

Improving Interest, Participation and Learning Outcomes in Learning IPS Through the Jigsaw Model Learning Approach

Nely Karnidah SMP Negeri 9 Kotabumi, Indonesia E-mail: nelykarnidah1970@gmail.com

| Article Info | Abstract |
|--|--|
| Article History Received: April 2023 Revised: May 2023 Published: June 2023 | Cooperative learning strives for a student to be able to teach material to other participants. The students are conditioned in a situation where they will interact and discuss and share opinions while indirectly helping to cover up the weaknesses between students. The Jigsaw learning model allows everyone in the |
| Keywords: | class to share ideas and contribute each other's abilities to improve the process of success in learning. This classroom action research took place at SMP Negeri 9 |
| Cooperative Learning Jigsaw Types, Classroom Action Research, Learning Outcomes | Kotabumi, Talang Bojong village, Lampung. The research was carried out for 3 months, from 1 August to 31 October 2018. The researcher involved two colleagues as observers. The author plans research using the Kemmis and Taggart |
| Doi: http://dx.doi.org/10.23960/E3J/ | model designs using the stages: Planning, Action, and Observation, followed by Reflection for each cycle. Based on the results of the study, student achievement |
| V611.65-70 | or learning outcomes through the Jigsaw cooperative learning model experienced a significant increase. In cycle I with a class average of 62.71 it increased in cycle |
| | II to 74.79 and in cycle III to 84.79. Likewise, student learning activities both individually and in groups experienced a significant increase in discussions, |
| | teacher-student interaction, student interaction. |

INTRODUCTION

Education is the key to the progress of a nation. A nation that wants its country to be developed must prioritize the development of its human resources in education. Renewal for the sake of renewal is always sought, so education can really make a significant contribution in efforts to improve the life of the nation as mandated by the founders of the Republic of Indonesia as outlined in the Preamble of the 1945 Constitution (Suyanto, 2000).

An educator means a person who educates (KBBI, 2023), while a teacher means person whose job (livelihood, profession) teaches (KBBI, 2023). Academically, educators are educational staff who are appointed and devote themselves to supporting the implementation of education. In other words, educator is a professional whose job is to prepare and carry out the learning process, then evaluate and provide additional training or guidance when needed. This makes the teacher has a function as an organizer, creator, motivator, and facilitator that influences the success in the learning system. Creativity in choosing learning approaches and models as well as learning media that are appropriate to the material to be delivered, especially in Social Sciences (IPS) subjects, is needed to enhance the education quality.

The objective of implementing the curriculum is to balance between so the interests, talents and potential needs of students as well as the carrying capacity of existing schools. Thus, students are expected to have sufficient competence to meet the demands or challenges of new life in the local, national or global environment (Depdiknas, 2008). One of the factors that support the successful implementation of the curriculum is how the existing materials are conveyed to students, in this case the teachers are very important because the teacher as the conveyer of material in the curriculum is directly related to students.

Social Sciences (IPS) as one of the subjects that must be mastered by junior high school students cannot be separated from the importance of creativity in the learning process. A creative learning

process helps students understand geosphere phenomena concerning natural phenomena, social phenomena, locations, and so on which are very useful for life. The problems faced in social studies learning at SMP Negeri 9 Kotabumi include: Currently the method used in social studies learning is dominated by lectures so that it does not involve students being active in the learning process (passive students). IPS is a subject that is considered difficult, it is proven that the social studies learning outcomes obtained by students are still low, namely the highest score is 85 and the lowest is 50 so that the average IPS score is 69.25. For North Lampung district, the achievement of the minimum completeness criteria (KKM) is 70 so it has not been achieved.

The scope of IPS material is very broad and rote in nature, IPS textbooks are only limited to borrowing from schools. This shows that the learning process in the class does not meet the criteria for good learning. Therefore, educators are expected to be able to create an interesting Social Sciences (IPS) learning atmosphere and can increase students' motivation and learning outcomes. One effort that can be done is to choose a learning model that provides the widest opportunity for students to develop according to the wishes and abilities of students, in this case, variations in the use of small groups are needed.

One of the learning models that can be applied is the Cooperative Learning Approach, the Jigsaw Learning Group model (Degeng, Utaya & Kuswandi, 2022; Maydiantoro, 2018). The Group Study model was chosen because so far it has rarely been used by teachers, including researchers, and teachers mostly use discussion and lecture models. It is hoped that by using the Group Study model the teacher will be creative in conveying social studies learning. This learning model aims to help students more interested in learning and material presented is more easily embedded in students' memories, so that student learning achievement is expected to increase.

Although the Jigsaw learning model has been known and used in various contexts, its application in the context of social studies teaching at SMP Negeri 9 Kotabumi has not been widely studied. Therefore, this study makes a new contribution to the literature by evaluating the effectiveness of this model in this specific context. The research also focuses on how the Jigsaw learning model can be used to increase student engagement in the learning process and improve their learning outcomes, which is an important contribution to the educational literature.

