JIGSAW COOPERATIVE LEARNING MODEL USING AUDIOVISUAL MEDIA TO IMPROVE LEARNING OUTCOMES

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Article Info	Abstract
	This research is a classroom action research that aims to improve student learning outcomes in Social Sciences learning by using a jigsaw cooperative learning model with the help of audiovisual media. The study was conducted at the Al-Hamidiyah Integrated Islamic Elementary School Class III Khalid Bin Walid, amounting to 25 people consisting of 14 men and 11 women. The research was carried out starting from the lack of student learning outcomes in learning, from the results of the worksheets given to students there are about 56% of students who are still below the Maximum Mastery Criteria that is set that is 75. Together with colleagues to improve learning by two cycles. Each cycle consists of planning, implementation, observation, and reflection. Data collected in this study are quantitative data in the form of learning outcomes. The results of this study's data analysis showed an increase in the percentage of student learning outcomes also increased, from 60% in cycle 1 to 80% in cycle 2. The results of this study can be concluded that the use of the Jigsaw Cooperative Learning Model assisted with audiovisual media can improve learning outcomes. **Keywords:** jigsaw; audiovisual; and learning outcomes

A. Introduction

Social Sciences is an integration of various branches of social sciences, such as sociology, history, geography, economics, politics, law and culture. Social studies try to help students in solving problems they face so that they become more and more aware of the social environment in the community (Sulfemi, 2019) and (Kesumaningrum and Syachruroji. 2016).

Social studies are one of the subjects taught at every level of education from elementary to elementary-high school which examines various social and humanities disciplines as well as basic human activities that are scientifically packaged to provide insight and deep understanding to students. (Yuliana, et al, 2015) and (Setiyawan. et al. 2018). Therefore, the teacher has a very large contribution to the success of learning in school.

The teacher is the guide who directs the students themselves. For this reason, learning can be done well to its destination, the teacher must always create and manage teaching and learning processes that are effective, efficient, and fun. Thus, teachers are required to always appear professional with the main task of educating, teaching, guiding, and directing. One of them is by using appropriate learning strategies and approaches so that every individual who has potential can be developed with a learning process that is suitable for exploring the potential to be always creative and developing (Sarjana and Khayati, 2016).

Teachers still face many challenges, such as the view of students, that social studies are very drab, less challenging, loaded with material. So that social studies are less interested and favored by students, this is added by students having diverse uniqueness, with different abilities from one another (Sulfemi, 2018) and (M, Talakua and Tehupuring, 2016).

Based on the results of preliminary observations of the social studies learning process about the characteristics of traditional markets, modern markets, stalls, and cooperatives in class III SDIT AL Hamidiyah, Pancoranmas District, Depok, data obtained that student learning outcomes are still under the Minimum Mastery Criticism. From the

results of the student worksheets, there were approximately 56% of students, 13 of 25 students of class III AL-Hamidiyah Integrated Islamic Elementary School, the value was still below the stipulated minimal completeness criteria, which was 75. While those above Minimal Completeness Criteria, 52%, were 12 people.

The low learning outcomes are many factors, especially the factors of teachers and students. The teacher as an important component in the teaching and learning process has a very strategic role in the effort to establish quality human resources. The low social studies learning outcomes are following several studies, such as Damanhuri.dkk (2016) and Elly's researchers. et al. (2017). Further research from Windiyani et al. (2018) entitled "The Use of Photographic Image Learning Media in Social Sciences Subjects in Elementary School Students" that Social Studies learning from 30 fifth grade students obtaining a value above the maximum criteria of completion only 10 students

or 33.3% have been declared reached while 20 students or 66.7% had not yet reached.

For this reason, it is necessary to improve the learning undertaken by the teacher so that students have the motivation and interest which in the end will increase the value of social studies learning outcomes, especially the themes of Characteristics of Traditional Markets, Modern Markets, Stalls and Cooperatives in class III SDIT Al-Hamidiyah Depok. One of them is by improving learning by using a type of jigsaw cooperative learning model with the help of audio-visual media.

The use of jigsaw cooperative learning with the help of audiovisual media in this study is expected in teacher learning to make students not only have motivation, interest and make it easier for students to learn the material provided, but students can also provide and teach the material to friends his group of classmates. So that in this learning the teacher only acts as a mediator, facilitator, and motivator.

