
Implementation of Concept Mapping Learning Model to Improve History Learning Achievement

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Abstract

This study aims to determine the application and determine the improvement of students' history learning achievement and the obstacles faced in the application of the Concept Mapping model. This research used CAR (Classroom Action Research) with qualitative and quantitative approaches consisting of 3 cycles. The results showed that the application of the Concept Mapping learning model combined with group discussions, quiz games, and the provision of material handouts can improve learning achievement. In cycle I student achievement increased by 0.96, cycle II increased by 1.66, and in cycle III increased by 3.30. The obstacles faced in the application of the Concept Mapping learning model are at the beginning of the application of the Concept Mapping learning model there are still some students having difficulty determining secondary ideas. The condition of the lesson at the last hour requires the teacher to create an interesting atmosphere. There must be clear communication between teachers and students because the learning model requires steps to be taken to create Concept Mapping.

Keywords: learning achievement, Concept Mapping.



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Introduction

The learning process is a very important part of education. In the learning process, there is a transfer of knowledge, both from teachers to students and between students. The teacher is a motivator and facilitator who has an important role in organizing the class as part of the learning process. The quality of learning is influenced by the teacher's ability to organize the class, one of which is the teacher's ability to deliver material (Fitri, 2021).

In delivering the material, teachers are required to use an effective learning model (Ahmad, 2016). So far, there are many teachers who use the lecture method in the learning process, especially history learning. Many history teachers deliver learning materials using the lecture method or only by taking notes so that student activeness in the history learning process is less visible. Students seem to only receive information conveyed by teachers and textbooks.

The problem that history teachers often face is finding a learning model that involves the active role of students but still achieves learning goals and objectives (Hamid, 2011). It is undeniable that history as one of the subjects not included in the National Examination is often underestimated by students. Moreover, the history learning process is less interesting and does not involve the active role of students (Aman., 2012).

According to (Ayudia, 2019) learning achievement is influenced by several factors, both factors that come from oneself and factors that come from outside. Factors that come from within students can be in the form of physical condition, psychology, and conditions of psychological maturity. Meanwhile, factors that come from outside students can be in the form of a social environment, cultural environment, physical environment, and spiritual environment. The learning process carried out in the classroom is a factor that comes from outside or external factors. In this case the teacher is required to create an interesting and quality

learning process, which can motivate students to learn history so as to improve students' history learning achievement.

Quality learning will be more memorable for students so that the learning will be recorded in the long term. According to constructivist learning theory, (Suparlan, 2019) students must build their own knowledge in their minds. Teachers can facilitate this process, by allowing students to assess, discover or apply their own ideas, and teaching students to be aware and consciously use their own strategies for learning. Teachers can provide ladders to students to higher understanding but students themselves must climb the rungs so that the constructivistic approach will emphasize the active role of students in building and giving meaning to the information and events experienced (Supardan, 2016.).

This history learning is sustainable, relevant to the concepts that have been obtained during the learning process. The process of linking new information to relevant concepts contained in one's cognitive structure, according to Ausubel, is called meaningful learning. Concept maps express meaningful relationships between concepts in the form of propositions (Adiwijaya, 2016) Meaningfulness will be more evident if the concept map is prepared and evaluated by the students themselves.

The steps that can be taken in making Concept Mapping according to (Burhanuddin, 2018)) are as follows.

- a. Identify the main idea or principle that covers a number of concepts.
- b. Identify secondary ideas or concepts that support the main idea.
- c. Placing the main idea in the center or at the top of the map.
- d. Group secondary ideas around the main idea that visually show the relationship of these ideas with the main idea.

This research examines the assignment of concept map preparation on history learning achievement so that it is expected that there will be an increase in students' history learning achievement after being given the assignment of concept map preparation.

Method

In this study, researchers used a classroom action research design or what is called Classroom Action Research. According to (Aqib, 2017) classroom action research is how a group of teachers can organize the conditions of their learning practices and learn from their own experiences.

Classroom action research is research conducted by teachers in the classroom/in the school where they teach, with an emphasis on improving/enhancing practices and processes in learning (Kusumah, 2011). Meanwhile, according to (Arifin, 2014) classroom action research is a systematic search carried out by program implementers in their own activities (in education carried out by teachers, lecturers, principals, counselors), in collecting data on the implementation of successes and obstacles faced, to then develop plans and carry out improvement activities.

Variations of the steps for implementing action research according to several experts in (Arifin, 2014), namely.

