The Effect of Implementing the Make a Match Model on Enhancing Student Collaboration in Sundanese Script Instruction in Elementary Schools

Siti Windiani[1], Joko Suprapmanto[2]
[1,2]Nusa Putra University, Sukabumi, Indonesia
Email: siti.windiani_sd23@nusaputra.ac.id

Abstract

This study aims to examine the implementation of the "Make a Match" model and its impact on enhancing student collaboration during Sundanese script instruction in elementary school. The study is motivated by the observation that instruction in the Sundanese script often lacks variety and tends to be teacher-centered, which hinders active engagement and interaction among students. The "Make a Match" model is introduced as an alternative pedagogical approach that provides students with opportunities to interact, contribute to one another, and take responsibility for completing tasks collectively. A quantitative approach was employed using a quasi-experimental design, specifically, a non-equivalent control group design. The research sample consisted of 75 fifth-grade students, comprising 42 students from SD Negeri 1 Caringin (the experimental group) and 33 students from SD Negeri 1 Cijengkol (the control group). Data were collected using a student collaboration questionnaire administered before and after the instruction, focusing on three indicators: shared responsibility, reciprocal contribution, and the optimization of each group member's abilities. The research instrument underwent a validation process by experts. A Shapiro-Wilk normality test on the N-Gain data indicated that both the experimental and control groups followed a normal distribution, with significance values of 0.189 and 0.241, respectively. The Wilcoxon test revealed a significant change in collaboration within the experimental group (significance value 0.002 < 0.05), whereas no significant change was observed in the control group (significance value 0.567 > 0.05). Descriptively, the mean N-Gain for the experimental group was 2.8547, which is higher than the 0.4274 recorded for the control group. However, the Mann-Whitney test yielded a significance value of 0.298 (> 0.05), indicating that there is no statistically significant difference in the improvement of collaboration between the two groups. Thus, while the implementation of the "Make a Match" model was followed by a significant change in collaboration within the experimental group, and showed a higher average improvement in descriptive terms, it has not been proven to result in a statistically more significant enhancement in collaboration compared to the instruction provided to the control group.

Keywords: *Make a Match Model, Student Collaboration, Sundanese Script, Elementary School, Learning Model.*

A. INTRODUCTION

Indonesia is a nation with a rich diversity of regional languages. Data indicates that there are approximately 718 such languages spread across various regions of the country. This diversity constitutes a cultural asset that must be safeguarded and preserved. One of these regional languages is Sundanese, spoken by the people in the West Java region. Sundanese serves not only as a means of daily communication but also as an integral part of Sundanese cultural identity, reflecting historical values, cultural heritage, and local wisdom. Therefore, efforts to protect and preserve the

Sundanese language are crucial to ensure that it does not face erosion or lose its function amidst the changing times.

Efforts to preserve regional languages can be carried out through education in schools. Article 1, Paragraph 1 of Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning environment and a learning process that enables students to actively develop their own potential (Habe & Ahiruddin, 2017). This indicates that the learning process should not merely focus on the delivery of subject matter, but also on fostering students' understanding of what they learn, enabling them to develop their thinking skills, personality, and the practical abilities needed for life.

The preservation of regional languages is further supported by West Java Provincial Regulation Number 5 of 2003 concerning the Maintenance of Regional Languages, Literature, and Scripts. This regulation asserts that the regional languages, literature, and scripts of West Java must be maintained, nurtured, and developed as an integral part of the region's cultural wealth. Under this regulation, the local government bears the responsibility of preserving the Sundanese language and script through various initiatives, including their integration into the school curriculum. Through this policy, the teaching of the Sundanese language and script within educational settings is expected to serve as a means to ensure the continuity and preservation of regional culture amidst the changing times. (Jawa Barat, 2014).

Education is a crucial endeavor for developing the potential of learners to the fullest. This aligns with Article 3 of Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, which states that the national education system functions to develop capabilities and shape the character and civilization of a dignified nation, with the ultimate goal of intellectually enriching the nation. Through the educational process, learners are expected to hone their potential, thereby acquiring the knowledge, skills, and positive attitudes necessary for life in society. Therefore, the learning process in schools must be capable of effectively assisting students in gaining a deep understanding of subject matter, which will ultimately lead to optimal learning outcomes (Indonesia, 2003).