Seeing the existing reality, we held Classroom Action Research (PTK) on Improving Interest and Learning Outcomes in Social Studies Learning through the Jigsaw Model Learning Approach for Class IX A Students of SMP N 9 Kotabumi is very interesting to reach. Learning Social Sciences (IPS) on this research is expected to increase student interest and learning outcomes as expected.

METHODS

This classroom action research took place at SMP Negeri 9 Kotabumi, Talang Bojong village, Kotabumi sub-district, North Lampung district. The research was carried out for 3 months, starting from August 1 to October 31st 2018. In this study, researchers involved two colleagues as observers, namely Saiful Robihan and Endang Sari, S.Pd and one documentation person. The author plans research using the Kemmis and Taggart model designs using the stages: Planning, Action and Observation, followed by Reflection for each cycle. This research was conducted in 3 cycles, each cycle consisting of 2 meetings. The research used contextual approach with the JIGSAW type cooperative learning model. The research steps are as follows:

- 1. Develop learning instruments.
- 2. Develop monitoring instruments.
- 3. Hold discussions between team members.
- 4. Outreach to students.
- 5. Carry out actions and observations in the first cycle of learning.
- 6. Reflect.
- 7. Develop learning strategies in the second cycle based on the reflections of the first cycle.
- 8. Carry out actions and observations in learning in the second cycle.
- 9. Reflect on the second cycle.
- 10. Develop learning strategies in the third cycle based on the reflection of the second cycle.
- 11. Carry out actions and observations in learning in the third cycle.

12. Prepare reports.

RESULTS AND DISCUSSION

A. Results

1. Student Learning Activity Data

Student learning activity data always increases from the first meeting to the sixth meeting. **Table 1.** Learning Activity Recapitulation Data

| No | Activity | Score | Meeting | | | | | | 2 |
|----|---------------------------|-------|---------|----|----|----|----|----|----|
| NO | Activity | 50010 | 1 | 2 | 4 | 5 | 7 | 8 | 4 |
| 1 | | А | 0 | 0 | 3 | 5 | 8 | 9 | 25 |
| | Discuss | В | 8 | 10 | 12 | 11 | 11 | 11 | 63 |
| | | С | 16 | 14 | 9 | 8 | 5 | 4 | 56 |
| | | А | 0 | 1 | 5 | 7 | 10 | 11 | 34 |
| 2 | Ask | В | 9 | 11 | 13 | 11 | 10 | 11 | 65 |
| | | С | 15 | 12 | 6 | 6 | 4 | 2 | 45 |
| | | А | 0 | 0 | 3 | 4 | 9 | 9 | 25 |
| 3 | Answer | В | 6 | 10 | 12 | 12 | 10 | 11 | 61 |
| | | С | 18 | 14 | 9 | 8 | 5 | 4 | 58 |
| | | А | 0 | 0 | 2 | 5 | 8 | 10 | 25 |
| 4 | Respond to Answers | В | 4 | 9 | 13 | 11 | 11 | 10 | 58 |
| | | С | 20 | 15 | 9 | 8 | 5 | 4 | 61 |
| 5 | | А | 0 | 0 | 3 | 3 | 8 | 11 | 25 |
| | Conclude | В | 2 | 3 | 8 | 10 | 10 | 9 | 42 |
| | | С | 22 | 21 | 13 | 11 | 6 | 4 | 77 |
| 6 | | А | 0 | 0 | 4 | 4 | 7 | 8 | 23 |
| | Self-confident | В | 4 | 7 | 9 | 11 | 11 | 13 | 55 |
| | | С | 20 | 17 | 11 | 9 | 6 | 3 | 66 |

2. Portfolio Assessment (Group Work)

The portfolio assessment of group work results has always increased from the first meeting to the sixth meeting as follows:

| N | A | C | Meeting | | | | | | |
|----|--------------------|-------|---------|---|---|---|---|---|----|
| NO | Activity | Score | 1 | 2 | 3 | 4 | 5 | 6 | 2 |
| | | А | 0 | 0 | 2 | 2 | 3 | 4 | 11 |
| 1 | Cooperation | В | 1 | 2 | 2 | 3 | 2 | 1 | 11 |
| | | С | 5 | 4 | 2 | 1 | 1 | 1 | 14 |
| 2 | | А | 0 | 0 | 1 | 2 | 3 | 5 | 11 |
| | Neatness | В | 2 | 4 | 4 | 3 | 2 | 1 | 16 |
| | | С | 4 | 2 | 1 | 1 | 1 | 0 | 9 |
| 3 | Anguion Acquire av | А | 1 | 1 | 2 | 3 | 4 | 5 | 16 |
| | Allswei Accuracy | В | 1 | 2 | 2 | 2 | 1 | 1 | 9 |
| | | С | 4 | 3 | 2 | 1 | 1 | 0 | 11 |
| 4 | | А | 0 | 1 | 1 | 2 | 4 | 4 | 12 |
| | Responsibility | В | 1 | 2 | 3 | 2 | 1 | 1 | 10 |
| | | С | 5 | 3 | 2 | 2 | 1 | 1 | 14 |

