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The Effect of Cooperative Learning Engineering Make A Match on Student Achievement In Learning PAI Students of SMPN 2 West Telukjambe Karawang

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ABSTRACT

Humans must understand that their education so far is not just mere formality. But more than that, education will largely determine the life of the nation and state, which are fostered from the elementary level. This study aims to assess the effect of Cooperative Learning taking a matching technique on student achievement. In this study, two groups were born. Namely, the Experiment group was given the Effect of Cooperative Learning Techniques Make Match on the learning outcomes of Grade VIII PAI students in SMPN 2 Telukjambe Barat and control groups with conventional learning. At the end of the study, a final test was conducted to see the learning outcomes of the PAI of the two samples. The results showed that applying the teaching model of cooperative learning type make a match was able to increase student achievement in class VIII SMPN 2 Telukjambe west and can change the way of thinking of students in the study the Islamic religious education to more fun and not dull, and can change the perspective of students in behaving better by showing good morals, courtesy, and honesty.

Keywords: Cooperative Learning, Make A Match, Learning Achievement

A. INTRODUCTION

Education is the main factor that shapes the normative human person. Education obtained by children is not only in school, but all factors can be used as a source of education (Amirudin & Muzaki, 2021b). Education is a series of purposeful interaction activities between adult humans and students face-to-face or by using the media to assist in students' development (A. Amirudin & Muzaki, 2019a). The quality of education can be achieved if the teaching process is effective, takes place in a directed manner, and is according to the learning objectives (A. Amirudin & Muzaki, 2019b) . So here, we need intelligence in carrying out activities as human beings in terms of learning. Intelligence is one of the most extraordinary gifts from God to humans (Amirudin & Muzaki, 2021a). Children's intelligence is not only measured by IQ because every child has multiple intelligences, namely intelligence, emotionalsocial intelligence, and spiritual intelligence. In addition, being a successful person requires not only high intelligence but also emotional intelligence, which is oriented to human relationships and based on human relationships with God (Budianto, Amirudin, & Muzaki, 2020). It is sought to support the active learning process of students in developing their potential in terms of cognitive, affective, and psychomotor (Amirudin, Nurlaeli, Muzaki, & Karawang, 2020).

Human development is the core of national development. Because in a nation, aspects of human resources are the most crucial element in building an ideal civilization (A. Amirudin, Mukhtar, & Muzaki, 2020). Education as an instrument of human development is a series of activities aimed at the interaction between adult humans and students face to face or by using the media to assist in the development of students as a whole (A. Amirudin & Muzaki, 2019a). The application of learning models that are not optimal results in students becoming bored. Saturation of learning is a period used to study but does not get results (Khaerunnisa, Amirudin, Muzaki, & Moh.Subhan, 2021). Students are only given textbooks containing various materials to be studied without using methods and learning models that stimulate students to be active and interested in taking lessons, especially in PAI subjects whose scope of material is extensive. Islam is manifested in Islamic Religious Education (PAI), placing education as the main agenda for improving the condition of society (Khaerunnisa et al., 2021). The reality that occurred in Class VIII of SMPN 2 Telukjambe Barat PAI learning was only carried out 2 hours/week. Time limitations contribute to the difficulty of the PAI subject matter to be adequately conveyed. This will impact the way of learning of students who only memorize,

make students not creative in understanding the material, and tend to be passive in the learning process (I. Amirudin, 2020).

This research is essential to do considering that student boredom affects students' comprehension. Therefore, appropriate learning methods are needed to reduce the level of boredom of students in learning. The make a matching technique is allegedly able to reduce the boredom level of students. The cooperative learning model technique is Make a Match, developed by Lorna Curran (Huda, 2011). Students look for partners while learning a particular concept or topic in a pleasant atmosphere in this technique. This technique can be applied to all subjects and all grade levels. In the technique Make a Match, students are expected to work together. The advantage of this technique is that students will learn about a concept in a pleasant atmosphere through playing while learning to pair answer cards and questions. The application of this technique will further enable students to learn to make learning more meaningful because of the active involvement of students during the learning process. Through this technique, students will also be trained to express others' ideas, opinions, and criticisms. By applying the Cooperative Learning of Make a Match technique, PAI learning in schools will be preferred by students. Middle school-aged children aged between 14-15 years are children who like to form peer groups, usually to play together; through the Cooperative Learning of Make a Match technique, students can work together to complete a subject matter. Students can build their knowledge, so abstract PAI concepts can be easily understood and more meaningful. This happens because Make a Match is a cooperative learning model that divides students into groups. The student learning process is conditioned like playing games, so students will be more motivated in learning so that learning outcomes will increase. Continuing education and character development are a task for families, communities, and governments; preparing a formidable generation of Muslims is the hope of all parents following the verses of the Qur'an.