To achieve these educational goals, the learning process must be designed in such a way that students not only acquire knowledge but also engage actively in learning activities. This active engagement can be fostered through various activities that encourage interaction among students. Such interaction is an essential part of the learning process, as students interact not only with their teachers but also with their peers to reach learning objectives. One key aspect that can be developed through this interaction is collaboration.

Human beings are both individuals and social beings; throughout their lives, they constantly interact and require cooperation with others—including within the context of education. In the learning process, cooperation is a crucial element, as students frequently encounter tasks and problems that demand collective solutions. Through collaboration, students can exchange information, provide assistance, and

support one another to achieve learning objectives. Therefore, instruction should be designed to be active and participatory, allowing students to gain meaningful learning experiences through engagement and interaction with their peers. This perspective aligns with the ideas of John Dewey, who emphasized the importance of active learning experiences and the direct involvement of learners in the educational process (Rosita & Leonard, 2017).

However, in the practice of teaching the Sundanese script in elementary schools, the current learning activities lack variety, failing to fully assist students in optimally understanding the forms and writing methods of the Sundanese script. This is supported by observations conducted between March 23 and March 27, 2026, during Sundanese script lessons in the fifth-grade class at SD Negeri 1 Cijengkol. The observations revealed a lack of variety in how the material is presented; the teacher tends to simply write the Sundanese script content on the blackboard without incorporating more interactive learning activities. Consequently, students are not actively engaged in the learning process.

Furthermore, an interview with the fifth-grade homeroom teacher on March 26, 2026, revealed that instruction in the Sundanese script is rarely carried out. The teacher noted that this subject is not taught on a regular basis; instead, it is typically introduced only when the school is preparing for competitions related to the Sundanese language and culture.

This situation indicates that the teaching of the Sundanese script in the classroom has not been implemented optimally. Therefore, more varied learning activities are needed to provide students with opportunities to engage actively and interact with their peers throughout the learning process.

Subsequently, on March 26, 2026, the researcher conducted interviews with two students at SD Negeri 1 Cijengkol, identified by the initials M and Z. Based on the interviews, M mentioned that he enjoys all subjects, including Sundanese language. However, instruction in the Sundanese script (*Aksara Sunda*) occurs only on specific occasions. Students participating in Sundanese script competitions receive more intensive training, whereas other students receive only limited instruction; in the classroom, the teacher merely has students copy down information without providing a detailed explanation of the script. M remarked, "It's better for those who join the competitions—they get trained until they truly understand and have memorized the script. It's not like us in the regular class, where we just copy things down and only gain a superficial awareness without really understanding it. Sometimes I even envy those in the competitions; since they've memorized it, they can easily handle lessons and assignments, answering quickly. Meanwhile, we struggle because we don't really grasp the material—it's rarely explained in a way that's easy to understand." (Interview with M, March 26, 2026).

Meanwhile, Z expressed a different perspective. According to the interview, Z finds Sundanese language lessons somewhat boring and unengaging. This is due to the teaching method employed—a lecture-based approach. Furthermore, Z feels disengaged when required to do a significant amount of writing or copying of

material provided by the teacher. Z stated, "I don't really like the subject because there's so much writing involved. Especially when it comes to the Sundanese script—I don't understand it, the explanations are boring, and I just feel unmotivated when I'm told to copy out the Sundanese characters." (Interview with Z, March 26, 2026). These interviews indicate that instruction in the Sundanese script remains largely teacher-centered and lacks variety. This situation highlights the need for implementing instructional models that encourage students to be actively involved, interact with one another, and support each other during the learning process.

Given these issues, the researcher is interested in implementing a learning model that can enhance student collaboration during the study of Sundanese script. Through activities that involve searching for and matching cards in pairs, students are encouraged to interact, communicate, and assist one another in completing learning tasks. By employing an active and engaging learning model, it is expected that students' understanding of Sundanese script will improve, subsequently leading to better learning outcomes.

Based on the aforementioned challenges, the researcher is motivated to conduct a study titled "The Effect of Implementing the 'Make a Match' Model on Improving Understanding and Collaboration in Learning Sundanese Script in Elementary Schools." This research aims to contribute to the development of a more active, engaging, and effective learning process, thereby fostering both student comprehension and collaboration in the study of Sundanese script at the elementary school level.

