

# Journal of Student-Centered Learning

https://jscl.ibnusantara.com/

E-ISSN: 3063-4873 | DOI: 10.63687/jscl.v2i1.22



# Optimizing Islamic Religious Education Learning Outcomes with the Make a Match Model in Elementary Schools

<sup>®</sup> Yulidar,<sup>a\*</sup> <sup>®</sup> Sitti Mania,<sup>b</sup> <sup>®</sup> Rappe,<sup>c</sup> <sup>®</sup>Lenni Suriyanti,<sup>d</sup> <sup>®</sup> Asyikin,<sup>e</sup>

- <sup>a</sup> SD Negeri 10 Manurunge, Tanete Riattang, Bone, Sulawesi Selatan, Indonesia
- <sup>b</sup> Fakultas Tarbiyah dan Keguruan, UIN Alauddin Makassar, Sulawesi Selatan, Indonesia
- <sup>c</sup> Fakultas Tarbiyah dan Keguruan, UIN Alauddin Makassar, Sulawesi Selatan, Indonesia
- <sup>d</sup> MTs Negeri 7 Bulukumba, Sulawesi Selatan, Indonesia
- <sup>e</sup> MTs Negeri 7 Bulukumba, Sulawesi Selatan, Indonesia

#### **Article Information:**

Received 2024-04-26 Revised 2025-06-02 Published 2025-06-18

**Keywords:** Learning Outcomes, Make A Match, Learning Model, Islamic Religious Education

#### **Abstract**

Islamic Religious Education (PAI) at UPT SD Negeri 10 Manurunge faces challenges in student learning outcomes. To address this issue, this research evaluates the implementation of the Make a Match learning model as a strategy to improve student learning outcomes in PAI subjects. It is hoped that this model will provide an effective solution to improve student learning outcomes at the school. This study is a Classroom Action Research (CAR) that includes the stages of planning, action implementation, observation, and reflection. The research subjects involve grade 1 students at SD Negeri 10 Manurunge. Data collection was done using observation methods and learning outcome tests. The collected data were analyzed descriptively. The results of this study indicate that the implementation of the Make a Match learning model is effective in improving student learning outcomes in PAI for grade 1 students at UPT SD Negeri 10 Manurunge. From cycle I to cycle II, the percentage of students in the very high category increased from 5% to 19%, and the high category increased from 33% to 57%. The average student score increased from 68 to 82, with learning completeness improving from 66% to 100%. This improvement shows that the Make a Match model creates a more interactive and enjoyable learning environment. This study provides significant contributions to the development of learning methods, particularly the Make a Match model, to improve student learning outcomes in Islamic Religious Education. The findings suggest that the use of this model can create a more interactive and enjoyable learning process, which in turn enhances student motivation and engagement. Furthermore, this research offers insights for educators to implement innovative methods that align with students' needs.



Copyright: This work is licensed under

a Attribution-ShareAlike 4.0 International (CC BY-SA 4.0).

### INTRODUCTION

Islamic Religious Education (PAI) and Character Education play an important role in achieving national education goals by forming individuals who have faith and piety towards God (Basyari & Akil, 2022). PAI is an inseparable component of the national education system, because of its impact on the formation of students' morals and character (Larumunde & Akibun, 2022; Alawiyah et al., 2023). However, the implementation of PAI learning still faces problems, one of which is related to low learning outcomes (Sundusin, 2022). Learning outcomes have substantial

## How to Cite:

Yulidar, Y., Mania, S., Rappe, R., Suriyanti, L., & Asyikin, A. (2025). Optimizing Islamic Religious Education Learning Outcomes with the Make a Match Model in Elementary Schools. *Journal of Student-Centered Learning*, *2*(1), 13-24. https://doi.org/10.63687/jscl.v2i1.22

\*Corresponding Author: Yulidar, SD Negeri 10 Manurunge, Tanete Riattang, Bone Regency, South Sulawesi, Indonesia, email: yulidar8787@gmail.com

importance both in the form of direct measurable achievements and in their relevance to everyday life (Hasani et al., 2023). Based on observations at UPT SD Negeri 10 Manurunge, the majority of students in grade 1 have not achieved completion in PAI & BP subjects, which is caused by the lecture method which focuses more on teachers and involves less students. Therefore, the application of the Make a Match learning model is relevant to improving student learning outcomes. This method can increase student involvement and active participation in learning, providing deeper meaning for students (Sulastri, 2020).

In recent years, there has been a trend of research exploring the use of the Make A Match model in learning. Several of these studies include the application of the Make A Match model to improve student learning outcomes, which has been found effective by several researchers (Noveda, 2022; Larumunde & Akibun, 2022; Jufri, 2021; Arbiah, 2022; Azizah, 2022; Sulastri, 2020; Laila et al., 2023; Mubayyinah et al., 2023; Ismianti, 2023). In addition, this model has also been proven to increase student learning activity, as reported by Dede (2020), Aisyah (2023), and Umroh (2023). The application of the Make A Match model also contributes to increasing student learning motivation, as explained by Tirwan (2021). Other studies show that this model is able to increase student learning interest, as expressed by Fauzi et al. (2021) and Apriani (2022). These findings provide a strong basis for considering the application of the Make A Match model as a solution to improve various aspects of learning, including learning outcomes, activeness, motivation, and student learning interests in various educational contexts.