In contrast to the research conducted which describes how it is implemented in the learning process, this study provides an overview of the influence of making a matching technique on student achievement or output (Riyanti, 2018).

B. RESEARCH METODOLOGY

Following the problems that have been raised previously, the type of this research is experimental research. Experimental research is research in the presence of *treatments* used to look for the effect of specific treatments on others under controlled conditions (Sugiyono, 2013). In this study, two groups were taken: the Experiment group given the Effect

of *Cooperative Learning* Techniques *Make Match* on the PAI learning outcomes of Grade VIII students at SMPN 2 Telukjambe Barat and the control group groups with conventional learning. At the end of the study, a final test was conducted to see the learning outcomes of the PAI of the two samples. In experimental research, there are several designs.

Sugiyono (Sugiyono, 2017) revealed that several forms of experimental design could be used in research, namely *Pre-Experimental Design, True Experimental Design,* and *Quasi Expe.* According to Sugiyono (Sugiyono, 2016), *True Experimental* is an actual experiment. Because in this design, the researcher can control all the variables that influence the course of the experiment. There are two forms of design, *True Experimental*, namely *Posttest-Only Control Design* and *Pretest-Posttest Control Group Design.* In this case, the researchers used the *Pretest-Posttest Control Group Design.* According to Sugiyono, there were two groups of trials chosen randomly in this study, then given a *pretest* to determine whether the initial conditions are their different between the experimental and control groups. What is meant by the experimental group is the group that is given treatment by the researcher to find out the effect of the treatment, while the control group is the group that the researcher does not treat. Our data collection technique uses a triangulation model, namely interviewing, distributing questionnaires, and field observations.

Furthermore, after knowing the results of the *two pretest* groups, the experimental group was given *treatment* (X), while the control group was not given treatment (X). After being given treatment or *treatment* in one of the trial groups (experimental group), it was continued with the *posttest* in the two experimental groups used. The effect of treatment or *treatment is* symbolized by (O2-Oi) - (O4-O3). To see the effect of treatment based on its significance is to use parametric statistical tests or non-parametric statistical tests. If there is a significant difference between the experimental and control groups, the treatment given has a significant effect. Data analysis techniques in quantitative research use statistics with a descriptive statistical approach.

The design of this study can be described as follows:

Table 1. Research Design

R O1 X ₁ 02	Description	
R O3 X ₂ 04	R	randomly selected group
	X_1	Treatment for something tested
	X_2	Learning Conventional

O1	results <i>pre-test</i> experimental Group
O2	results post-test experimental Group
O3	Results pretest control group
O4	results posttest control group

overall, the research phase can be explained as follows:

- 1. Perform the initial observation and permit to school.
- 2. Making instruments, consulting with *experts*, and testing instruments used in research.
- 3. Coordinate with grade VIII teachers at SMPN 2 Telukjambe Barat.
- 4. Determine the experimental class and the control class of the existing class.
- 5. Researchers set learning objectives, the sequence of the learning process, and develop a Plan learning Implementation (RPP) following the experimental plan.
- 6. Carry out pre-tests for the experimental and control class.
- 7. Conducting research activities, namely the learning process in the experimental class given treatment or *treatment* (using learning models of *cooperative* technique *Make a Match* on the learning outcomes of Grade VIII PAI at SMPN 2 Telukjambe Barat).
- 8. Carry out the *post-test* after the research activities are finished for the experimental and control classes.
- 9. Conduct data analysis.

