

Application of the Jigsaw Learning Model to Improve Learning Outcomes in History Subjects Class XI-4 at SMA Negeri 14 Medan

Nova Ramadayani¹ Pulung Sumantri² Imelga Megawati Gultom³

Program Studi Pendidikan Profesi Guru Sejarah, Universitas Islam Sumatera Utara, Kota Medan, Provinsi Sumatera Utara, Indonesia^{1,2,3}

Email: novaramadayani738@gmail.com¹ pulungsumantri@yahoo.com² imeladagultom68@guru.sma.belajar.id³

Abstract

This study seeks to enhance student learning achievements by implementing the Jigsaw learning model with Class XI-4 at SMA NEGERI 14 Medan. Currently, the learning outcomes and student engagement have not met expectations. Learning methods that are inappropriate and do not suit students' characteristics in implementing learning are one of the causes of the learning outcomes and student activity that are not achieved as expected. In using jigsaw learning, students work in small groups to solve tasks that have been divided, each group member is responsible for studying and understanding part of the learning material and then sharing their knowledge with other group members. In this process, In this approach, each student specializes in a specific section of the material and gains a deeper comprehension through teamwork with their peers on the content provided by the teacher. The findings of this study demonstrate that applying the Jigsaw learning model effectively enhances history learning outcomes for Class XI-4 at SMA NEGERI 14 Medan. The research indicates a notable improvement in student performance, with scores rising from 65.5% in the first cycle to 86.9% in the second cycle. Additionally, the study highlights improvements in students' communication, collaboration, and respect for the opinions and contributions of other groups.

Keywords: Learning Outcomes, Jigsaw Model Learning, History Learning



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

INTRODUCTION

Learning can be seen as an endeavor to support students in their educational journey or as an activity aimed at making their learning experience more effective. Sudjana describes learning as a deliberate and organized effort to establish educational interactions between students and teachers during the learning process. On the other hand, Crow views learning as a process where an individual's surroundings are intentionally structured to enable them to exhibit particular behaviors in specific conditions or respond to certain scenarios. Syaiful Sagala put forward four views regarding the concept of learning, namely: learning is an activity designed programmatically by the teacher through instructional design. with the aim of making students more active and focused on using learning resources, learning involves the process of educating students by applying educational principles and learning theories, which are the main factors in educational success. This process involves two-way communication, where teachers as educators do the teaching and students as students do the learning, Learning is a fundamental element in achieving educational success. It encompasses a reciprocal communication process where teachers impart knowledge and students actively engage in learning. It involves structuring an individual's environment to facilitate specific behaviors or responses under particular conditions. In this framework, learning is regarded as a distinct facet of education, while teaching serves as a means to offer stimulation, guidance, direction, and motivation to ensure that the learning process takes place effectively. In conclusion, learning is a process that is designed deliberately, structured and systematic. Which involves

interaction between educators, students and the environment with the aim of achieving certain learning outcomes.

According to R.Mohammad Ali, history can be understood in three ways, namely; as a series of changes, incidents and events that occur around us, as a narrative about these changes and as a science that studies these changes and events. This view was explained by Roeslan Abdulgani, History is described as a field of study that methodically examines the progress of human societies and events from the past. Its purpose is to critically evaluate these findings to provide insights that help in understanding the present and planning for the future. History learning is a learning activity carried out by educators to explain to students about society's life in the past, including important events that have special meaning. The application of appropriate learning models in the teaching process can increase students' motivational interest in learning, therefore. requires efforts from all parties. especially teachers and students to achieve it. According to Suprihatin (2017), According to Arends (2001), The Jigsaw model was first created and examined by Elliot Aronson and his team at the University of Texas, and later modified by Slavin and his colleagues at Johns Hopkins University. The term "Jigsaw" is derived from the English word for a type of saw, and it is also referred to as a "puzzle," which is a game involving pieces that fit together to form a complete image. The Jigsaw learning model adopts a cooperative principle similar to the saw function, where students work together to achieve learning goals. Slavin (2005:246) explains that Jigsaw is one of the most flexible cooperative methods. Another interpretation defines Jigsaw as a cooperative learning strategy where small groups of students collaborate to enhance learning environments and achieve educational objectives. This approach allows students to gain a comprehensive learning experience both individually and collectively. According to Lie (1993: 73), the Jigsaw learning model is a cooperative technique where students work in small, diverse groups of four to six members. In this model, students work together by being positively dependent on each other and having independent responsibility.