The specific objective of this study is to fill the gap that has not been studied previously regarding the use of the Make A Match learning model in improving student learning outcomes, especially in Islamic Religious Education (PAI) subjects in elementary schools. Although many previous studies have examined various aspects such as learning outcomes, activeness, motivation, and interest in learning through the Make a Match model, there has been no research that focuses on the application of this model in the context of PAI at the elementary school level. Therefore, this study aims to explore the effectiveness of the Make a Match model in improving PAI student learning outcomes at UPT SD Negeri 10 Manurunge. Thus, this study is expected to provide a significant contribution in expanding the understanding of the use of the Make a Match learning model in the context of Islamic Religious Education at the elementary school level, as well as providing new insights for educators in improving the quality of PAI learning through a more interactive and enjoyable approach.

The hypothesis of this study focuses on the application of the Make a Match learning model in improving student learning outcomes in Islamic Religious Education (PAI) subjects at UPT SD Negeri 10 Manurunge. Based on existing learning theories and findings from previous studies that support the effectiveness of this model in various learning contexts, the hypothesis proposed is that the application of the Make a Match model consistently and in a targeted manner in each learning session will result in a significant increase in students' understanding of PAI materials. This increase will ultimately be reflected in better student learning achievement. In other words, the hypothesis of this study proposes that the implementation of the Make a Match learning model systematically and in a structured manner will improve students' academic achievement in PAI subjects at UPT SD Negeri 10 Manurunge. This study aims to test and prove the truth of the hypothesis.

## **METODE**

The unit of analysis in this study is the learning process of Islamic Religious Education (PAI) at UPT SD Negeri 10 Manurunge. The main focus of this research is on the interaction between the teacher, students, and the lesson material in the context of the application of the Make a Match learning model (Vermunt et al., 2023). This model was chosen because it is believed to improve student learning outcomes by actively involving them in the learning process through enjoyable and competitive games (Nadeem et al., 2023). The interactions that take place in the classroom, both between the teacher and students and among students themselves, are crucial points in this research to observe the impact of the Make a Match model on learning outcomes. This study aims to explore

the extent to which this model can enhance students' understanding of the PAI material being taught.

The research design used in this study is Classroom Action Research (CAR) (Puspita et al., 2024). CAR was selected due to its flexibility, allowing for direct observation and continuous improvements throughout the learning process. As explained by Nurulanningsih (2023), CAR enables the researcher to actively participate in the learning process, evaluate outcomes, and make adjustments during the learning cycles. The researcher will apply the Make a Match model in each cycle, aiming for positive changes in student learning outcomes (Lynch, 2024). The study follows a cyclical approach consisting of planning, action, observation, and reflection. This process allows the researcher to examine how effectively the Make a Match model can be applied in the classroom (Altrichter et al., 2002). By using this approach, the research intends to create an environment where continuous improvements can be made, ultimately enhancing the overall quality of learning.

The data sources used in this study include direct observations of the classroom learning process, teacher observation notes, and student learning test results (Schildkamp et al., 2020). Data were systematically collected through active participation from both the teacher and students in each stage of the CAR cycle (Granström et al., 2023). The data collection process involved observations to examine classroom interactions and tests to measure students' understanding of the material (Karvonen et al., 2024). All data obtained during the implementation of the Make a Match model will be analyzed to provide a clear picture of its impact on student learning outcomes (Martinez et al., 2016). The data collection process involves collaboration between the teacher and researcher to ensure the accuracy and completeness of the data gathered.

Data analysis in this study is based on observations and evaluations of the learning process carried out by both the teacher and students in the field (Popenoe et al., 2021). The collected data will be processed and analyzed to form meaningful sentences. The analysis method used is descriptive comparative, where the researcher compares quantitative data from the outcomes of Cycle I and Cycle II (Bingham, 2023). This analysis includes identifying changes or differences in student learning outcomes between the two cycles (Darling-Hammond et al., 2023). The researcher will also interpret the findings to provide a clearer picture of the impact of the Make a Match model in improving student learning outcomes (Anderson, 2010). This analysis is expected to offer deeper insights into the effectiveness of this learning model in the context of Islamic Religious Education at the elementary school level (Aljohani, 2023).

## RESULTS AND DISCUSSION

## **Results**

## **Implementation of Cycle I**

The implementation of cycle I is carried out in several stages consisting of the planning stage, action implementation, observation, and reflection stage. Cycle I begins with the planning stage. Preparation for PTK Cycle I involves the preparation of a Teaching Module with clear learning objectives, namely Understanding the Pillars of Islam well. In addition, this study will apply the "Make A Match" learning model in the learning process. By using this learning model, it is expected that learning outcomes can increase significantly. The implementation of the action is carried out through teaching and learning activities, where this activity is adjusted to the Teaching Module which consists of the initial activity stage, core activities, and closing activities.