The researcher presents the research design and agrees with the teachers regarding the subject matter to be delivered during the study. The material is determined based on the contents of Curriculum 13, which has quite a lot of material and contains the understanding of concepts and requires experience in students' daily lives on essential competencies. Furthermore, the material agreed upon with the title raised was the influence of the *cooperative learning* of the technique *Make a Macht* on the learning outcomes of PAI students of class VIII at SMPN 2 Telukjambe Barat.

a) Model Cooperative Learning Type Make A Match

Cooperative learning is a form of learning based on constructivism (Suparmi, 2013). Cooperative learning follows human nature as social beings who are full of dependence on others, have common goals and responsibilities, assign tasks, and have a sense of destiny (Tambak, 2017). *Cooperative learning* has various types, one of which is making *a match*. One of the advantages of this technique is that students look for a partner while learning about a concept or topic in a pleasant atmosphere. This is in line with the opinion of Isjoni, stating

that *making a match* is a model of learning to find a partner while learning concepts in a pleasant atmosphere (Isjoni, 2011).

Make-A Match is a cooperative learning method where students look for partners while learning about a concept or topic in a pleasant atmosphere and placing students in several small groups consisting of 5-8 students in one group with different abilities, -different (Ningtyas & Wuryani, 2017). Curran, Lorna (Huda, 2011), "Make a matching technique is a model of choice, a technique for a partner from the teacher handed out a card at the beginning of learning and then combines questions and answers true or advisable "Which means that the make a matching technique is a technique that uses a card and contains questions and the other card contains answers and the teacher and is distributed to students. States that the make a matching model is a learning model that invites students to find answers to a question or pair of concepts through a pair of card games within a specified time limit. Meanwhile, making a match is one conceptual approach that teaches students to understand concepts actively, creatively, effectively, interactively, and fun students so that concepts are easily understood and enduring in students' cognitive structures (Huda, 2011). According to Agus Suprijono, "things that need to be prepared if learning is developed by *Make A Match* are cards. The cards consist of cards containing questions and other cards containing answers to these questions "(Suprijono, 2010). Cards are one of the learning media used as a tool to convey messages or information to students in teaching and learning activities. The technique Make A Match can create compelling, warm learning and create an atmosphere full of cooperation.

Based on the experts' opinions above, the authors conclude that the model cooperative *learning* type *makes a match* is a group learning model that invites students to understand concepts through a pair of card games. The game is limited to a predetermined time in a pleasant learning atmosphere. Making a match means finding a partner is one type of cooperative learning strategy. The make a matching technique was developed by Lorna Curran as quoted by Soufan Amri & If Khoiru Ahmadi. In this method, students were delighted because it was not tedious. After all, the teacher provoked students' creativity using the media. Teachers are required to have the ability to design, implement and do an evaluation of learning to cooperate. so hopefully the

This learning can change learners' knowledge, especially in the basic competence to practice circumcision prayer in junior high school two West Telukjambe.

b) Strengths and Weaknesses of Models Cooperative Learning Type Make A Match

Each model in learning has advantages and disadvantages when applied in the implementation of learning.) the advantages and disadvantages of the group learning model in pairs are as follows: (Lie, 2002)

1. Strengths:

- a. Increase student participation.
- b. Suitable for simple tasks.
- c. More opportunities for each group member to contribute.
- d. Easier interactions.
- e. It's easier and faster to shape it.

2. Weaknesses:

- a. Many groups report and need to be monitored.
- b. Fewer ideas emerge.

c) Steps Cooperative Learning Type Make A Match

Each learning model has steps in its implementation, so that it is easy to apply in learning. According to by Lorna Curran (1994), , the initial stage

- 1. The teacher prepares several concepts or topics that are suitable for the review session.
- 2. The teacher prepares a different colored cardboard to make a question card and answer card.
- 3. Cardboard paper that has been prepared to make question cards and answer cards are cut into rectangles (shaped like playing cards).
- 4. The teacher writes the questions on the question card and the teacher writes the answers on the answer card.
- 5. Question cards and answer cards are made in the same amount so they can be paired. (Huda, 2011)

