (a) chronological thinking skills, (b) skills identifying sustainability in change, and (c) The skill of analyzing causality. At high skill, made up of: (a) historical skill, (b) data/ information/source skills, (c) research reporting skills. The skills that exist in historical thinking on history subjects are intended for students to think critical analyses in using knowledge of the past to gain current and future

understanding and learning (Ofianto & Tri, 2021).

With the application of "kurikulum 2013" history education requires a renewal of learning at school, including a renewed view of the history content, a teaching method of history. The historical concept of thinking in this matter is part of learning history closer to the scientific spirit even more closely on the 2013 new revision curriculum that is more compelling the process that learning should be able to demonstrate higher order thinking skill (hots) or hots (Suardana, Redhana, & Yunitasari, 2020).

Learning Hots are needed mainly to stimulate high levels of thinking, and stir up a joyful hormone. This can be started by teachers by creating active, creative, effective, and fun learning (pakem). It is relevant to a historical model of thought which is defined as a concept of critical thinking in historical learning and being able to make learners not bored with historical learning by reneiling the model and not being monotonous (Rahmini, 2020).

The above issue is one of the problems in history study. The study of history as one of the high school subjects teaches historical values the value of history-value that is more than just an event of place, time, character, cause and effect (Kochhar, 2008).

The need for a proper learning model a proper learning model that applies students can take an active role in creating knowledge and its ability to think through the teachers. The discovery learning model was appropriate for Solving the problem described above. Elevate I learning is the discovery learning model is defined as a process that occurs when learning is not presented with a final lesson, but it is expected to organize itself (Hobri, 2018). The model discovery learning is a type of learning that compels students to search out information on their own, to search for as much knowledge as they can and then to correlate in a story (Yulaikawati, 2020).

METHOD

This type of research is research experiment which is a research method used to seek influence certain treatment towards others within controlled conditions. Carried out in Pontang State High School.

Samples reflect the size and characteristics of the population. If the popularity is full of energy, there are sources of energy and time that discourage research to study any subject of population. To study this study from a sample applying a sample of the population padal, a sample of the population should really representative (representative) (Sugiyono, 2016).

This research USES a non-sample retrieval technique opportunities for each population to become a sample (Sugiyono, 2016). Are sample collecting techniques based on specific research and objectives as well as on previously recognized qualities or axioms. In this study how to draw samples that would use the interview from this al caral from the assessor of the teachers directly history subjects and based on the student prestations value data and the student's historical ability test with pre-research description tests to measure And based on the data value of the student and the pre research description tests to measure the level of historically sloping students of the XI IPS class at the 2022/2023 school year to find out the traits or properties of the sample before the study is done further (Koesoema, 2009), then it has data that for XI IPS 5 and IPS 6 have the ability of a student historical thought or stance that dips different students deserve to do research more lalga, Data results on pre-research description tests can be seen in experiments class inspectors and control classes in IPS 6 as XI class control IPS 5 experimental classes.

Data collection can be done in various locations, by different sources and by different means, kalim (Sugiyono, 2016). This research, observation interviews, Outlines and doctoral tests are used as data collection.

RESULTS AND DISCUSSION

The lower dialogue is the result of a data analysis of the ability of a control class based on data obtained.

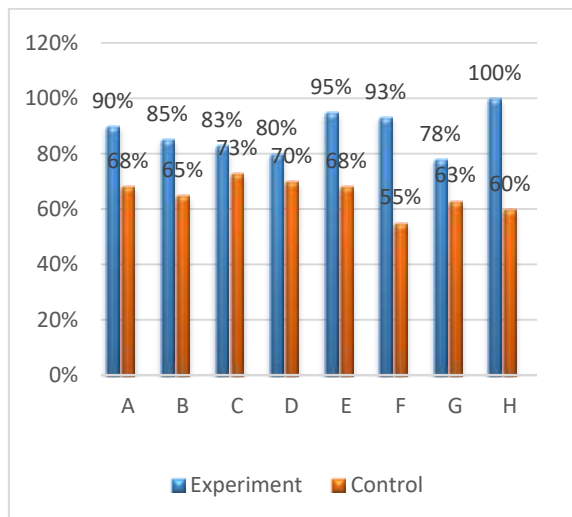


Diagram 1. Posttest Data Analysis Percentage

SUSTAINED:

- A. Sequential thinking skills
- B. Identification skills and transformation
- C. The skill of analyzing cause and effect
- D. Skill builds important meaning of history
- E. Data/information/source skills
- F. Skill with data analyzing historical sources
- G. Skill designing history research
- H. Advanced reporting skills

The diagram above contains the pretest data of students in more urinary tests given to experiment classes and control classes (Rina's, 2020). Pretest data taken after experiment class was given a treat for the class, which in this study

USES the discovery learning model based mind map pada XI 5th class as an experimental class. The test will outline as much as 10 points on basic 3.4 competence "blows the nilali-nilali pledge of youth and its meaning for Indonesian national life on massnow" and refers to the book book historical insight skills of inato dan tri zahra ningesih.