The next stage of observation is carried out to see and understand the teaching and learning process that occurs when cycle I is taking place. The researcher was observed by colleagues while conducting the research. The teacher observed the researcher in implementing learning by applying the Make A Match model. This aims to improve student learning outcomes in understanding the material Understanding the Pillars of Islam. From observations of the teacher (researcher), it was found that in delivering teaching materials, the teacher (researcher) was able to do this well because he mastered the material being taught. However, in the application of the learning model during the teaching and learning process, there were still shortcomings in giving rewards to students who

answered the teacher's (researcher's) questions correctly. From observations of students, several things were found as follows: some students had difficulty in completing tasks given by the teacher, lack of understanding of the explanation given by the teacher, the results obtained by some students were not optimal, lack of student activity in discussing with group friends, but in general, student activity in participating in the teaching and learning process was quite good.

After the action is carried out, at the end of cycle 1 a final test is given with the aim of evaluating the success of the actions that have been carried out. If students get a score between 70 and 100 according to the criteria for learning objective skills, then it can be considered successful. Based on the examination data of the learning test results, the values obtained are as stated in the following table:

Table 1. Learning Outcomes of Students in Cycle I

Interval	Criteria	Many Students	Percentage (%)	Average
90 - 100	Very high	1	5	
80 - 89	Tall	7	33	
70 - 79	Currently	6	28	68
60 - 69	Low	2	10	
0 - 59	Very Low	5	24	
Amount		21	100	

Based on table 1, there is 1 student (5%) in the very high category, 7 students (33%) in the high category, 6 students (28%) in the medium category, 2 students (10%) in the low category, and 5 students (24%) in the very low category. The average value of student learning outcomes is 68. The percentage of classical student learning completion is 13 students (66%), while students who have not completed it reached 7 students (34%). They have not met the criteria for Classical and Competency Completeness (KKTP) with a value interval of 70-100. This shows the level of classical completeness with the criteria for student learning completion which is relatively low, especially for grade 1 students of UPT SD Negeri 10 Manurunge who have not completed studying the material Chapter 4 Getting to Know the Pillars of Islam in the subject of PAI.

After the first meeting in cycle I, the researcher conducted a reflection on the implementation of the actions in the cycle. This reflection aims to identify the shortcomings in the implementation of cycle I and make it a guideline for the implementation of cycle II. The successes and failures that occurred in the implementation of the actions in cycle I can be described as follows. The research has not been able to optimally carry out learning activities on class 1 material, namely Understanding the Pillars of Islam. Student learning outcomes in cycle I are still low, this can be seen from the average value obtained in the cycle. There are some students who still look confused and have difficulty in understanding the material being studied.

To improve the deficiencies and increase the success of learning cycle I, it is necessary to conduct cycle II. In this second cycle, the researcher will deliver the lesson material more clearly and in detail so that the learning concept taught is clearer and more definite. Learning management will be improved by using better facilities and infrastructure, as well as more concrete explanations. The researcher will also direct students to be more careful in implementing the learning of the material Getting to Know the Pillars of Islam by implementing the Make A Match learning model, so that they can avoid the same mistakes as in cycle I.

# Implementation of Cycle II

The implementation of cycle I was carried out in several stages consisting of the planning stage, action implementation, observation, and reflection stage. In the action planning stage in cycle II, several steps have been carefully arranged. First, the Independent Curriculum Teaching Module was prepared to provide structured guidance for the learning process. The second step was to determine the teaching material for cycle II, which this time will focus on understanding the two sentences of the Creed. Then, the learning plan was designed using the Make A Match model so that the learning process can be more interactive and effective. To monitor the effectiveness of the

implementation of the learning model, an observation sheet was prepared to see the teaching and learning situation in more detail. Finally, a research instrument was prepared to collect relevant data that will be used in further analysis and research. With these steps, it is hoped that the implementation of cycle II can provide better results and support the achievement of the desired learning objectives.

Description of the actions taken in the context of implementing this PTK are in accordance with the focus set, namely the application of the Make A Match learning model. In cycle II, the core steps taken include several essential processes. First of all, the teacher clearly conveys the learning objectives and motivates students to be actively involved in the learning process. Furthermore, information is presented comprehensively to ensure a good understanding of the material being taught. The formation of groups of four students is carried out to increase social and collaborative interaction in learning. The teacher is also responsible for guiding these groups in the learning and working process, providing direction and support as needed. Evaluations are carried out regularly to monitor student learning progress. Finally, awards are given as a form of appreciation for student achievement and effort in learning. By implementing these steps, it is hoped that learning can be more dynamic, effective, and encourage the achievement of optimal learning outcomes for students.

Next, the observation stage was carried out to see and find out the teaching and learning process that occurred during cycle II. The results of observations that varied from colleagues in the teaching and learning activities (KBM) that had been planned in cycle II at the first meeting were as follows: The teacher entered the class on time and seriously explained the learning objectives to the students. Furthermore, the teacher effectively explored the initial understanding of the students and motivated them to be actively involved in the learning process. The learning material was delivered clearly using a projector, and the teacher organized the students into small groups consisting of 4-5 students. Furthermore, the teacher provided guidance to the students in compiling two-sentence word cards of the Syahadat and supported them in the presentation activities of the results of their group work. Awards were given to the group that showed the best results, as well as to the group that had performed well. After that, the teacher and students made conclusions about the learning material before providing reflections on the learning process. Follow-up was also given to ensure students' understanding of the material. All of the stages above that were planned were successfully implemented according to expectations, indicating the success of the implementation of KBM in cycle II at the first meeting.