Core stage

- 1. Students are divided into two groups, one group gets a question card and the other group
- 2. gets an answer card.
- 3. Each student is distributed a question card and answer card.
- 4. Every student who has gotten a question card and an answer card, think of

- 5. answers or questions from the one held.
- 6. Each student looks for a matching pair of cards.
- 7. Pairs of students who are able to match the cards, then sit close to each other.
- 8. Students who haven't gotten the card yet and can't match the card with their friend's card, (can't find the question card or answer card), gather with their own group.
- 9. The teacher confirms the correctness of the pairs of cards.
- 10. Student pairs present the topics they have received, which are responded to bygroups
- 11. other.
- 12. After one round, the cards are shuffled again so that each student gets a different card than
- 13. before, and so on.

Final stage

- 1. The teacher together makes conclusions about the learning material. b.
- 2. The teacher provides an opportunity to ask students who do not understand thematerial learning.

The model *cooperative learning* type *make a match* is a group learning model that invites students to understand concepts through a pair of card games, this game is limited to a predetermined time in a pleasant learning atmosphere. The steps of themodel *cooperative learning* type *make a match* must be carried out systematically, the implementation begins with the preparation stage, the distribution of question or answer cards, finding and finding partners, giving awards, and conclusions.

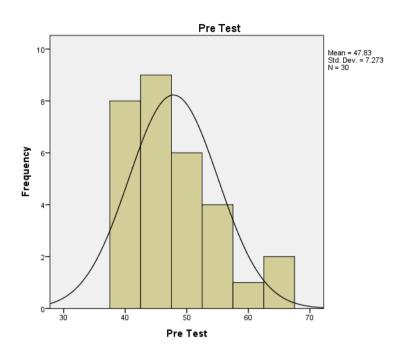
Research results data in the form of learning outcomes are pre test (X1) and post test (X2) as a result of the research treatment, namely the use of themethod *make a match* (Y). The research data were analyzed using descriptive statistical techniques, to measure the central tendency and the tendency of data distribution from the treatment group. The calculation of research data is done using a data processing program that is "SPSS version 21.0". Recapitulation of the results of the calculation of descriptive statistics the value of learning outcomes of material humble and frugal behavior can be seen in table 2

Table 2. Summary Data
Statistics

		Pre test	Post test
N	Valid	30	30
	Missing	0	0
Mean		47.83	81.67
Median		45.00	82.50
Mode		45	85
Std. Deviation		7.273	6.865
Minimum		40	60
Maximum		65	95
Sum		1435	2450

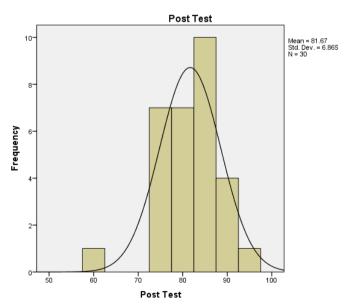
Based on table 1 above, the research sample was 30 students. The mean (average) acquisition in the pretest was 47.83, and the post-test was 81.67. Median (middle value) at pretest 45.00 and post-test 82, 50. Mode (the value that often appears) pretest 45 and post-test 85. Std deviation pre-test 7,273 and post-test 6,865. Minimum pretest 40 and post-test 60. Maximum pretest 65 and post-test 95. The histogram of the pretest and post-test values are as follows:

Figure 1. Histogram Pre test



While for the post test histogram namely

Figure 2. Histogram Post Test



Using average midterm scores and post-test results. To make a rating scale using the following formula: (100-KKM): 3 = Interval Length

As for the school that is the place of study, the magnitude of KKM PAI is 73; thus, the length of the assessment interval is: (100-73): 3 = 9. Based on the length The interval assessment criteria for the assessment of knowledge as follows:

- 1. (Very Good) = 92-100
- 2. (Good) = 82-91
- 3. (Enough) = 73-81
- 4. (Less) = ≤ 72

This study obtained an average value post-test of 81.67 and an average score of UTS of 71.83. So that the average value obtained from the two values is 76.75, which is based on the reference to the assessment criteria above, including the excellent category, based on the initial descriptive test analysis, student achievement before using the Cooperative Learning Method Model *Make a Match* can be seen in the following table:

Table 3. Statistics Student Mastery Score before the Cooperative Learning Method Model *Make a Match*.