1. Kurt Lewin (Dalyono., 2013) described action research as a spiral cyclical process, which includes: planning, implementation, and observation.
2. Stephen Kemmis developed an action research spiral chart that also incorporated Lewin's model. Kemmis' model includes: observation, planning, first action, monitoring, reflection, rethinking, and evaluation (Kurniawan, 2023).
3. Richard Sagor described a five-step sequence: problem formulation, data collection, data analysis, reporting results, and action planning (Saputra, 2021).
4. Emily Calhoun describes action research in steps: site selection, data collection, data compilation, data analysis and interpretation, and action implementation (Sanjaya, 2016).

(Moleong, 2013) explains that data sources are places, people or objects where researchers can observe, ask, or read about things related to the variables under study. The data sources of this research are students of class XI SMA Negeri 1 Prambanan and history subject teachers.

Qualitative data sources were obtained through observations, interviews and documentation conducted by researchers (Abdussamad, 2021)

. While quantitative data sources in the form of numbers are obtained from the pre-test results and post-test results in each cycle of action taken.

Results and Discussion

1. Pre-action Activity

Researchers conducted discussions with history subject teachers regarding the student learning process in the classroom. In addition, researchers also discussed the learning model that would be applied by researchers, namely the Concept Mapping learning model. It is expected that by using the Concept Mapping learning model in the classroom can improve student learning achievement. The pre-action process is as follows (Kurniawati, 2012).

a. Introduction of Concept Mapping Learning Model in History Learning in Class XI IPS.

The researcher previously had a conversation with the history subject teacher about the history learning process, especially in class XI. So far, history learning in SMA Negeri 1 Prambanan still uses the lecture method. In addition, there are obstacles that are often faced by history teachers in the learning process, namely students are less active in participating in the learning process. The rote nature of history material also makes students lazy to learn history. In addition, history is a subject that is not tested in the national exam so students often consider history lessons not very important.

Classroom action research using Concept Mapping learning model was conducted as an effort to improve history learning achievement in class XI students. This study also aims to determine the obstacles that arise in the implementation of the Concept Mapping learning model in class XI.

In this study, data were obtained from direct observation which was carried out for 3 cycles. Data were also obtained from the results of tests conducted in each cycle, the results of interviews with students and teachers, as well as from documentation. The results of the analysis of the research conducted by applying the Concept Mapping learning model are as follows.

With this, it is the duty of a teacher to find solutions to existing problems. Teachers are expected not only to use the lecture method in the learning process, but also to apply learning models to improve student achievement and learning activities (Bahri, 2021). Learning models that are more varied and emphasize the active role of students greatly help students in understanding a subject matter. In addition, the learning model used by the teacher makes students not feel bored when following the learning process. If students do not feel bored while learning, then this can improve student achievement.

Therefore, there is a need for alternative new learning models. The alternative new learning model chosen in this study is the use of the Concept Mapping model. The main focus of using this learning model is to change the students' mindset that history learning is boring and only lectures into learning that is fun, demands student activeness, can exchange ideas and can train their courage in expressing their opinions in front of the class.

It was also explained to the history teacher that this research would be limited to improving students' history learning achievement by using the Concept Mapping learning model. It is expected that using the model can make students active in learning history and be able to improve history learning achievement.

b. Observation of Classes that will be Used as Research Samples.

Before conducting research, researchers first observed learning conducted by teachers in the classroom to find out the condition of students during the learning process. Observations made in class.

c. Planning for Improving Student Learning Achievement with Concept Mapping Learning Model.

The application of new learning models in history learning aims to improve students' history learning achievement. Therefore, it is necessary to design a new learning model in learning history. The plans made are as follows.

- 1) Application of Concept Mapping learning model in history learning.

The low activeness and achievement of students' history learning is a problem that must be solved. The solution needed is to use a new learning model that can attract students to be more active in learning history. Therefore, researchers try to apply the Concept Mapping learning model in learning history.

- 2) Equal perception between teachers and researchers about Concept Mapping learning model in history learning.

It is necessary to have a common perception between teachers and researchers before the implementation of the action. This is done so that there is no misunderstanding during the implementation of the action. Based on the similarity of perceptions between teachers and researchers, an agreement was obtained that the teacher was an observer as well as a collaborator while the researcher served as a teacher or teacher. Furthermore, the researcher explained about the points that must be done by teachers and researchers before conducting the Concept Mapping learning model. Researchers together with teachers determine the material that will be used as research.

Researchers as teachers must explain the learning objectives and procedures for learning by using the Concept Mapping learning model clearly to students. In addition, researchers must also be able to assist students in solving any problems encountered in learning history.

d. Preparation of Action Plan

The action plan that will be carried out in the research is made before the researcher applies the Concept Mapping learning model (concept map) at school. The plan is made as a guideline for teachers to facilitate the learning process that will be carried out. The plan was also made to find out the design of history learning by using the Concept Mapping learning model. The teacher as a collaborator helps the learning process in the classroom by using the Concept Mapping model. While the teacher's task as an observer is to observe the learning process using the Concept Mapping model, especially about how student achievement and the teacher's teaching process.