After the action is carried out, at the end of cycle 1 a final test is given with the aim of evaluating the success of the actions that have been carried out. The learning outcomes of students are obtained from the LKPD group assignment scores, which are assessed after following the teaching and learning process through the application of the Make A Match learning model. In cycle II, these scores are then averaged. If students get a score between 70 and 100 according to the criteria for learning objective skills, then they can be considered successful. Based on the examination data of the learning test results, the scores obtained are as stated in the following table:

Table 2. Learning Outcomes of Students in Cycle II

Tuble 2. Eeur ming o decomes of students in eyele if						
Interval	Criteria	Many Students	Percentage (%)	Average		
90 - 100	Very high	4	19			
80 - 89	Tall	12	57			
70 - 79	Currently	5	24	82		
60 - 69	Low	0	0			
0 - 59	Very Low	0	0			
Amount		21	100			

Based on table 2, there are 4 students (19%) in the very high category, 12 students (57%) in the high category, 5 students (24%) in the medium category, 0 students (0%) in the low category, and 0 students (0%) in the very low category. The average value of student learning outcomes is 82. The percentage of student learning completion classically has reached 100% or all students have met the Classical Completion Criteria and Competencies (KKTP) with a value interval of 70-100. This shows an increase in learning outcomes from cycle I to cycle II in grade 1 students of UPT SD Negeri 10 Manurunge.

After the first meeting in cycle I, the researcher conducted a reflection on the implementation of the actions in the cycle. This reflection aims to identify the shortcomings in the implementation of cycle I and make it a guideline for the implementation of cycle II. The successes and failures that occurred in the implementation of the actions in cycle I can be described as follows. The research has not been able to optimally carry out learning activities on class 1 material, namely Understanding the Pillars of Islam. Student learning outcomes in cycle I are still low, this can be seen from the average value obtained in the cycle. There are some students who still look confused and have difficulty in understanding the material being studied.

In cycle II, there was a development in cooperation between group members, although not all group members were active in working together. In this cycle, students who had more abilities were given the opportunity to guide their friends who still did not understand the material presented. Meanwhile, for students who were not active, they were given the opportunity to take turns in working on the tasks that had been given. This was evident from the courage of several groups in presenting the results of their discussions. With the help of peers, students' self-confidence increased, as seen from the changes in students who were initially less active to being more active in working on LKPD questions. This was due to the ability of peers to eliminate awkwardness. The language used by peers was easier to understand, and there was no reluctance, inferiority, or shame in asking or asking for help. Furthermore, the implementation of the teaching and learning process through the Make A Match learning model in the classroom went according to the plan that had been prepared for learning.

#### Discussion

# Improving Learning Outcomes Through the Implementation of the Make A Match Model

The implementation of the Make a Match learning model in the teaching and learning process has proven to have a positive impact on improving student learning outcomes. This research was applied at UPT SD Negeri 10 Manurunge in the Islamic Religious Education (PAI) subject for grade 1. The research findings show that students who previously struggled to understand the material showed significant progress after the application of the Make a Match method (Felder & Brent, 2005). This model integrates enjoyable game elements, where students actively engage in matching cards related to the lesson content (Sinaga et al., 2023). This approach creates a more interactive and engaging learning atmosphere, which makes it easier for students to understand and remember the material. This is in line with the findings of Lodge et al. (2018), which show that the Make a Match model is effective in improving student learning outcomes, especially in PAI lessons. In this way, students are more motivated and actively involved in the learning process.

Based on the results of Cycle II, 4 students (19%) were categorized as very high, 12 students (57%) as high, 5 students (24%) as medium, and no students were in the low or very low categories. The average student learning outcome score was 82, with a classical learning completeness rate of 100%, meaning all students met the Classical and Competency Completion Criteria (KKTP) with a score range of 70-100. According to Badara et al. (2024), this shows a significant improvement in student learning outcomes from Cycle I to Cycle II in grade 1 at UPT SD Negeri 10 Manurunge. The application of the Make a Match model has proven to be effective in improving student learning outcomes, as reflected in the increase in scores and learning completeness (Suciani et al., 2022). With this model, students are more active in learning and achieve better results in line with the established criteria.

The implementation of the Make a Match learning model successfully improved the learning outcomes of grade 1 students at UPT SD Negeri 10 Manurunge. This finding is supported by previous research conducted by Jufri (2021), Larumunde & Akibun (2022), Laila et al. (2023), and Ismianti (2023), which show that the Make a Match model is effective in improving student learning outcomes, especially in Islamic Religious Education. This model encourages students to

learn interactively through games, making Islamic Education more engaging and helping students better understand the material. This is in line with the findings of Sulastri (2020), who stated that this method accelerates students' understanding of the material being taught. Overall, the Make a Match model has proven to significantly improve student learning outcomes, making it an effective approach to engage students and enhance their academic performance.

