

The Contribution of the Edmodo-Based Group Investigation Type Learning Cooperative Learning Model Assisted by the Learning Management System (LMS) in Improving the Historical Thinking Skills of History Teacher Prospective Students

Yulia Sofiani¹, Oka Agus Kurniawan Shavab²

Abstract

The organizers' work at the Siliwangi University History Education Department in 2017 showed that their ability to think historically still needed to be improved. This is part of the research results, which show that the index of historical thinking averages 53.6%. This study aimed to study various cooperative learning models of inquiry group type assisted by a Learning Management System (LMS) developed to improve the historical thinking skills of prospective history teachers. The research method is classroom action research. The research results in the first cycle showed that the index of historical thinking averaged 70.4%, and in the second cycle, the average historical result was 82.4%. Based on the results in the first and second cycles, using the investigative group learning model and Edmodo learning media can improve students' historical thinking.

Keywords: *Cooperative Learning Type Group Investigation, Edmodo, Historical Thinking*

Introduction

Based on observations at the History Education Department of Siliwangi University, prospective history teachers from the class of 2017 show that their historical thinking skills still need to be improved. Their chronological thinking abilities are underdeveloped, hindering their ability to describe historical events in the correct order accurately. This skill is essential for avoiding historical anachronism and understanding the context of events. Additionally, their analytical and interpretative skills appear weak as they struggle to effectively utilize written and oral sources. Difficulties accessing relevant learning materials further exacerbate these challenges, impacting their ability to express coherent arguments and opinions clearly. Consequently, there is a pressing need for improved training and resources to enhance historical thinking skills among future teachers. By implementing targeted interventions, such as workshops and collaborative learning experiences, and providing diverse learning materials, we can ensure that they develop the necessary competencies to foster a deeper and more meaningful understanding of history among their future students. This approach not only prepares them for the complexities of teaching but also equips them to inspire critical thinking and engage students in meaningful discussions about historical events and their implications for today's society.

¹ Assistant Professor, Universitas Siliwangi, yuliasofiani@ymail.com

² Assistant Professor, Universitas Siliwangi, okaaks@unsil.ac.id

Third, students are less able to find correlations between one historical material and another because the historical material taught to students is continuous and has a common thread that can be connected. This problem can be seen when the lecturer discusses the material from the previous meeting; most students find it challenging to connect the previous material with the material taught; some can do it, and some look confused or silent.

Fourth, most students are not optimal in interpreting historical studies. They had difficulty expressing their opinions and stringing sentences that were on the material that had been taught. Prospective history teachers also stammered when explaining it but could not complete their opinions. It can also be seen that students are confused when concluding the sources obtained. The position of interpretation is significant for those in the scope of history because it can determine the actual historical events.

The problems described above, such as visualizing the historical thinking ability of prospective history teachers, are still lacking. This is also clarified by the results of the pre-research, which shows that the average percentage of students' historical thinking is 53.6%. With conditions like this, it is very appropriate for lecturers to provide treatment to improve their historical thinking skills. The ideal history learning creates interaction between lecturers and students, and students can also capture and understand what lecturers convey. They must also be able to analyze the material presented and provide answers to existing problems. It would be even better if their analysis could be used to answer current problems. By thinking historically, students must understand and study history correctly so that their knowledge develops and is not only fixated on the explanations given by lecturers and the source books they have.

Historical thinking is a continuous activity in which there are activities of reading, writing, relating material to another, and analyzing the material obtained, such as how to compare historical events with each other, why historical events occur and how they have an impact, how historical events can help for current life and be able to interpret historical events that occur (Madjid et al., 2014; Hamdi et al., 2015; Malawi et al., 2017). By doing this activity, students will not swallow all the material without first digesting it by thinking about history.

Murni (2007, p. 82) explained that historical thinking involves students mentally analyzing and criticizing historical facts, information, and records. This skill also requires students to be able to hear and read historical narratives and be able to explain why something happened.

Meanwhile, Seixas and Peck (2004) explain that historical thinking consists of several elements: significance, epistemology and evidence, continuity and change, progress and decline, empathy (historical perspective taking), and moral judgment.

One solution that can be offered based on the above problems is to use a group investigation-type cooperative learning model. Because with this learning model, students are required to complete a task or project in groups, they are also trained to communicate well with their group mates, establish high social relationships, and have good teamwork skills (Agnesia, 2018; Mariyaningsih et al., 2018). They will also be trained on how to analyze and interpret the assigned tasks based on the sources they have. The end of this activity also trains them to write discussion reports, which is one part of historical thinking (Nuraida, 2019; Mais, 2016; Listiana, 2013).

A learning process will be effective using the correct and appropriate learning model. However, a learning process will be even more effective if it is accompanied by technology or tools to convey information, called learning media. In addition, a good teacher is a teacher who can utilize learning media in any form. In the *digital* era like today, a teacher must be able to use technology-based media, especially since students are very fond of using technology products, such as *social media* (Erwinsyah, 2016; Darimi, 2017; Jauhari, 2018).