B. Research Methodology

This research uses the action research method. The emphasis is focused on collecting information and data from four sources, namely (1) collaborators (2) Homeroom (3) learning material from the curriculum and student handbooks (3) the course of the learning process itself, and (4) several students in the class, both done through interviews and observations. Wardani (2014) and Permatasari, (2017). The study was conducted at the Al-Hamidiyah Integrated Islamic Elementary School on the Depok Sawangan Kilo Meter 2 No. 12 highway, Rangkap Jaya Village, Pancoranmas District, Depok City. The subjects were Class III students Khalid Bin Walid, amounting to 25 people consisting of 14 men and 11 women. This research process follows the principles that apply in classroom action research namely: 1) Planning 2) Action, 3) Observation and 4) Reflection. (Sulfemi and Minati, 2018)

Indicators used to measure improvement in students' learning motivation include 5 aspects including a) A desire to learn, b) Perseverance in learning, c) Active participation in learning, d) Efforts to learn, and e) Completion of tasks. The results of the data collected at each research activity from the implementation of the research cycle were analyzed descriptively using a percentage technique to be able to see the trends that occur in social studies learning activities. (Prihatiningsih and Setyanigtyas, 2018) and Sediasih, 2017).

C. Research Result and Discussion

The implementation of learning is done through two cycles. The first cycle is an improvement from the initial learning (Prasiklus), the second cycle is an improvement from the first cycle to improve student learning outcomes and motivation, to get the expected value. In the Prasiklus activity, lecture learning methods are used. As stated by Novita, (2014) following the implementation of its activities: First, do the planning. At this stage the following stages are

carried out: a) preparing a learning plan, b) determining the indicators and learning objectives, c) determining the steps of learning. d) determining the material to be delivered in this pre-cycle is about the characteristics of traditional markets, modern markets, stalls, and cooperatives, e) determining learning tools and media, and f) preparing student worksheets and compiling student learning evaluations. Second, the stage of implementation activities. At this stage, it is divided into introduction, core activities, and closing. In the introduction the following actions are taken: a) greeting and praying together, b) checking the attendance of students, c) conditioning students with "pat focus", d) asking questions and answers e) conveying the learning objectives.

At the core activities the following activities were carried out: a) explaining the social studies learning material about Market Characteristics, b) the students paid attention to the teacher's explanation of the material, c) with the students doing the questions and answers, d) the students completed the worksheets, e) asked answer about things that are not yet known to students, f) provide material reinforcement and motivation.

At the end of the activity that is closing activities are as follows: a) students are allowed to ask questions, b) learners with the teacher conclude the subject matter, c) learners work on evaluation (honesty), d) evaluation of evaluation results, e) giving feedback, and f) closing the lesson by saying hello.

The results of these pre-cycles obtained the total value of 1510, the highest value of 80, the lowest value of 40, the average grade of 60.4 who finished learning 12 people and 13 people who were not yet complete, consisting of 13 men and 12 women. Students who are complete in learning by 48% and not 52%. Teacher observations obtained 12 students or 48% can answer and 13 or (52%) cannot answer. The low level of research is almost the same as research conducted by Gunarasa, et al. (2014).

Based on the data obtained by the frequency distribution of the range value is 40, the number of interval classes is 5.72 rounded to 6, and the length of the interval class (p) 6.667 rounded to 7. (Suryanto, 2014). Based on calculations it can be seen the

number of students who are in the range 73-80 there are 12 people, 65-72 no, 57-64 no, 49-56 there are 5 people, 41-48 no, and 33-40 there are 8 people.

After the pre-cycle results that do not reach the Minimum Standing Criteria value, then proceed to cycle 1 on. In cycle 1, a Jigsaw cooperative learning model is used as stated by Purnamasari et al. (2016) and (Priansa; 2017), as follows: 1) explain learning material, 2) Learners pay attention to the teacher's explanation of the material and answer teacher questions, 3) Students observe the pictures, 4) Students are divided into four groups consisting of from six people by taking a color card. Each student who gets the same color card gathered in one group, 5) The same color card group will act as a team of experts who will discuss one topic. Yellow color will discuss the characteristics of traditional markets, and blue color discuss the characteristics of modern markets, red color discuss the characteristics of stalls, green color will discuss the characteristics of cooperatives, 6) Each student record the results of the discussion in their respective expert groups, 7) Students form a new group

(consisting of four people) using each group must consist of red, green, yellow, and blue (heterogeneous), 8) Each new group formed will discuss the characteristics of the four places of sale and purchase (traditional, modern markets, stalls, and school cooperatives) using each member of the expert team explaining to other group members, 9) Representatives of each group present the results of observational discussions through pictures shown by the teacher, while other groups respond to them, 10) Giving awards to the group with the best discussion results (the characteristics mentioned are correct), 11) Students complete the worksheet about the characteristics of traditional markets, modern markets, stalls and cooperatives, 12) Questions and answers about things that are not yet known to students relating to learning material, and 13) Provide material and motivation reinforcement.