# The Importance of Innovative Approaches and a Fun Learning Environment

The findings suggest that to achieve optimal learning outcomes, educators must adopt teaching approaches that align with the needs of their students (Iversen et al., 2015; Aas, 2019). Every student has different learning styles, and a flexible approach tailored to individual characteristics can help improve students' understanding and engagement in the learning process (El-Sabagh, 2021). Innovative teaching models, such as Make A Match, are highly effective in addressing the diverse learning styles of students because they incorporate enjoyable game elements (Gligorea et al., 2023). This model allows students to actively engage with the material through interaction, rather than passively receiving information (Martin-Alguacil et al., 2024). Therefore, educators need to understand and adapt their teaching methods to accommodate various learning styles, increase student participation, and maximize the achievement of desired learning outcomes.

The interaction between teachers and students is a crucial factor in creating effective learning. The teacher plays not only the role of delivering content but also as a facilitator who provides support and guidance throughout the learning process (Rutten et al., 2024). Improving the quality of this interaction can encourage students to participate more actively in learning activities and strengthen their understanding of the material being taught (Mebert et al., 2020). In the context of the Make A Match model, this interaction is essential because the model emphasizes collaboration and discussion among students. Teachers must be able to provide constructive feedback and create an atmosphere that supports positive interactions between students (Van den Bergh et al., 2014). With the right guidance, students will feel more confident to express their opinions and tackle learning challenges in a more creative and productive manner (Scott-Barrett et al., 2023). This not only enriches students' learning experiences but also enhances their social skills, which are important for their academic and personal development.

Creating a conducive and enjoyable learning environment is crucial in enhancing student motivation (Rusticus et al., 2023). When students feel comfortable and engaged with the learning atmosphere, they are more likely to be motivated to learn and achieve better results. The Make A Match model, which integrates game elements, can create a dynamic and engaging environment for students (Garris et al., 2002). This environment encourages students to participate more actively, collaborate with classmates, and approach the material in a more creative way (Zhou et al., 2024). Additionally, a fun learning environment helps reduce anxiety that students may experience, allowing them to focus more and enjoy the learning process (Liu & Hong, 2021). By creating an enjoyable environment, educators can significantly increase student engagement, encouraging them to be more open, confident, and interested in the subject (Sahin, 2021). This not only boosts motivation but also ensures that learning can proceed effectively and efficiently.

## **CONCLUSION**

The implementation of the Make A Match learning model has proven effective in improving student learning outcomes, especially in the subject of Islamic Religious Education (PAI) in class 1 of UPT SD Negeri 10 Manurunge. The results of the study showed a significant increase from cycle I to cycle II, where the percentage of students in the very high category increased from 5% to 19%, and the high category increased from 33% to 57%. The number of students in the low and very low categories also decreased. The average value of student learning outcomes increased from 68 in cycle I to 82 in cycle II. In addition, classical learning completeness experienced a striking improvement, with only 66% of students completing cycle I, while in cycle II, 100% of students achieved learning completeness according to the KKTP criteria. This significant increase shows that the Make A Match model has succeeded in improving student learning outcomes and creating a more interactive and enjoyable learning environment.

The results of this study have important theoretical implications in the field of education, indicating that the application of the Make A Match learning model is effective in improving student learning achievement. These findings support learning theories that emphasize the importance of social interaction, collaboration, and active involvement of students in the learning process. These implications can encourage the development of more innovative learning concepts and strategies. Practically, these findings recommend the integration of the Make A Match model into the curriculum and learning practices in schools through teacher training to design collaboration-based learning. In addition, it is important for schools to provide facilities and infrastructure that support the implementation of this model, such as technological devices, relevant teaching materials, and adequate classrooms. Thus, the application of this model is expected to significantly improve the effectiveness of learning and student learning outcomes.

The limitations of this study are important to identify areas for improvement in further research. One of the main limitations is the limited sample size, as this study only involved one school. This may affect the generalizability of the findings to a wider student population. For further research, it is recommended to involve more schools or classes so that the results of the study are more representative of the variety of students and learning contexts. In addition, comparative studies between various learning models can provide deeper insights into the advantages and suitability of the models to different learning needs. Further research can also examine other factors that influence learning outcomes, such as motivation, learning styles, and environmental factors. Thus, future research is expected to provide greater contributions to the development of sustainable learning theory and practice.

## THANK-YOU NOTE

We would like to express our sincere gratitude to UPT SD Negeri 10 Manurunge for the support and cooperation that has been given during the implementation of this research. UPT SD Negeri 10 Manurunge has given permission and provided the necessary facilities and infrastructure so that this research can be carried out smoothly. We would also like to express our appreciation for the direction and moral support given during the research process. The trust and assistance given by UPT SD Negeri 10 Manurunge have been the main driving force for the smooth running of this research. Hopefully the results of this research can provide good benefits for the progress of UPT SD Negeri 10 Manurunge and the world of education in general.

## **AUTHOR CONTRIBUTION STATEMENT**

The Author Contribution Statement can be several sentences long and should briefly describe the work of each author. Please list only 2 initials for each author, without periods, but separated by commas (e.g. ZA, KU). In the case of two authors with the same initials, please use the middle initial to distinguish between them (e.g. REW, RSW). The Author Contribution Statement should be included at the end of the manuscript before the References.