According to Arends (2001), the Jigsaw model involves students studying in small groups consisting of 4-6 people with diversity. In this method students work together by positively interdependent and are responsible for learning and mastering parts of the lesson material, then delivering the material. to other groups. Slavin (2005: 246) characterizes the Jigsaw model as a type of Collaborative Learning, which involves a group learning process where each participant contributes their information, experiences, ideas, attitudes, opinions, abilities, and skills to enhance the group's overall performance. The jigsaw learning model is a method that divides students into groups with different material. In this case, each group is responsible for the tasks of its own group and other groups. In general, the jigsaw learning model can have a positive impact on history learning for class XI-4 at SMA NEGERI 14 Medan. This can be seen in the observations and research carried out, where students show high enthusiasm for the jigsaw model and participate in learning activities well.

RESEARCH METHODS

The study employs classroom action research (CAR) with the goal of enhancing the current learning process. This research targets the identification of issues within the teaching and learning environment, which may stem from teachers, students, or the interactions among various educational components such as materials, media, methods, strategies, and assessments, in order to develop appropriate solutions. classroom conditions. July to August 2024/2025 academic year in class XI-4 SMAN 14 Medan with 20 students. Data collection techniques involve giving questions pretest at the beginning of learning and pretest questions at the beginning of learning and questions: pretest at the end of learning in cycles I and II. The

gathered data is subsequently examined to attain the desired outcomes. This PTK follows a cycle designed based on the Kemmis and McTaggart (1990) model, as shown in Figure 1.

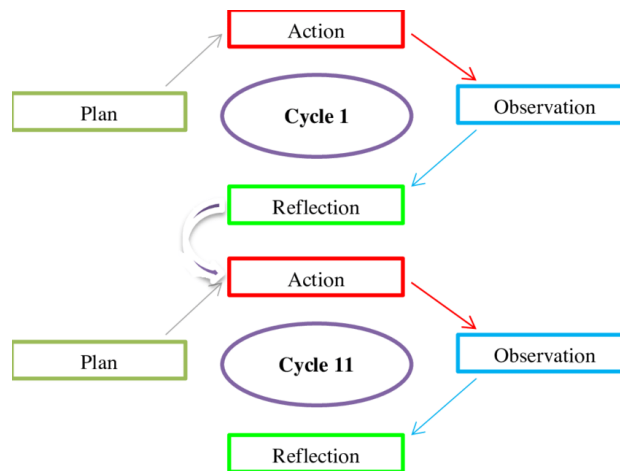


Figure 1. Classroom action research model according to and Mc Taggart (1990)

Data collection techniques begin with developing learning tools, including a syllabus and lesson plans that integrate the jigsaw learning model. Furthermore, preparations for data collection include making observation sheets and post-tests. Data analysis was carried out using quantitative descriptive methods. To determine activity and completeness of student learning outcomes, appropriate formulas were used.

$$\text{Individual completion} = \frac{\text{total score obtained}}{\text{maximum score}} \times 100\%$$

The Minimum Completeness Criteria (KKM) at SMAN 14 Medan is 70, where students are considered complete individually if their absorption capacity is complete individually if their absorption capacity reaches 70% in history subjects. The research was carried out in class XI-4 by giving pretest and posttest questions, each consisting of 25 questions. In the final phase, the collected data is analyzed, discussed, and summarized to present the research findings. To assess student activity and learning outcomes, percentages are used from the pre-cycle through cycle 2. The data indicates an improvement in student learning activity following the interventions in cycle 1, with a higher percentage of students demonstrating increased engagement.

RESEARCH RESULTS AND DISCUSSION

According to the results from the classroom action research conducted during the pretest, only 5 students in Class XI-4 met the completeness criteria, while 15 students did not. This indicates that many students did not reach the Minimum Completion Criteria (KKM) of 70. This data highlights the need for immediate enhancements in the learning process, including revisions to the teaching models and methods used. These improvements aim to boost student learning outcomes and address issues in the teaching and learning process. Following these adjustments, the next step is to prepare students for the learning activities by providing observation sheets for student engagement in Cycle I. 66.67%. This indicates that most students did not demonstrate sufficient participation in the learning process using the Jigsaw model. Similarly, teacher activity observations in Cycle I showed a value of 67.85%, suggesting that teachers were not yet fully effective in managing the learning process, signaling the need for further improvements in the next cycle. In Cycle I, learning outcomes for Class XI-4 students

showed that out of 20 students, only 5 met the Minimum Completion Criteria (KKM), while 15 did not. This indicates that many students fell short of the KKM score of 70, highlighting the need for process enhancements before progressing to Cycle II. By Cycle II, observations of student activities showed a significant improvement, reflecting the positive impact of the Jigsaw model on student engagement in Class XI-4 at SMAN 14 Medan. Additionally, teacher activity levels in Cycle II improved markedly to 96.42%, demonstrating the effectiveness of the Jigsaw model in enhancing teaching practices. The learning outcomes for Class XI-4 students in Cycle II showed that all students achieved an average score of 86.9, meeting the Minimum Completion Criteria. This indicates that the Jigsaw learning model successfully improved student performance from Cycle I to Cycle II.