Pretest data obtained from ebb and control classes with help from SPSS 27 have been obtained on average, deviation standards, variances, and lowest score score. Analyse data pretest experiment class and control data:

Table 1. Normal Results

	Experiment	Control
Many students	40	40
Average	82.10	63.10
Highest Score	100	73
Lowest Score	68	50
Standard Deviation	7.313	7.725
Variance	51.14	51.44

The normal test is to find out if the distribution variables are normal or not. Normality testing USES colmogorov-smornov formulas in calculation USES SPS 27 (Sartunut, 2021). To know what 's normal is if sig > then it' s normal and if sig < 0.05 can 't be said as normal Calculations obtained as follows:

Table 2. Normal Results

Variable	Class	Sig.	Conclusion
Ability	Experiment	0.34	Normal

	Class		
Thinking Historically	Control Class	0.50	Normal

Based on the normality test results show data of historical cognitive ability such as experiment classes have sig > 0.05 because of sig. 0.20 > 0.05 and control classes have sig.05 because of sig 0.91 > 0.05.

The aim of the homogeneity test reinforces or verifies statistically evenness with the condition of both early groups of subjects. The homogeneity test is used to assess whether a variant between groups is compared to the test

Identical or not cumulative. Homogeneity test indicated by Levene's method, sig test by compare sig > 0.05.

Table 3. Homogeneity Test Results

Variable	F	Sig.	Conclusion
Class control and Experiment	2.573	0.56	homogenized

Based on the chart above the homogeneous results, the test class data shows a.56 sig. Research data is said to be homogeneous when sig > 0.05, padal the study is produced by sig 0.56 > 0.05. Then the same variant means homogenized (Winebrug, 2006).

Hypothetical testing used tests with parametric statistics, formula or formula with independent t-test samples. Counting

process using SPSS 27 for Windows software (Tryono, 2013). An independent sample t-test with the posttest sig that USES the learning media of the mind map and USES the learning medium of the video to see whether there is a significant influence between nilali pretest think historically students are dumping mind map media by using video learning media (Wiratna Sujaweweni, 2014).

Table 4. T-Posttest

Class	Average	Sig. (2-tailed)	Conclusion
Control Class	63.10		
Experiment Class	82.10	0.001	Things accepted is Effect of sig

Based on the chart above, test t nilali at 3,601 with sig. With research listed as having a significant influence if the sig. Then it may be concluded that there is a significant historical influence of thinking ability between students who use the mind map media and students who use video learning media.

The hypothesis is:

H₀: no influence for learning model learning the mind map's ability to think historically of students on the kelals XI history course at state high school 1 Pontang H₀: p = 0

H_a: there is the influence of learning model learning the mind map's ability to

think historically of students on the kelas XI history course at state high school 1 Pontang $H_a: p \neq 0$.

CONCLUSION

Based on research analytical analytical lines and discussions At all levels taken in XI IPS 5 as experimentation and XI IPS 6 as a penis class in public high school 1 pontang is allowed that, there is a significant impact on the use of the discovery learning model based mind map against the historically thought of students that studies are being covered with video collecting media. It indicates that awareness of the results of a hypothesis test of historical ability with independent t-test samples is found test value of t at 11.400 and sig. And so it can be said that the benefits of the discovery learning model based mind map have had an influence on the ability of historically student thinking. The dogmatic stages of the discovery learning model by revealing to students are required to be independent in search of information, analysis at the daln discussion stage create the mind map, allowing students to understand the learning behind the meaningful, where information can be remembered longer, and easier the student learning process. The yateis were subjected to higher thinking ability.

Historically students with the discovery lerning model compared to the based lerning problem model. Based on

the results of this study, the discovery learning model can be recommend in history study to arouse historical ability, can appeal students' curiosity to the learning process, with regular students using the discovery learning steps in completing its student student ability to toxify basic concepts and ideas that reverse to revitalize and enhance cognitive skills and processes. Evident in the learning process students are more enthusiastic and participate more in the learning process.

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