## REFERENCES

- Aas, H. K. (2019). Teachers Talk On Student Needs: Exploring How Teacher Beliefs Challenge Inclusive Education In A Norwegian Context. *International Journal of Inclusive Education*, 26(5), 495–509. https://doi.org/10.1080/13603116.2019.1698065
- Aisyah, N. (2023). Meningkatkan Aktivitas Dan Hasil Belajar Materi Sifat-Sifat Wajib Bagi Allah Dengan Metode Make A Match. *EDUCATIONAL: Jurnal Inovasi Pendidikan & Pengajaran,* 3(1), 84–93. https://doi.org/10.51878/educational.v3i1.2063
- Alawiyah, A., Sukron, J., & Firdaus, M. A. (2023). Penerapan Model Pembelajaran Kooperatif Times Games Tournament untuk Meningkatkan Keaktifan Belajar Siswa pada Pembelajaran

- Pendidikan Agama Islam. Fitrah: Journal of Islamic Education, 4(1), 69–82. https://doi.org/10.53802/fitrah.v4i1.188
- Aljohani, A. (2023). Predictive Analytics and Machine Learning for Real-Time Supply Chain Risk Mitigation and Agility. Sustainability, 15(20), 15088. https://doi.org/10.3390/su152015088
- Altrichter, H., Kemmis, S., McTaggart, R., & Zuber-Skerritt, O. (2002). The concept of action research. Learning Organization, 9(3),125–131. The https://doi.org/10.1108/09696470210428840
- Anderson C. (2010). Presenting And Evaluating Qualitative Research. American journal of pharmaceutical education, 74(8), 141. https://doi.org/10.5688/aj7408141
- Apriani, A. (2022). Penerapan Model Pembelajaran Make A Match terhadap Minat dan Hasil Belajar Siswa pada Pembelajaran PAI di MI Najahiyah Palembang. Jurnal Pendidikan *Tambusai*, 6(2), 14985–14997. https://doi.org/10.31004/jptam.v6i2.4779
- Arbiah. (2022). Penerapan strategi Make a Match untuk meningkatkan hasil belajar siswa kelas IV Pendidikan Agama Islam. Fakultas Tarbiyah Dan Ilmu Keguruan (FTIK) IAIN Palangka Raya, 2, 1–11.
- Azizah, Z. N. (2022). Penerapan Model Pembelajaran Make A Match Berbantu Media Kartu Dalam Meningkatkan Hasil Belajar Mata Pelajaran Pendidikan Agama Islam di SDN 2 Lambu Jurnal Pendidikan Profesi Guru Islam, 191-198. Kibang. Agama 2(2),http://202.162.210.184/index.php/guau/article/view/224
- Badara, A., Marwati, M., & Sulfiah, S. (2024). Improving Elementary School Student Learning Outcomes Through Teacher Professional Development. International Journal of Educational Research Excellence (IJERE), 3(1), 117–125. https://doi.org/10.55299/ijere.v3i1.798
- Basyari, M. H., & Akil. (2022). Peran Dan Fungsi Pendidikan Islam Dalam Masyarakat. Risalah, Jurnal Pendidikan Dan Studi Islam, 8(2), 865-879. https://doi.org/10.31943/jurnalrisalah.v8i2.292
- Bingham, A. J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. International Journal of Qualitative Methods, https://doi.org/10.1177/16094069231183620
- Darling-Hammond, L., Schachner, A. C. W., Wojcikiewicz, S. K., & Flook, L. (2023). Educating Teachers To Enact The Science Of Learning And Development. Applied Developmental Science, 28(1), 1–21. https://doi.org/10.1080/10888691.2022.2130506
- Dede. (2020). Penerapan Metode Pembelajaran Kooperatif Tipe Make A Match Untuk Meningkatkan Keaktifan Dan Hasil Belajar Pendidikan Agama Islam. GHAITSA: Islamic Journal, 1(3),260–270. https://www.siducat.org/index.php/ghaitsa/article/view/110
- El-Sabagh, H. A. (2021). Adaptive E-Learning Environment Based On Learning Styles And Its Impact On Development Students' Engagement. Int J Educ Technol High Educ 18, 53. https://doi.org/10.1186/s41239-021-00289-4
- Fauzi, A., Muttaqin, A. I., & Aminah, S. (2021). Pengaruh Penggunaan Metode Make A Match Terhadap Minat Belajar Siswa Mata Pelajaran Al-Qur'an Hadits materi Tajwid kelas V di SD Islam Kebunrejo Genteng Banyuwangi. International Journal of Educational Resources, 01(05). https://doi.org/10.59689/incare.v1i5.181
- Felder, R. M., & Brent, R. (2005), Understanding Student Differences. Journal of Engineering Education, 94: 57-72. https://doi.org/10.1002/j.2168-9830.2005.tb00829.x
- Garris, R., Ahlers, R., & Driskell, J. E. (2002). Games, Motivation, and Learning: A Research and Practice Model. Simulation & Gaming, 33(4),441-467. https://doi.org/10.1177/1046878102238607