The research design was carried out in 3 cycles with each cycle having a different subject matter. In the first cycle, the material discussed was the emergence and development of the Demak Kingdom and the Banten Kingdom. The second cycle, the material used was the emergence and development of the Islamic Mataram Kingdom and the Kingdom of Gowa and Tallo. In the third cycle, the material discussed was the emergence and development of the Ternate and Tidore Kingdoms.

At the end of each cycle, the researcher held a discussion with the supervising teacher as a form of reflection to improve the action in the next cycle. Problems that arose in the previous cycle were used as an evaluation for improvement in the next cycle. The research design can be seen in the Learning Implementation Plan (RPP) listed in the attachment.

2. Implementation of Action

Application of Concept Mapping Learning Model in History Learning to Improve Learning Achievement of Grade XI Students.

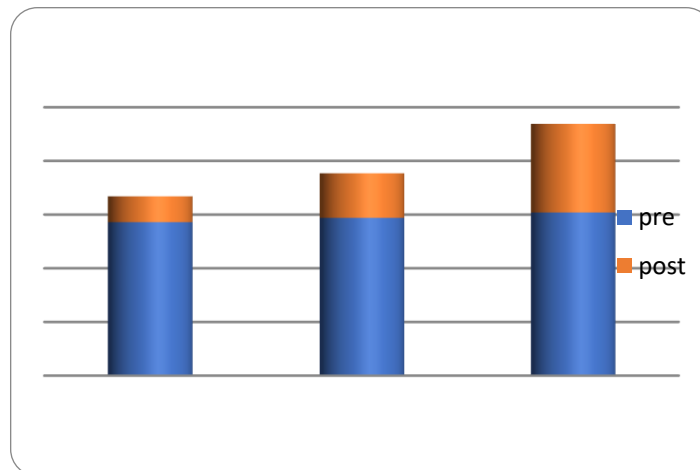
The application of Concept Mapping learning model aims to improve students' history learning achievement. To determine the increase in students' history learning achievement, tests were conducted in each cycle. In each cycle, two tests were conducted, namely the pre-test (initial test) to determine the initial level of understanding of students and at the end of the learning process, a post-test (final test) was also conducted to determine the increase in achievement after experiencing the action. The research was conducted in 3 cycles so that the test was conducted 6 times.

The average increase in student learning achievement in cycle I, cycle II, and cycle III can be seen in table below.

Table 1 Average Learning Achievement of Class XI Students

Cycle	Pre tes	Post tes	Improvement
I	5.72	6.68	0.96
II	5.88	7.54	1.66
III	6.08	9.38	3.30

Based on the table, it can be presented in graph form as follows.



Graph of Average Learning Achievement of Class XI Students

Based on the average results of achievement tests conducted in each cycle, it can be concluded that the average student achievement in cycle I Pre-action is 5.72 and Post-action is 6.68 or an increase of 0.96. The average student achievement in cycle II Pre-action is 5.88 and Post-action is 7.54 or an increase of 1.66. The average student achievement in cycle III Pre-action is 6.08 and Post-action is 9.38 or an increase of 3.30.

Table 2 . Student Absorption of Class XI

Cycles	Pre test	Post test	Improvement
I	16%	56%	40%
II	30%	72%	42%
III	54%	100%	46%

Based on the table, it can be presented in graph form as follows

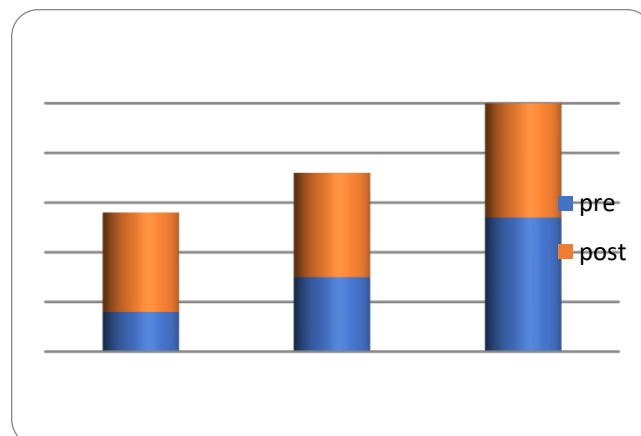


Figure 2. Graph of Student Absorption in Class XI

The pre-action absorption of cycle I was 16% and post-action was 56% or an increase of 40%. In cycle II, my pre-action absorption was 30% and post-action was 72% or an increase of 42%. In cycle III, the pre-action absorption was 54% and the post-action absorption was 100% or an increase of 46%.

b. the obstacles faced in the application of the Concept Mapping learning model are as follows

- 1) History subjects are taught at the last hour, which is at 12.15 to 13.45 WIB. This affects the condition of students who are tired and sleepy so that there are some students who are lazy to take history lessons. Teachers must be able to create an interesting classroom atmosphere.
- 2) There must be clear communication between teachers and students because the learning model requires steps to be taken to create Concept Mapping.
- 3) At the beginning of the application of the Concept Mapping learning model, there are still some students who find it difficult to find secondary ideas. So the teacher must guide students who are having difficulty.