Table 2. Group Work Portfolio Recapitulation Data

3. Student Test Scores

Data on Student Test Scores always increases from the first meeting to the sixth meeting as follows:

| | Table 3. Student Achievement Value Recapitulation Data | | | | | | | |
|----|--|----|----|----|----|----|----|--|
| NO | Complete/Unfinished | P1 | P2 | P3 | P4 | P5 | P6 | |

| 1 | Complete | 8 | 11 | 16 | 19 | 22 | 23 |
|---|------------|----|----|----|----|----|----|
| 2 | Unfinished | 16 | 13 | 8 | 5 | 2 | 1 |

The results of individual student tests at the first meeting obtained a complete score of 8 students and 16 students who did not complete. At the second meeting, 11 students completed the score and 13 students did not complete. At the third meeting, a Completed score of 16 students was obtained and 8 students Not Completed. At the fourth meeting, a Completed score of 19 students was obtained and 5 students Not Completed. At the fifth meeting, a Completed score of 22 students was obtained and 2 students Not Completed. At the sixth meeting obtained a Completed score of 23 students and 1 student Not Completed.

B. Discussion

Our research results show evidence that the use of the Jigsaw method can increase participation, collaboration and learning achievement. There is an increase in the results in each cycle both in the learning activities section where students become more active in the learning process, including in discussing activities, asking questions, responding to questions, and concluding the results of the discussion. The level of student confidence to be involved in learning activities has also increased quite a bit (Azmin, 2016; Akinbobola, 2009; Mills, 2003;). These results are in accordance with the explanation from Suherman (2003), cooperative learning encourages students to solve task problems in small groups and share excellence in answering assignments given by the teacher. Slavin (2009) explains that in cooperative learning students will encourage students to share their knowledge with each other while indirectly helping to cover up the weaknesses between students. Bhadari, et. al., (2017) conducted research in India and found evidence that the use of the Jigsaw method can increase interaction between students and make the learning process more interesting and effective in terms of time. The Jigsaw model can also improve students' communication skills with peers and teachers. Students are very satisfied with the application of the learning model.

The use of the Jigsaw method also makes a positive contribution when students work on group assignments (portfolio assessment). This learning pattern allows students to cooperate with each other in completing assignments given by the teacher (Adnan, 2017). This interaction between students allows them to be more motivated to work together and be responsible for doing this group assignment. Likewise, the tidiness and accuracy of answers also increased. These results are consistent with Karocop's research (2017) which compared the use of Jigsaw with conventional laboratory methods. Karocop (2017) found evidence that in learning using the jigsaw model students managed to achieve higher achievement than other methods. In addition, the level of student misunderstandings can decrease due to interactions between students in learning activities. This is because cooperative learning strives for a student to be able to teach other participants. The process of sharing knowledge between study partners provides opportunities for students to learn new knowledge in different ways and of course fun (Nur, 2005).

The results of our research also show that the use of the jigsaw learning model has increased the achievement of student achievement. Mastery learning which is a measure of student achievement shows a positive increase in each cycle. These results are consistent with several studies at various levels of education which show the results that the use of Jigsaw increases student achievement (Azmin, 2016; Honeychurch & Draper, 2012; Sahin, 2010, Aronson, 2005;). Azmin's research (2016) in the country of Brunei Darussalam, for example, found results where students' understanding increased and was able to re-explain their understanding properly through the use of this method (McLeish, 2009). This is caused by students being more active in the learning process and stimulating all individuals to participate more in the process (Dollard and Mahoney, 2010; Sahin, 2010; Johnson and Johnson (1994). This is in accordance with the exposure from Slavin (2009) which explains that The Jigsaw learning model allows everyone in the class to share ideas and contribute each other's abilities to improve the process of success in learning.

CONCLUSION

The Jigsaw method can improve student participation, collaboration, and learning achievement. There was an increase in outcomes in each cycle, including in learning activities where students became more active in the learning process, including in discussion activities, asking questions, responding to questions, and concluding discussion results. The level of confidence of students to engage in learning activities has also increased quite a lot. These findings are consistent with other research showing that cooperative learning, such as the Jigsaw model, encourages students to problem-solve tasks in small groups and share an edge in answering tasks assigned by teachers. Students will share knowledge with each other while indirectly helping to cover weaknesses between students. The Jigsaw method has been proven to improve interaction between students and make the learning process more interesting and effective in terms of time. The use of the Jigsaw method also contributes positively when students work on group assignments. This learning pattern allows students to work together in completing the tasks given by the teacher. Interaction between students allows them to be more motivated to work together and take responsibility in working on these group assignments. The level of student confusion can be reduced due to interaction between students in learning activities. The process of sharing knowledge among peers provides opportunities for students to learn new knowledge in different ways and of course fun.