Statistics	Value Statistics
Subject	40
Ideal Score	10
Maximum Score	8.5
Minimum Score	6.5
Range Score	2
Average Score	7.48

Table 3 shows that the average score of PAI learning achievement before using the Cooperative Learning Method *Make a Match* is 7.48 out of an ideal score of 10. 13 students complete 13 or only 37.8% of the total number of students, while 27 who do not complete 27 people or 62.2% of the total number of students. The maximum score obtained by students on the initial test is 8.5, and the minimum score obtained by students is 6.5. Suppose the students 'ability to solve the questions on the initial test is analyzed. The percentage of students' mastery learning on the initial test can be seen in the following table.

Table 4. Students' Completion of Learning on the Preliminary Tests before Applying the Cooperative Learning Method Model *Make a Match*.

Score	Frequency	Percentage	Category
0 <x 7.9<="" <="" td=""><td>27</td><td>67.5%</td><td>Not Completed</td></x>	27	67.5%	Not Completed
8 <x<10< td=""><td>13</td><td>32.5%</td><td>Completely</td></x<10<>	13	32.5%	Completely

The table above shows that the percentage of students' completeness was 32.5% in the initial test, and 13 of 40 students were included in the complete category. 67.5%, i.e. 27 out of 40 students, were included in the incomplete category. Categories of student learning outcomes before applying the Cooperative Learning Method Model *Make a Match* can be seen in the following table

Table 5. Categories of Student Learning Achievement before Applying the Cooperative Learning Method Model *Make a Match*.

Score	Frequency	Description
0-5.4	0	Very Low
5.5-6.4	0	Low
6.5-7.9	27	Medium
8.0-8.9	13	High
9.0-10	0	Very High

From the above table, it can be seen that based on the results of the pretest, the PAI student achievement category is no students in the deficient category, there are no students in the low category, 27 students in the medium category, 13 students in the high category, and no students who reach very high category. From the above calculation, it is obtained count = 29.82 and table: $\alpha = 0.05$ and DB = n-1 = 30 - 1 = 29 that is 2.045. Then arithmetic \geq table shows the influence of making a matching technique on student learning outcomes at SMPN 2 Telukjambe Barat. This is following the discussion in CHAPTER II that the make a matching technique has many advantages, namely giving a considerable influence on students' souls to

do positive actions and be progressive and can be a motivator for other students to follow who have obtained praise from his teachers, both in behaviour, manners or even enthusiasm and motivation in doing better.

This process has a substantial contribution to facilitating the achievement of educational goals. Seeing the advantages of *making a match* above, the learning technique is essential because it can lead to student motivation and affect positive behaviour in student life, especially in improving student learning outcomes. Besides, *making a match* or punishment also has the advantage that *making a match* will improve students' mistakes; students no longer make the same mistakes and feel his actions so that he will respect himself. Make a matching technique as a form of negative reinforcement. If given appropriately and wisely can be a motivational tool for students to learn so that student learning outcomes can improve. Based on the advantages of reward and punishment, the learning process will run pleasant. Thus, this will affect the motivation and student learning outcomes. Because the make a matching technique will increase the enthusiasm of student learning so that in every learning that is done, the situation will be full of motivation and its impact on student learning outcomes as expected.

Based on the study results, it was found that the cooperative learning model of making a match type was able to improve the achievement of class VIII students at SMPN 2 Telukjambe. This model can suppress the level of boredom of students in learning and change the mindset of students that PAI is a fun learning and change student behaviour to be more polite and honest.