- Gligorea, I., Cioca, M., Oancea, R., Gorski, A.-T., Gorski, H., & Tudorache, P. (2023). Adaptive Learning Using Artificial Intelligence in e-Learning: A Literature Review. *Education Sciences*, *13*(12), 1216. https://doi.org/10.3390/educsci13121216
- Granström, M., Kikas, E., & Eisenschmidt, E. (2023). Classroom Observations: How Do Teachers Teach Learning Strategies? *Frontiers in Education*, 8, 1119519. https://doi.org/10.3389/feduc.2023.1119519
- Hasani, M., Helandri, J., & Yunus, M. (2023). Meningkatkan Hasil Belajar PAI Melalui Model Pembelajaran Teams Games Tournament (TGT) Pada Siswa Kelas XI Di SMA Ar-Risalah Kota Lubuklinggau. *Edification Journal*, 5(2), 249–270. https://doi.org/10.37092/ej.v5i2.491
- Ismianti, S. (2023). Meningkatkan Hasil Belajar Siswa Kelas VIIIB Pada Mata Pelajaran PAI (Pendidikan Agama Islam) Melalui Metode Make A Match Di SMPN 11 Muaro Jambi. *Jurnal Ilmiah Dikdaya*, 13(1), 32. https://doi.org/10.33087/dikdaya.v13i1.389
- Iversen, A.-M., Pedersen, A. S., Krogh, L., & Jensen, A. A. (2015). Learning, Leading, and Letting Go of Control: Learner-Led Approaches in Education. *SAGE Open*, 5(4). https://doi.org/10.1177/2158244015608423
- Jufri, I. (2021). Model Pembelajaran Kooperatif Tipe Make A Match Untuk Meningkatkan Hasil Belajar Pendidikan Agama Islam. *IQRO: Journal of Islamic Education*, 4(1), 61–70. https://doi.org/10.24256/iqro.v4i1.1868
- Karvonen, M., Ruhter, L., & Clark, A. K. (2024). Data to Inform Academic Instruction for Students with Extensive Support Needs: Availability, Use, and Perceptions. *Exceptionality*, 32(3), 183–202. https://doi.org/10.1080/09362835.2024.2313748
- Laila, R., Sesmiarni, Z., Charles, & Wati, S. (2023). Pengaruh Penerapan Model Pembelajaran Kooperatif Tipe Make A Match Terhadap Hasil Belajar Siswa Kelas X Pada Mata Pelajaran Pendidikan Agama Islam Di SMAN 1 Sungai Puar. *ALFIHRIS: Jurnal Inspirasi Pendidikan, 1*(2), 178–197. https://doi.org/10.59246/alfihris.v1i2.217
- Larumunde, A., & Akibun, S. (2022). Meningkatkan Hasil Belajar Siswa Pada Materi Puasa Ramadhan Melalui Metode Make A Match Pada Mata Pelajaran Pendidikan Agama Islam Dan Budi Pekerti. *Al-Muhtarif: Jurnal Pendidikan Agama Islam, 1*(1), 145–157. https://ejournal.iaingorontalo.ac.id/index.php/almuhtarif/article/view/509
- Liu, M., & Hong, M. (2021). English Language Classroom Anxiety and Enjoyment in Chinese Young Learners. SAGE Open, 11(4). https://doi.org/10.1177/21582440211047550
- Lodge, J. M., Kennedy, G., Lockyer, L., Arguel, A., & Pachman, M. (2018). Understanding Difficulties And Resulting Confusion In Learning: An Integrative Review. *Frontiers in Education*, *3*, 49. https://doi.org/10.3389/feduc.2018.00049
- Lynch, K. (2024). The Application of Behavioral Economics to Teacher Professional Development. *Educational Researcher*, *53(9)*, 508-520. https://doi.org/10.3102/0013189X241282296
- Martin-Alguacil, N., Avedillo, L., Mota-Blanco, R., & Gallego-Agundez, M. (2024). Student-Centered Learning: Some Issues and Recommendations for Its Implementation in a Traditional Curriculum Setting in Health Sciences. *Education Sciences*, *14*(11), 1179. https://doi.org/10.3390/educsci14111179
- Martinez, F., Taut, S., & Schaaf, K. (2016). Classroom Observation For Evaluating And Improving Teaching: An International Perspective. *Studies in Educational Evaluation*, 49, 15–29. https://doi.org/10.1016/j.stueduc.2016.03.002
- Mebert, L., Barnes, R., Dalley, J., Gawarecki, L., Ghazi-Nezami, F., Shafer, G., ... Yezbick, E. (2020). Fostering Student Engagement Through A Real-World, Collaborative Project Across Disciplines And Institutions. *Higher Education Pedagogies*, 5(1), 30–51. https://doi.org/10.1080/23752696.2020.1750306