Previous research indicates that the use of interactive learning models can increase student engagement in the learning process. One such model is the "Make a Match" learning model, developed by Lorna Curran (1994) (Mira Anggela, 2025). This learning model is a form of cooperative learning that involves an activity where students must find the matching pair for a given question card and answer card. Research by Putri and Lena (2023) also indicates that the implementation of the "Make a Match" model can enhance student engagement and learning outcomes—particularly in theme-based instruction that integrates multiple subjects—as students become directly involved in a learning process that is both enjoyable and meaningful (Irwan & Kamarudin, 2021).

Theoretically, this research is grounded in constructivist theory, as developed through the ideas of Jean Piaget and Lev Vygotsky. Constructivist learning theory posits that knowledge is actively constructed by students through their learning experiences and social interactions. Many experts argue that a constructivist approach to learning is more effective at fostering active participation in the classroom compared to the lecture method. (Wijayanti et al., 2025) (Mareza, 2026).

This is directly related to the Make a Match cooperative learning model, in which students are actively engaged in searching for and pairing up cards, while interacting with their peers. Through these activities, students are able to construct an understanding of the Sundanese script in a manner that is active, independent, and meaningful.

Collaboration is a form of social process involving specific activities aimed at achieving a common goal through mutual assistance and an understanding of one another's roles. It entails working together to reach a shared objective. Collaboration involves the division of tasks, where each individual carries out specific duties for which they are responsible, all in service of the collective goal. Collaboration emerges when individuals recognize that they possess sufficient knowledge and self-regulation to pursue shared interests; in this context, the existence of an organized structure serves as a fundamental element of the collaborative process (Cahyaningtyas et al., 2023). Cooperation is a social process carried out collectively to achieve specific goals through mutual assistance, understanding, and a sense of responsibility in the division of tasks.

In the context of learning, cooperation refers to a joint effort among students—whether as individuals or in groups—to attain learning objectives, complete assignments, and solve problems collaboratively. The capacity for cooperation can be understood as the ability of several students to assist one another, fostering a sense of togetherness and cohesion in the pursuit of shared goals (Magta et al., 2019). Collaboration in learning refers to a student's ability to work together with their group through mutual assistance, interaction, and a sense of responsibility in completing tasks or addressing challenges, ensuring that shared goals are effectively achieved.

Collaboration is an individual's capacity to work alongside others to attain agreed-upon objectives. It provides students with opportunities to exchange ideas, learn from one another, and cultivate a collective spirit while completing group assignments. Through collaboration, students are encouraged to assist and support their peers, which can enhance both their understanding of the subject matter and their social skills (Saptriani et al., 2026). Thus, collaboration can be defined as a form of interaction among individuals or groups, carried out collectively to achieve specific goals in an effective and harmonious manner.

According to West (as cited in Fitri et al., 2019), the indicators of cooperation are as follows: 1) shared responsibility in completing tasks, 2) mutual contribution, and 3) the maximization of each team member's individual abilities. Indicators according to Lisanti (Khusna et al., 2020) include: 1) students demonstrating a willingness to assist one another, 2) each student conscientiously carrying out their assigned tasks without relying on other group members, and 3) students collaborating with their group members to complete tasks in their entirety within the allotted time. According to Rekysika (Harlina Ramelan and Dadan Suryana; in Khasanah, 2017), the indicators include: 1) interaction between students and their group members, 2) taking responsibility for individual tasks, and 3) mutual assistance among group members.

B. METHOD

This study employs a quantitative method with a quasi-experimental approach, specifically a Nonequivalent Control Group Design. The research involves two groups: an experimental group, which utilizes the "Make a Match" model, and a control group, which follows conventional instruction. The study population consists

of all fifth-grade elementary school students in the Cikembang cluster for the 2025/2026 academic year, totaling 293 students. A purposive sampling technique was used to select participants based on criteria aligned with the research objectives: 42 fifth-grade students from SD Negeri 1 Caringin were assigned to the experimental group, and 33 fifth-grade students from SD Negeri 1 Cijengkol were assigned to the control group, resulting in a total sample size of 75 students.

Data were collected through observation, interviews, questionnaires, and documentation. Observations were conducted to monitor the implementation of instruction and student activities during the application of the "Make a Match" model. Interviews were held with teachers and students to gather information regarding the teaching of Sundanese script (*Aksara Sunda*) and student engagement in the learning process. A closed-ended questionnaire, utilizing a four-point Likert scale (strongly agree, agree, disagree, and strongly disagree), was used to measure student collaboration based on indicators such as shared responsibility, mutual contribution, and the maximization of individual group members' capabilities. The questionnaire was administered twice, as a pretest (before the intervention) and a posttest (after the intervention) to both the experimental and control groups. Additionally, documentation, including photographs of learning activities, student attendance records, examples of student collaborative work, and instructional materials was used to supplement the research data. The questionnaire data were analyzed quantitatively to assess changes in student collaboration before and after instruction, and to compare the results between the experimental and control groups.