In the closing activity the following activities were carried out: 1) Students were allowed to ask questions that were not yet clear (courage), 2) Together with the teacher to conclude the subject matter, 3) Students worked on evaluations (honesty), 4) Evaluation of

evaluation results, 5) Giving feedback, and 6) The teacher closes the lesson by saying greetings. (Suparno and Maryani, 2018)

At this stage of cycle 1, the total value of 1850 was obtained with the breakdown of the highest score of 90 and the lowest score of 50, from an average grade of 74. The total number of students completed was 15 people and 10 students who were not yet completed with 60% learning completeness reached the criteria minimum completeness and 40% of students who do not reach the minimum completeness criteria, while the observations of 17 (68%) students can answer 8 students or (32%).

Based on the data obtained 40 data ranges, the number of class intervals 5.72 rounded 6, the length of the interval class (P) 6.667 rounded to 7. Based on the calculation it can be seen the number of students who are positioned 83-90 there are 3 people, 75-82 there are 11 people, 67-74 there are 9 people, 59-66 there are 1 people, and 51-58 there are 1 people. From the most data obtained values between 75 to 82.

The results of cycle 1 that have not yet reached the minimum completeness

criteria then proceed to cycle 2 whiles still using the Jigsaw type cooperative learning method there are only assignments to students to make posters and media that are changed when the first cycle uses images, then cycle 2 try to use audiovisual media. Thus, the learning is almost the same as cycle 1 but when the implementation of cycle 2 is added with additional teaching material activities photos about the characteristics of the market, laptops, audio-visual video, LCD, and sound system to ask about the economic activities of market characteristics. Also, students are given strengthening in learning. In the closing activity is almost the same as in cycle 1.

In cycle 2 learning, the total number of scores is 2227 with the breakdown of the highest score of 100 and the lowest score of 73, the average grade of 89.08. Students who are complete in learning the only amount to 20 people and those who have not completed 5 people. Observations that can answer 20 people or (80%) while those who cannot answer 5 students or (20%)

Based on these data the interval values obtained range 27, the number of

classes 5, 72 rounded up to 6 pieces, and the length of the interval class (p) 4.5 rounded to 5. Based on the above calculation, obtained 98-100 there are 7 people, 93-97 there are 6 people, 88-92 no, 83-87 there are 6 people, 78-82 there are 1 people, and 73-77 there are 5 people.

The following student learning outcomes and observations of students learning each cycle are presented in the following charts and table.
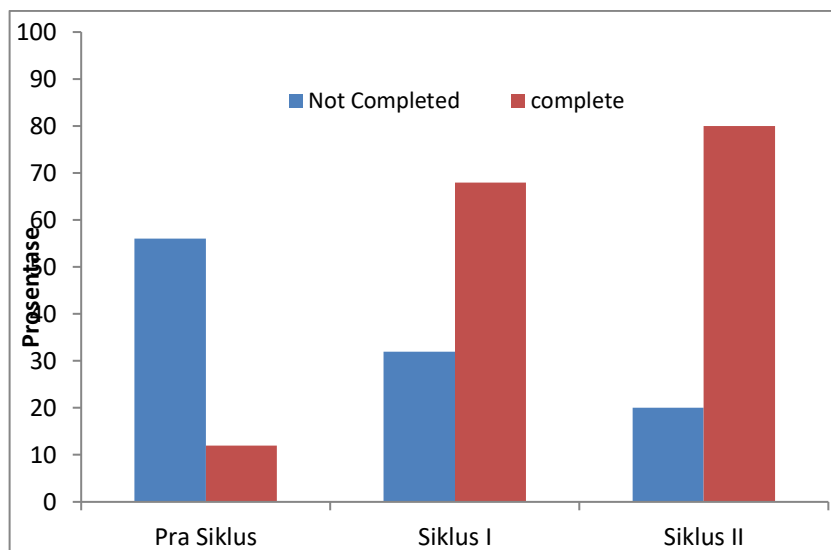
Graph 1.
Mastery Learning Students Each Cycle
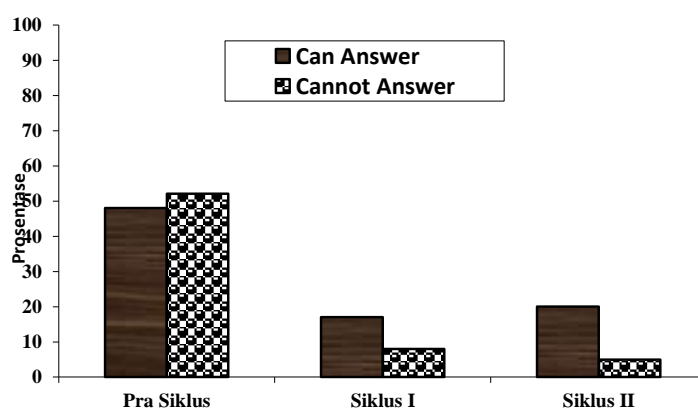
Graph 2.
Teacher Observation Results