In contrast to previous research, for example, research conducted by Dhestha Hazilla Aliputri (Aliputri, 2018) with the title of applying the make a match type of cooperative learning model with the aid of picture cards to improve student learning outcomes, also research from Chomsah Choirotu Hilmaningrum, Tri Murwaningsih, Andre Novie Rahmanto (Chomsah Choirotu Hilmaningrum, Tri Murwaningsih, 2008) with the title Application of the Make Match learning method. To improve learning outcomes of the principles of office administration. Also, research with the title of applying the make a match type of cooperative learning model to improve social studies learning outcomes written by n. Riyanti and M. Husni Abdullah (Riyanti, 2018). Then the research entitled the make a match type of cooperative learning model to improve student learning outcomes and activities was written by rilda weni (Weni, 2017), as well as the research conducted by tutut rahmawati et al. entitled the implementation of the make a match type cooperative learning model to increase interest and learning achievement. As well as research with the application of the Make A Match Type Cooperative Learning Model to Develop Learning Motivation for Early Childhood Age 7-8

Years at SD Negeri 1 Way Dadi Sukarame Bandar Lampung, which Helda Yati and Neni Mulya researched, this research can open insights about how much influence and its impact on PAI learning (Yeti & Mulya, 2018).

The results of this study contribute to providing effective and efficient model reinforcement in supporting student learning success; also as a recommendation for an effective and efficient learning model in improving student achievement that can be applied to all subjects.

C. CONCLUSION

The influence of the make a matching method to increase students' interest in learning in class VIII in junior high school two telukjambe Barat 2018/2019 school year shows the influence of this effect is seen from significant results. This effect can be seen by calculating the results of the X variable scores and Y variables. Through these data, it is known that the study results obtained a value of R = 0.531 with the determination of the remaining deficiency. The rest of these other variables indicate that the implementation of making a matching method in teaching Islamic religious education has a positive influence and significant on students' interest in learning is proven true. The matching method influences students' interest in learning Islamic religious education in junior high school two telukjambe Barat. Student learning achievements in PAI study at SMPN 2 Telukjambe Barat are classified as very high, classified as high because the student report card grades are primarily distributed at 80 (50.8%) and 85 (40.7%). Besides that, students also successfully won achievements in various competitions, such as the PAI calligraphy skills competition at the Karawang district level, quizzes at the junior high school level, the district level speech contest, etc. Through a multiple regression analysis, it was found that there was a significant positive relationship between the effect of using the cooperative learning model make a matching technique on student achievement in learning PAI class VIII at SMPN 2 Telukjambe Barat.

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E. AUTHOR CONTRIBUTION STATEMENT

Amirudin Coordinates all activities, namely operational preparation. Responsible for interview and observation activities. Coordinate Data Collection and Compilation of Reports; Iqbal Amar Muzaki Assists in Operational Preparation, Responsible for interviews and observations.

REFERENCES

- Aliputri, D. H. (2018). Penerapan Model Pembelajaran Kooperatif Tipe Make A Match Berbantuan Kartu Bergambar Untuk Meningkatkan Hasil Belajar Siswa. *Jurnal Bidang Pendidikan Dasar*, 2(1A), 70–77. https://doi.org/10.21067/jbpd.v2i1a.2351
- Amirudin, A., Mukhtar, U., & Muzaki, I. (2020). *The Formulation Of Management Standard For Karawang Kota Santri Program*. https://doi.org/10.4108/eai.30-9-2019.2291128
- Amirudin, A., & Muzaki, I. (2019a). Rendering Learning Approach With Islamic Religious Education Subjects and Students Accounting XI Relationship with Management and Business. https://doi.org/10.4108/eai.17-10-2019.2289728
- Amirudin, A., & Muzaki, I. A. (2019b). Life Skill Education and It'S Implementation in Study Programs Islamic Religious Education. *Jurnal Tarbiyah*, 26(2), 278–293. https://doi.org/10.30829/tar.v26i2.485
- Amirudin, I. (2020). Analysis Of Policy Development Models For Strengthening Character Education Based On Islamic Education Values In The First Middle Education Unit In Karawang District. *Multicultural Education*, 6(5), 15–19. https://doi.org/10.5281/zenodo.4393076
- Amirudin, & Muzaki, I. A. (2021a). *DEMONSTRATION OF EFFECTIVENESS OF IMPLEMENTATION METHOD OF STUDENT LEARNING PRAYERS*. *10*(1), 111–120. https://doi.org/10.29313/tjpi.v10i1.7816
- Amirudin, & Muzaki, I. A. (2021b). *Minimizing Students' Boredom in Learning Islamic Cultural History Using Card Short Method at Madrasah Aliyah Negeri (MAN) I Karawang*. 20(1), 2639–2646. https://doi.org/10.17051/ilkonline.2021.01.296
- Amirudin, Nurlaeli, A., Muzaki, I. A., & Karawang, U. S. (2020). Pengaruh Metode Reward and Punishment Terhadap Hasil Belajar Siswa Pada Bidang Studi Pendidikan Agama