This analysis was based on the measurements taken from both groups to determine the impact of the "Make a Match" model on student collaboration during the study of Sundanese script in an elementary school setting.

C. RESULTS AND DISCUSSION

Based on observation sheets, the implementation of the "Make a Match" model in the experimental group followed a sequence that included card matching, presentations, and lesson summarization. During the card-matching activity, students worked to find the correct matching cards while interacting with their peers to complete the assigned task. Subsequently, in the presentation phase, students displayed their matched cards in front of the class, while in the final stage—lesson summarization—students and the teacher collectively summarized the material covered. This series of activities provided opportunities for students to participate, contribute to one another, and take responsibility for completing tasks throughout the process of learning the Sundanese script. The application of the "Make a Match" model is also discussed in relation to enhancing student collaboration, an aspect analyzed based on the results of questionnaires administered before and after the intervention.

The discussion of the data analysis results in this study aims to examine changes in student collaboration following the implementation of the "Make a Match" model in Sundanese script instruction at the elementary school level, and to compare these results with a control group. The study involved an experimental group of 42

students and a control group of 33 students. Data analysis was conducted using an initial equivalence test, a normality test, descriptive statistical analysis (N-Gain), the Wilcoxon Signed-Ranks test, and the Mann-Whitney U test. These analyses were employed to assess the initial state of student collaboration, changes in scores before and after instruction, and the differences in improvement between the experimental and control groups. The initial equivalence test, performed using the Mann-Whitney U test, yielded a significance value of 0.110. Since this value exceeds the significance threshold of 0.05, there is no statistically significant difference between the pretest scores of the experimental group and the control group. These results indicate that, statistically, there is no significant difference in the students' initial collaboration scores prior to the intervention. Consequently, both groups could be further analyzed to determine the changes in student collaboration scores following the implementation of the instructional model.

The normality test results using the Shapiro-Wilk method show that the pretest and posttest data for the experimental group yielded significance values of 0.197 and 0.102, respectively. Since both values are greater than 0.05, the experimental group's data are considered to be normally distributed. For the control group, the pretest data yielded a significance value of 0.101—indicating a normal distribution—whereas the posttest data yielded a significance value of 0.008, indicating a non-normal distribution. These results demonstrate that not all pretest and posttest data meet the assumption of normality; therefore, the selection of statistical analysis techniques must take into account the characteristics of the data and the objectives of the analysis. Based on the descriptive statistics for the N-Gain, the experimental group (consisting of 42 students) showed a minimum value of -9.92, a maximum value of 14.35, a mean of 2.8547, and a standard deviation of 6.74630. Meanwhile, the control group (consisting of 33 students) showed a minimum value of -15.92, a maximum value of 14.38, a mean of 0.4274, and a standard deviation of 8.83683. These findings indicate that the mean N-Gain for the experimental group is higher than that of the control group. According to the categorization used in this study, the improvement in student cooperation falls into the "moderate" category. Descriptively, these results illustrate that the experimental group achieved a higher average N-Gain compared to the control group.

The normality test results for the N-Gain data show a Shapiro-Wilk significance value of 0.189 for the experimental group and 0.241 for the control group. Since both values are greater than 0.05, the N-Gain data for both groups are considered to be normally distributed. These results indicate that the distribution of the N-Gain data in both groups meets the criteria for normality according to the Shapiro-Wilk test. Subsequently, the difference in the improvement of student cooperation between the two groups was analyzed using statistical testing to determine whether the difference in N-Gain values was statistically significant.

The results of the Wilcoxon Signed-Ranks Test for the experimental group yielded a significance value of 0.002. As this value is less than 0.05, there is a significant difference between the pretest and posttest scores for student cooperation in the

experimental group following the implementation of the "Make a Match" model. This indicates that the student cooperation scores in the experimental group underwent a statistically significant change. Meanwhile, the control group yielded a significance value of 0.567—greater than 0.05—indicating no significant difference between the pretest and posttest scores for student cooperation in that group. Thus, a significant change in scores was observed in the experimental group, whereas the change in the control group was not statistically significant.