Discussion

According to the research on implementing the Jigsaw learning model to enhance history learning outcomes for the class, student performance in Cycle I was rated at 65.5%, which is considered below average. However, in Cycle II, the learning outcomes improved significantly to 86.9%. According to Skinner (1996), the learning process involves behavior that can increase with learning and decrease if you don't learn . . Learning is viewed as a cognitive process that transforms environmental stimulation into new capacities. Susanto (2013) also explains that in the general Indonesian dictionary, learning is defined as effort or exercise to gain intelligence (Poerwodarminto. 1991). According to Sudjana (2005), Learning outcomes represent the skills and knowledge that students acquire following their educational experiences. According to Soedijarto (2006), these outcomes encompass proficiency in cognitive and affective areas as well as the speed at which students learn, aligned with the established educational objectives. Suidiana (2004) further elaborates that learning outcomes possess three key traits: (1) they reflect both real and potential abilities, (2) these abilities are maintained over a relatively long period, and (3) they are the result of ongoing experience and practice. Bloom categorizes learning outcomes into three domains: cognitive, affective, and psychomotor. The cognitive domain pertains to intellectual skills and is divided into six levels: knowledge, understanding, application, analysis, synthesis, and evaluation. The affective domain deals with attitudes, including aspects such as acceptance, response, assessment, organization, and internalization. The psychomotor domain involves skills and actions, ranging from reflexive movements and basic motor skills to perceptual abilities, coordination, complex skills, and expressive movements. Usman and Setiawati (2003) point out that learning outcomes are shaped by a combination of internal and external factors, with these outcomes emerging from the interaction of these influences. Additionally, Daniel House (1998) asserts that students' attitudes, interests, desires, and motivation also impact learning outcomes. Data analysis indicates that student engagement with the Jigsaw model has improved across cycles, which positively affects learning outcomes with a percentage value that continues to increase in each learning cycle. Teacher activities also show improvement, with teachers following the steps of the jigsaw model well, including guiding and observing students as they work on learning tasks.

CONCLUSION

Based on the research findings and analysis, the following conclusions can be drawn:

1. The implementation of the Jigsaw learning model has been effective in enhancing the learning outcomes of Class XI-4 students at SMAN 14 Medan.
2. The Jigsaw learning model positively impacts the improvement of learning outcomes for Class XI-4 students at SMAN 14 Medan.

BIBLIOGRAPHY

- Berkah, J. (2018). The Influence of Jigsaw Learning Method on Students' Interest in Learning History at Smk Kharismawita South Jakarta. *Candrasangkala: Journal of Education and History*, 4(1), 21-30.
- Muhammad, H., & Bakri, S. (2023). Implementation of Jigsaw Learning Model in Improving Learning Outcomes of Class X IPS 1 Students of MAN 2 Halut in Indonesian History Subject. *EDUKASI*, 21(2), 331-339. Referrals should be encouraged from reputable international journals or accredited national scientific journals, not from books or anything else.
- Santoso, M. H., & Soeryanto, M. P. (2021). Analysis of Jigsaw Cooperative Learning Method to Improve Student Activity and Learning Outcomes. *Analysis of Jigsaw Cooperative Learning Method to Improve Student Activity and Learning Outcomes*, 11(01), 0-10.
- Sulaiman, S. (2012). Conceptual approach in history learning. *Lontar History Journal*, 9(1), 9-21.
- Suprihatin, S. (2017). The Influence of Jigsaw Learning Model on Learning Outcomes of Indonesian Society Studies of Students. *Journal of Promotion of Economic Education Study Program*, 5(1).
- Wicaksono, D., & Iswan, I. (2019). Efforts to Improve Student Learning Outcomes Through the Application of Problem-Based Learning Models in Grade IV of Muhammadiyah Elementary School 12 Pamulang, Banten. *Holistika Journal*, 3(2), 111-126.