Conclusion

Based on the results of the research and discussion, the following conclusions can be drawn (1). The implementation of history learning in SMA Negeri 1 Prambanan class XI using the Concept Mapping learning model begins with determining the main idea. Furthermore, students are asked to identify secondary ideas which are then made into Concept Mapping. students explain the material using the secondary ideas they have paired. (2). Learning by using the Concept Mapping learning model makes students feel less bored with history lessons. In addition, learning history using the Concept Mapping learning model makes it easier for students to understand the material and makes students more active.(3). The application of the Concept Mapping learning model is able to improve the history learning achievement of class students. In cycle I the average student achievement increased from 5.72 to 6.68. In cycle II the average student achievement increased from 5.88 to 7.54. in cycle III the average student achievement increased from 6.08 to 9.38.(4). the obstacles faced in the application of the Concept Mapping learning model are as follows

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References

- Abdussamad, H. Z. (2021). *Metode penelitian kualitatif*. CV. Syakir Media Press.
- Adiwijaya, H. S. (2016). Penerapan Pembelajaran Reciprocal Teaching Berbantuan Peta Konsep Untuk Meningkatkan Kemampuan Berpikir Kritis Siswa Pada Pembelajaran Biologi. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 2379.
- Ahmad, S. (2016). *Teori Belajar dan Pembelajaran di Sekolah Dasar*. Jakarta: Prena Media Group.
- Aman. (2012). "Pengembangan Model Evaluasi Program Pembelajaran Sejarah di SMA. *Jurnal Penelitian dan Evaluasi Pendidikan*, 2.
- Aqib, Z. (2017). *PTK Penelitian Tindakan Kelas TK/RA- SLB/SDLB*. Yogyakarta: : Ar-Ruzz Media.
- Arifin, Z. (2014). *Penelitian Pendidikan Metode dan Paradigma Guru*. Bandung: PT Remaja Rosdakarya.
- Ayudia, A. N. (2019). Pengaruh motivasi belajar terhadap prestasi belajar siswa di sekolah dasar. *jurnal bimbingan konseling islam*, 20.
- Bahri, S. (2021). Peningkatan Kapasitas Guru Di Era Digital Melalui Model Pembelajaran Inovatif Variatif. *Jurnal Hurriah: Jurnal Evaluasi Pendidikan Dan Penelitian*, 93-102.

-
- Burhanuddin. (2018). Penerapan Model Pembelajaran Peta Konsep Untuk Meningkatkan Hasil Belajar IPS Siswa Kelas VI SD Negeri 022 Jaya Mukti Kota Dumai. *Jurnal PAJAR (Pendidikan Dan Pengajaran)* , 1–16.
- Dalyono., M. (2013). *Psikologi Pendidikan*. Jakarta: Rineka Cipta.
- Fitri, S. F. (2021). Problematika Kualitas Pendidikan diIndonesia. . *JurnalPendidikan*, 68.
- Hamid, A. R. (2011). *Pengantar Ilmu Sejarah*. Yogyakarta: Ombak.
- Kurniawan, A. F. (2023). *Penelitian Tindakan Kelas*. Global Eksekutif Teknologi.
- Kurniawati, W. Y. (2012). Mind Map sebagai Alternatif Inovasi Pembelajaran. *Edu bio*, 3.
- Kusumah. (2011). *Penelitian Tindakan Kelas*. Jakarta Indeks: Jakarta Indeks.
- Moleong, L. J. (2013). *Metode Penelitian Kualitatif*. Bandung: PT. Remaja Rosdakarya.
- Sanjaya, D. H. (2016). *Penelitian tindakan kelas*. Prenada Media.
- Saputra, N. (2021). *Penelitian tindakan kelas*. Yayasan Penerbit Muhammad Zaini.
- Supardan, H. D. (2016.). Teori dan praktik pendekatan konstruktivisme dalam pembelajaran. . *Edunomic Jurnal Pendidikan Ekonomi*.
- Suparlan, S. (2019). Teori konstruktivisme dalam pembelajaran. *Islamika*, 79-88.