With conditions like this, researchers want to try to use a social learning application in a learning activity in the classroom, which is an application that is designed to be used in a learning activity, and the application is Edmodo. Thongmak (2013) in Shavab (2017, p. 227) explains that:

Edmodo is a private social platform that provides a secure space for teachers and students to connect and collaborate. It is easy to apply to classrooms since its appearance is similar to Facebook, which many students already know. However, those students need to be made aware of what constitutes the social networking tool and suggested the opportunity to use it for meaningful purposes.

Edmodo is deliberately made for classroom learning, and because Edmodo is a social networking site, it is categorized as a learning management system (LMS). Rahman (2010) explained that the Learning Management System (LMS) provides an integrated platform for content delivery and the management of learning and accessibility by various users, including learners, content creators, and administrators.

The combination of a group investigation-type cooperative learning model with the help of an *Edmodo-based* learning management system has never been done in the Department of History Education, FKIP Siliwangi University. It is expected to improve the historical thinking skills of prospective history teacher students, considering that this solution has advantages or potential that can stimulate prospective history teachers to be able to issue all potential in themselves and try to think historically so that learning activities become more attractive.

Method

The research method used in this study is Classroom Action Research (PTK) (Wibawa, 2003; Mulyatiningsih, 2015). Action research is a form of reflective inquiry conducted in partnership regarding certain social situations (including education) to increase the rationality and fairness of a) their social or educational practice activities, b) their understanding of these educational practice activities, and c) the circumstances that allow the implementation of these practical activities (Nellitawati et al., 2017; Suti, 2018; Maslihah et al., 2018). Kemmis (1983) in Wiriadmadja (2010, p. 12) explained that action education research is a form of reflective inquiry carried out in partnership regarding certain social situations (including education) to increase the rationality and fairness of social practice activities or their understanding of activities.

The selection of the Classroom Action Research method to improve the learning activities of prospective history teachers is based on the reason that Classroom Action Research has an applicative function for teachers in carrying out their duties and to improve the ability or competence of teachers in the learning process. This Classroom Action Research provides suggestions for teachers and solutions (Wijaya et al., 2013; Yulia et al., 2018; Jayusman et al., 2018).

Results and Discussion

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Before conducting research in the classroom, the researcher conducts pre-action activities by observing students and referring to historical thinking skills during learning activities. This pre-action activity aims to obtain an initial overview of students' historical thinking skills before the following action is taken.

Based on the observations that have been made, students still seem to be less developed in their historical thinking skills. Furthermore, enthusiasm for participating in learning activities also seems to be lacking. Lecturers' use of learning media relies only on PowerPoint presentations and written content. Hence, the delivery of messages from the learning media is not optimal.

The following is an initial test to measure students' historical thinking skills:

Table 1. Results of Students' Historical Thinking Skills in Pre-Action

Indicator	Prsentase
Chronological thinking	53%
Historical analysis and interpretation	54%
Cause and sequence	55%
The ethical mention	51%
Comparison and contextualization	55%
Average	53,6%

Source: Research Results, 2018

The next stage is the planning stage, which includes all the planning of actions to be carried out, such as the researcher and the lecturer in charge of the course, preparing a Learning Implementation Plan (RPP), and preparing the learning media and tools that will be used. At the stage of planning the first cycle of actions, researchers and lecturers design actions to be implemented, including:

1. The researcher makes observations to get information about the situation during the learning process in the classroom.
2. Researchers and lecturers design the implementation of economic history learning using Edmodo-based learning media.
3. Determine the subject matter that will be carried out in the learning process and determine the essential competencies in certain subjects.

Furthermore, the indicators of these essential competencies will be determined.

1. Prepare a learning implementation plan (RPP) about the essential competencies that must be achieved using Edmodo learning media and the group investigation learning model.
2. Prepare several research instruments, such as observation sheets and test posts.

After the planning stage, the next step is the implementation stage with cycle I, carried out in the Basic Competencies: "Analyzing the history of the economy in Indonesia during the liberal democratic period." The number of students who participated in learning activities in the first cycle was 40 students. The classroom action research in the first cycle consisted of two meetings held on Thursday, April 3, 2018, and April 10, 2018. Cycle II also consisted of two meetings held on Thursday, April 24, 2018, and April 31, 2018.

The implementation of this action consists of three parts, namely the initial activity, the core activity, and the final activity. In the initial activity, the lecturer prepares the class to participate in the learning activities on that day by explaining the learning objectives that will be carried out. Lecturers also provide stimulus to students by asking about the material studied last week and now.