- Islam (Studi Kasus Di SDIT Tahfizh Qur 'an Al-Jabar Karawang). 7(2), 140–149. https://doi.org/10.17509/t.v7i2.26102
- Budianto, A., Amirudin, & Muzaki, I. A. (2020). Peranan Pendidikan Agama Islam dalam Mengembangkan Kecerdasan Spiritual, Emosional, Sosial dan Intelektual Siswa di Sekolah Menengah Pertama (Penelitian di Kelas VIII SMP Islam Telukjambe). *Jurnal Wahana Karya Ilmiah*, 4(1), 487–497.
- Chomsah Choirotu Hilmaningrum, Tri Murwaningsih, A. N. R. (2008). Penerapan Metode Pembelajaran MakeAMatch Untuk Meningkatkan Hasil Belajar Prinsip?Prinsippenyelenggaraan Administrasi Perkantoran. *Journal of Chemical Education*, 85(8), 1090. https://doi.org/10.1021/ed085p1090
- Huda, M. (2011). Cooperative Learning (methods, techniques, structures and application models). Yogyakarta.
- Isjoni. (2011). Cooperative Learning. Jakarta: Rineka Cipta.
- Khaerunnisa, W., Amirudin, Muzaki, I. A., & Moh.Subhan. (2021). MADRASAH SEBAGAI ALTERNATIF PELAKSANAAN PENDIDIKAN ISLAM DALAM PERSEPSI MASYARAKAT (Studi Kasus di DTA Sirojul Falah II, Telukjambe Barat Karawang). 8(2), 164–177.
- Lie, A. (2002). Cooperative Learning: Practicing Cooperative Learning in Classrooms. Jakarta: Grasindo.
- Ningtyas, E., & Wuryani, E. (2017). Penerapan Model Pembelajaran Kooperatif (Cooperative Learning) Tipe Make-a Match Berbantuan Media Komik Interaktif Untuk Meningkatkan Aktivitas Belajar Dan Hasil Belajar Ips. *Jurnal Pendidikan Surya Edukasi*, *3*(1), 66–74.
- Riyanti, N. N. M. H. A. (2018). PENERAPAN MODEL PEMBELAJARAN KOOPERATIF TIPE MAKE A MATCH UNTUK MENINGKATKAN HASIL BELAJAR IPS. *JPGSD*, 6(4), 440–450. https://doi.org/10.47709/educendikia.v1i1.1008
- Sugiyono. (2013). Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, dan R&D. *Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, Dan R&D*.

 https://doi.org/10.1007/s13398-014-0173-7.2
- Sugiyono. (2016). Metode Penelitian Kombinasi (Mix Methode). Bandung: Alfabeta.
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif Dan R&D. Bandung: Alfabeta.
- Suparmi, S. (2013). Pembelajaran Kooperatif dalam Pendidikan Multikultural. *Jurnal Pembangunan Pendidikan: Fondasi Dan Aplikasi*, *1*(1), 108–118. https://doi.org/10.21831/jppfa.v1i1.1055
- Suprijono, A. (2010). Cooperative learning model learning. Jakarta: Bumi Aksara.

- Tambak, S. (2017). Metode Cooperative Learning dalam Pembelajaran Pendidikan Agama Islam. *Al-Hikmah: Jurnal Agama Dan Ilmu Pengetahuan*, *14*(1), 1–17. https://doi.org/10.25299/al-hikmah:jaip.2017.vol14(1).1526
- Weni, R. (2017). Model Cooperative Learning Tipe Make A Match Untuk Meningkatkan Hasil Belajar Dan Aktivitas Siswa. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, *3*(1), 42. https://doi.org/10.29210/02017108