REFERENCES

- Adnan, M. (2017). Perceptions of senior-year ELT students for flipped classroom: A materials development course. *Computer Assisted Language Learning*, *30*(3-4), 204-222.
- Akinbobola, A. O. (2009). Enhancing Students' Attitude Towards Nigerian Senior Secondary School Physics Through The Use of Cooperative, Competitive and Individualistic Learning Strategies. *Australian Journal of Teacher Education*, 34(1), 1-9.
- Aronson, E. (2005). The jigsaw classroom. Retrieved March, 27, 2014, from http://www.jigsaw.org
- Azmin, N. H. (2016). Effect of the Jigsaw-Based Cooperative Learning Method on Student Performance in the General Certificate of Education Advanced-Level Psychology: An Exploratory Brunei Case Study. *International education studies*, 9(1), 91-106.
- Bhandari, B., Mehta, B., Mavai, M., Singh, Y. R., & Singhal, A. (2017). Medical education/original article jigsaw method: An innovative way of cooperative learning in physiology. *Indian J Physiol Pharmacol*, 61(3), 315-321.
- Degeng, I. N. S., Utaya, S., & Kuswandi, D. (2022). The influence of types of collaborative learning models jigsaw vs discovery learning model and learning discipline on learning results. *Pegem Journal of Education and Instruction*, 12(2), 166-178.
- Depdiknas. (2008). Kurikulum Tingkat Satuan Pendidikan (KTSP). Jakarta: Departemen Pendidikan Nasional.
- Djamarah, Syaiful Bahri dan Aswan Jaim. (2006). Strategi Belajar Mengajar. Bandung: CV. Alfa Beta.
- Dollard, M. W., & Mahoney, K. (2010). How Effective Is the Jigsaw Method When Used to Introduce New Science Curricula in Middle Schools Science?. *The Ontario Action Researcher*, *10*(3).
- Honeychurch, S., & Draper, S. (2012). Taking forward the jigsaw classroom: the development and implementation of a method of collaborative learning for first year philosophy tutorials. *Discourse*, *11*(2), 40-52.
- Johnson, D. W., & Johnson, R. (1994). *Leading the cooperative school (2nd ed.).* Edina, MN: Interaction Book Company.
- Karacop, A. (2017). The Effects of Using Jigsaw Method Based on Cooperative Learning Model in the Undergraduate Science Laboratory Practices. Universal Journal of Educational Research, 5(3), 420-434.
- Maydiantoro, A. (2018). Studi penelusuran (tracer study) alumni program studi pendidikan ekonomi fakultas keguruan dan ilmu pendidikan universitas lampung. *Economic Education And Enterpreneurship Journal*, 1(2), 71-123.
- Mills, P. (2003). Group Project Work with Undergraduate Veterinary Science Students. Assessment & Evaluation in Higher Education, 28(5), 527-538.
- Moh, Uzer Usman. (2000). Menjadi guru professional. Bandung: PT Remaja Rosdakarya.

Nawawi, I. (2010). Meningkatkan prestasi belajar siswa pada pembelajaran IPS dengan metode diskusi di kelas V semester I SDN Benerwojo Kecamatan Kelayan Kabupaten Pasuruan.

Nur, M. (2005). Pembelajaran kooperatif. Surabaya: Pusat sains dan matematika sekolah UNESA.

- Sahertian, C. D. W. (2003). Pengaruh penggunaan bahan ajar dan gaya belajar terhadap hasil belajar matakuliah strategi pembelajaran pendidikan agama Kristen (PAK) mahasiswa sekolah tinggi agama kristen protestan negeri (STAKPN) Ambon. (Doctoral dissertation, Universitas Negeri Malang).
- Sahin, A. (2010). Effects Of Jigsaw III Technique on Achievement in Written Expression. *Asia Pacific Education Review*, 12(3), 427-435.
- Saliman. (2010). Pendekatan Pakem Dalam Pembelajaran Ilmu Pengetahuan Sosial. Bahan Pendidikan Dan Latihan Profesi Guru. Yogyakarta: UNY

Suherman, Erman. (2003). Pendekatan kontekstual dalam pembelajaran matematika. Educare.

Suyanto, D. H. (2000). *Pendidikan Indonesia menanti Milenium III*. Yogyakarta: Adi Cipta Karya. Zingaro, Daniel. (2008). *Group Investigation: Theory and Practice.* Ontario.