For the core activity, the lecturer divided the class into seven groups, with the theme of the group study being the Shariafudin Scissor Policy, the Benteng Movement Economic System, the Nationalization of De Javasche Bank, the Ali Baba System, and the 1959 Rupiah Devaluation. Furthermore, the lecturer gave a brief overview of Indonesia's economy's history during the liberal democracy period using Edmodo media and gave tasks each group had to do. The *Edmodo* media contains learning materials in articles, images, and videos. In addition, there are instructions that students must follow during learning activities. At this stage, each group conducts discussion activities to solve problems/tasks given by the lecturer. At the stage of group discussion activities, each group member already has the tasks that the group leader has shared. Furthermore, each member of his group conducts investigation/inquiry activities on the tasks that have been given. At the analysis stage carried out by students, lecturers also play a role in providing input, such as in data analysis, it is necessary to include data in the form of tables and diagrams so that they can understand the relationship between the data collected. The next step is to prepare a report and make a presentation for each group.

The role of Edmodo media in this learning activity is not only used by lecturers. However, students can use it when looking for their studies, so they no longer need to Google to look for these studies. This can be effective in learning time during group discussion activities. To reduce the use of paper, in the preparation of discussion reports, they are also collected through Edmodo through the form that has been provided, and the report is in the form of Microsoft Word. In the final activity, students and lecturers concluded the learning activities together.

At the end of each cycle, a test was carried out to measure students' historical thinking skills. Through this test, the success rate of using the group investigation learning model using Edmodo media in improving students' historical thinking skills can be known.

Table 2. Results of Historical Thinking Ability in Cycles I and II

Indicator	Cycle	Cycle II	Increased
	Presented	Presented	
Chronological thinking	70%	82%	11%
Historical analysis and interpretation	74%	85%	8%
Cause and consequence	70%	82%	10%
The ethical dimension	69%	80%	9%
Comparison and contextualization	69%	83%	14%
Average	70,4%	82,4%	-

Source: Research Results, 2018

The table above shows increased students' historical thinking ability starting from pre-action, cycle I, and cycle II. Improving students' historical thinking skills is a success of using the investigation group learning model and *Edmodo* learning media. It can be seen in the first cycle that the average percentage obtained is 70.4% with moderate criteria. Furthermore, in the second cycle, a significant increase was seen with an increase of 12%, and the average percentage was 82.4% with perfect criteria. It can also be concluded that each indicator of students' historical thinking looks up.

The success of increasing students' historical thinking is not spared from the role of the supporting lecturer in carrying out learning activities. These success factors can be seen from the role of learning media, making it easier for students to find information about studying the material. The use of the learning model is also considered very effective and runs according to the plans that have been carried out. Lecturers here also look better at positioning themselves as interactive and communicative facilitators. Students also looked enthusiastic in group discussions and during question-and-answer sessions in presentation activities. During presentation activities, lecturers do not hesitate to summarize their answers if mistakes occur.

Obstacles and Solutions Carried Out in Learning Activities

The obstacles faced in the implementation of learning activities using the group investigation learning model using *Edmodo* media are as follows:

1. The internet network is sometimes weak.

2. It is difficult to control students' internet use because lecturers cannot check the internet use activities carried out by students.
3. Class conditions that are sometimes noisy during group discussions.
4. It is not easy to condition students who are seen chatting during learning activities.
5. Lecturers cannot be immediately communicative and interactive in implementing learning at the beginning of the meeting.

Efforts that can be made to solve these obstacles include:

1. Lecturers must provide classrooms with a stable internet network, which can be done by borrowing a computer laboratory room from a university or faculty member.
2. Lecturers do not only sit in their place but must be ready to conduct examinations for each group in order to monitor internet use activities by students so that the learning objectives that have been designed can run optimally and students must remain focused on the learning activities that are being carried out.
3. Lecturers monitor the development of each group in their work and emphasize the attitude of responsibility to each group member for the tasks that must be completed so as not to give opportunities for students to make noise.
4. Lecturers must force themselves to be more assertive in reprimanding students who are seen chatting to not interfere with the concentration of other students who are studying.
5. Lecturers familiarize themselves with the learning model at the beginning of the meeting and consult with researchers regarding the obstacles they feel.

Conclusion

Based on the research activities that have been carried out, the author can provide several conclusions, namely: 1) The ability of students to think historically before learning activities using a group investigation learning model with the help of *Edmodo* media is 53.6%. This is different after students carried out these learning activities, with the first cycle of 70.4% in the medium category and the second cycle of 82.4% in the very high category. With these results, using the group investigation learning model with the help of *Edmodo learning media significantly improves* students' historical thinking. 2) The obstacles faced in implementing this learning activity include an unstable internet network, still having students chatting, classroom conduciveness that is not maintained, and lack of interaction of lecturers in learning activities. The efforts made to solve these obstacles include. There must be a room with a stable internet network, lecturers must monitor and go around to check student activities during group discussions, and lecturers must be firm in reminding students who are chatting.

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