- Mubayyinah, L., Muslim, M., & Hasan, N. (2023). Pengaruh Model Pembelajaran Make A Match Terhadap Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam kelas XI di **SMAN** Malang. VICRATINA: Jurnal Pendidikan Islam. 8(6). http://riset.unisma.ac.id/index.php/fai/index
- Nadeem, M., Oroszlanyova, M., & Farag, W. (2023). Effect of Digital Game-Based Learning on Engagement and Motivation. Computers, 177. https://doi.org/10.3390/computers12090177
- Noveda, Y. (2022). Pengaruh Model Pembelajaran Make A Match Terhadap Hasil Belajar Siswa Pendidikan Islam. E-Tecch, Pelajaran Agama https://doi.org/10.1007/XXXXXXX-XX-0000-00
- Nurulanningsih. (2023). Penelitian Tindakan Kelas (Ptk) Sebagai Pengembangan Profesi Guru Indonesia. JURNAL*DIDACTIQUE* Bahasa Indonesia, 4(1),https://doi.org/10.52333/didactique.v4i1.50
- Popenoe, R., Langius-Eklöf, A., Stenwall, E., & Jervaeus, A. (2021). A Practical Guide To Data Analysis In General Literature Reviews. Nordic Journal of Nursing Research, 41(4), 175-186. https://doi.org/10.1177/2057158521991949
- Puspita, G., Hakim, N., & Anggitasari, O. (2024). The Importance of Classroom Action Research (CAR) to Improve Teacher Professionality. Social, Humanities, and Educational Studies (SHES): Conference Series, 7(3). http://dx.doi.org/10.20961/shes.v7i3.91653
- Rusticus, S. A., Pashootan, T., & Mah, A. (2023). What Are The Key Elements Of A Positive Learning Environment? Perspectives From Students And Faculty. Learning Environments Research, 26(1), 161–175. https://doi.org/10.1007/s10984-022-09410-4
- Rutten, L., Butville, D., & Dvir, B. (2024). Leaning Into Difficult Topics: Inquiry Communities as Teacher Professional Learning for Turbulent Times. Journal of Teacher Education, 75(3), 292-304. https://doi.org/10.1177/00224871241231543
- Şahin, A. (2021). Humor Use in School Settings: The Perceptions of Teachers. SAGE Open, 11(2). https://doi.org/10.1177/21582440211022691
- Schildkamp, K., van der Kleij, F. M., Heitink, M. C., Kippers, W. B., & Veldkamp, B. P. (2020). Formative assessment: A systematic review of critical teacher prerequisites for classroom **Educational** Research. practice. International Journal of 103. 101602. https://doi.org/10.1016/j.ijer.2020.101602
- Scott-Barrett, J., Johnston, S.-K., Denton-Calabrese, T., McGrane, J. A., & Hopfenbeck, T. N. (2023). Nurturing curiosity and creativity in primary school classrooms. Teaching and Teacher Education, 135, 104356. https://doi.org/10.1016/j.tate.2023.104356
- Sinaga, B., Sitorus, J., and Situmeang, T. (2023). The Influence Of Students' Problem-Solving Understanding And Results Of Students' Mathematics Learning. Front. Educ. 8:1088556. https://doi.org/10.3389/feduc.2023.1088556
- Suciani, N. K., Sudarma, I. K., & Bayu, G. W. (2022). The Impact of Learning Style and Learning Motivation on Students' Science Learning Outcomes. MIMBAR PGSD Undiksha, 10(2), 395-401. https://doi.org/10.23887/jjpgsd.v10i2.49811
- Sulastri, S. (2020). Upaya Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran Pendidikan Agama Islam Dalam Mengenal Malaikat Dan Tugas-Tugasnya Melalui Metode Make A Match Di SD Negeri Sendang 01 Kecamatan Bringin Kabupaten Semarang Tahun Pelajaran 2017/2018. Janacitta, 3(2). https://doi.org/10.35473/jnctt.v3i2.742
- Sundusin, S. (2022). Peningkatan Hasil Belajar PAI Kelas VI SD Melalui Model Pembelajaran Development, Kooperatif TGT. Jurnal Education and 8(4),56–79. https://doi.org/10.37081/ed.v8i4.2098

- Tirwan, T. (2021). Peningkatan Motivasi Belajar Pengelolaan Haji Melalui Model Make A Match: Studi Terhadap Siswa Kelas X RPL2 SMKN 2 Purawakarta Tahun Pelajaran 2018/2019. Jurnal Syntax Transformation, 2(1). https://doi.org/10.46799/jst.v2i1.208
- Umroh, S. (2023). Penerapan Model Pembelajaran Kooperatif Tipe Make A Match Untuk Meningkatkan Aktivitas Dan Hasil Belajar Siswa Dalam Mata Pelajaran Al-Qur'an Hadits di. Ability: Journal of Education and Social Analysis. 4(1), 15–29. https://doi.org/10.51178/jesa.v4i1.1120
- Van den Bergh, L., Ros, A., & Beijaard, D. (2014). Improving Teacher Feedback During Active Learning: Effects of a Professional Development Program. *American Educational Research Journal*, 51(4), 772-809. https://doi.org/10.3102/0002831214531322
- Vermunt, J. D., Vrikki, M., Dudley, P., & Warwick, P. (2023). Relations Between Teacher Learning Patterns, Personal And Contextual Factors, And Learning Outcomes In The Context Of Lesson Study. *Teaching and Teacher Education*, 133, 104295. https://doi.org/10.1016/j.tate.2023.104295
- Zhou, Q., Zhang, H., & Li, F. (2024). The Impact of Online Interactive Teaching on University Students' Deep Learning—The Perspective of Self-Determination. *Education Sciences*, 14(6), 664. https://doi.org/10.3390/educsci14060664