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Table 1.
Percentage of success of student learning outcomes

No	Criteria	Pra Siklus		Siklus I		Siklus II	
		Amount	%	Amount	%	Amount	%
1.	Complete	12	52%	15	68%	20	80%
2.	Not Completed	13	56%	10	32%	5	20%
Average value of		60.4		74		89.08	

Table 2.
Percentage of success of observations of student learning

NO	Criteria	Pra Siklus		Siklus I		Siklus II	
		Amount	%	Amount	%	Amount	%
1.	Can Answer	12	(48%)	8	(68%)	20	(80%)
2.	Cannot Answer	13	(52%)	17	(32%)	5	(20%)
	Amount	25	100 %	25	100 %	25	100 %

Based on the table and chart above, it can be seen that the pre-cycle value until cycle 2 has increased. Although in cycle 2 it is not complete as a whole, it is also caused that the method of jigsaw cooperative learning model has weaknesses as stated by Masitoh and Dewi Laksimi, (2009) and Rumiyatun, (2012) that: 1) Students who are smart will tend to dominate so that it can lead to inferiority and passivity of weak students 2) Can occur in students who are merely doing the work of smart students without having adequate understanding, and 3) Grouping of students requires different seating arrangements and requires time special.

Increasing the results of classroom action research in cycle 2 using the Jigsaw type, the cooperative learning model following the research of Suparman, et al. (2014) and research by Ismiyatun, et al. (2015). The use of this method has advantages, among others: 1) Students in groups while learning about a concept or topic in a pleasant atmosphere, 2) Optimization of the participation of each student, 3) The existence of a clear structure allows students to share with fellow students in an atmosphere togetherness and have many opportunities to process information and improve communication skills, 4) There is a clear structure and allows students to share with different pairs quickly and regularly, 5) Increase the acceptance of learning material, 6) Improve positive

relationships between students. 7) The intrinsic motivation of students is greater, 8) Students have high confidence, 9) Students have more structured behavior in doing the task, 10) Students are responsible for their learning, 11) Students interpret what is conveyed teacher and friends in doing homework, and 12) The attitude of students' cognitive collaboration is increasing by organizing their ideas and thoughts to be explained to their friends. (Indo, et al. 2013)

Likewise, the use of audio-visual media that can increase the value of students is adjusted to that delivered by Arsyad (2014), as well as Sediasih research (2017), Yuliana, et al (2015), and Gunadi, K. (2012) which that with the media can provide the following: 1) Learning attracts more attention of students so that it can foster motivation to learn, 2) Learning becomes clearer and more meaningful, so that it can be understood by students, 3) Megajar methods will be more varied, not solely verbal communication or lecture by speaking words by the teacher, so students do not feel bored, bored, and the teacher does not run out of energy, and 4) Students can do more learning

activities because not only listen to the teacher's description, but also other activities such as observing, doing, acting out, and demonstrating.

Using the jigsaw learning model, the teacher acts as a facilitator both from the original group facilitator and expert group facilitator, thereby increasing students' sense of responsibility in learning for themselves and others. Students not only learn the material provided, but they must also be prepared to give and teach the material to other group members. Thus, students are interdependent with each other and will cooperate cooperatively. Thus in the implementation of this improvement cycle 2, the teacher only acts as a mediator, facilitator, and motivator. (Jayusman and Shavab, 2018).

The results of improved learning in cycle 2 can measure learning outcomes as conveyed by Hamdani (2011) and Jamalong and Indajati, (2015) because the level of learning outcomes obtained by students is strongly influenced by the quality of learning undertaken by the teacher. The teacher's role is very important in moving students' learning interest in the learning process.

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D. Conclusion

Based on the results of research and discussion, it can be concluded 1), in the pre-cycle stage an the average grade of 60.4 is obtained, 12 and 13 are incomplete, while observations of 12 (48%) can answer and 13 (52%) cannot answer. In cycle 1, an average class of 74.15 people was completed and 10 were not completed, while observations from 17 (68%) students could answer and 8 (32%) participants. In cycle 2 learning the average results of the class are 89.08 students who have completed 20 people and 5 who have not yet completed, observations that can answer 20 (80%) while those who cannot answer 5 people (20%). Second, learning using a jigsaw cooperative learning model with audiovisual media can improve learning outcomes, active and motivational for students, the material delivered by the teacher can be understood by students, the responsibility of students towards the task is quite high, and helps students to actively involved in learning activities and students get a more meaningful learning experience.

Based on the above conclusions some things should be done include: 1) The teacher should conduct classroom action research to prepare better learning, 2) The teacher accustoms to analyzing student learning outcomes periodically, programmed, and sustainably, 3) Teachers should able to present the subject the matter with an interesting method, and 4). Teachers should always provide motivation to their students.

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