The Mann-Whitney U test on the N-Gain data yielded a significance value of 0.298. Since this value is greater than 0.05, there is no statistically significant difference in the improvement of student collaboration between the experimental group and the control group. In other words, although the experimental group achieved a higher mean N-Gain score than the control group, the difference is not statistically significant. This result demonstrates that a difference in mean scores at a descriptive level is not necessarily accompanied by a statistically significant difference.

Overall, the data analysis indicates a significant change in student collaboration scores between the pretest and posttest for the experimental group following the implementation of the "Make a Match" model, whereas the control group showed no statistically significant change. Descriptive statistics for the N-Gain also indicate that the mean for the experimental group was higher than that of the control group, falling into the "moderate improvement" category based on the criteria used in this study. However, the Mann-Whitney U test results reveal that the difference in the improvement of student collaboration between the two groups is not statistically significant. Thus, while this study shows a significant change in student collaboration scores within the experimental group following the application of the "Make a Match" model, it does not demonstrate that the improvement in student collaboration in the experimental group is significantly greater than that in the control group.

D. CONCLUSIONS

Based on the data analysis and discussion regarding the implementation of the "Make a Match" model to enhance student collaboration in learning Sundanese script at the elementary school level, it can be concluded that there was a significant change in the student collaboration scores within the experimental group following the implementation of the model. This is evidenced by the Wilcoxon Signed Ranks test, which yielded a significance value of 0.002—well below the 0.05 threshold. Conversely, the control group showed a significance value of 0.567 (greater than 0.05), indicating no statistically significant change in scores between the pretest and posttest.

Descriptive statistical analysis of the N-Gain scores revealed a mean value of 2.8547 for the experimental group, compared to 0.4274 for the control group. According to the categorization criteria used in this study, the improvement in student collaboration falls into the "moderate" category. Nevertheless, the Mann-Whitney U test applied to the N-Gain scores resulted in a significance value of 0.298—greater than 0.05—indicating that there is no statistically significant difference in the improvement of student collaboration between the experimental group and the control group. Thus,

while the implementation of the "Make a Match" model is associated with a significant change in student collaboration scores within the experimental group, the N-Gain comparison does not provide sufficient statistical evidence to claim that the improvement in student collaboration in the experimental group is significantly greater than that in the control group.

REFERENCES

1. Aeni, I. N., & Ropiah, O. (2026). Pengaruh Model Pembelajaran Index Card Match (ICM) pada Kemampuan Menulis Aksara Sunda di SMA Negeri 1 Garawangi Kelas X. *JURNAL MADINASIKA: Manajemen Pendidikan dan Keguruan*, *7*(2), 321-327.
2. Afa, N. A., & Nugraha, A. (2021) Pengembangan Media Roda Keberuntungan Sebagai Upaya Meningkatkan Motivasi Belajar Siswa Sekolah Dasar. *Prosiding Seminar Nasional Bimbingan dan Konseling Islami, 1*, 1865-1874.
3. Cahyaningtyas, D., Wardani, N. S., & Yudarasa, N. S. (2023). Upaya peningkatan hasil belajar dan sikap kerjasama siswa melalui penerapan discovery learning. Scholaria: *Jurnal Pendidikan dan Kebudayaan, 13*(1), 59–67. https://doi.org/10.24246/j.js.2023.v13.i1.p59-67
4. Fatah, H. (2020). Analisis pengaruh aplikasi pembelajaran aksara Sunda terhadap pemahaman siswa dengan metode TAM. *Sistemasi, 9*(1), 82. https://doi.org/10.32520/stmsi.v9i1.590
5. Fauhah, H., & Rosy, B. (2020). Analisis model pembelajaran Make a Match terhadap hasil belajar siswa. *Jurnal Pendidikan Administrasi Perkantoran* (JPAP), 9(2), 321–334. https://doi.org/10.26740/jpap.v9n2.p321-334
6. Fikri, M., Suriansyah, A., & Rafianti, W. R. (2024). Analisis penggunaan model pembelajaran cooperative learning dalam meningkatkan hasil belajar pada kelas tinggi sekolah dasar. *MARAS: Jurnal Penelitian Multidisiplin*, *2*(4), 2228-2234.
7. Fitri, F. K., Suryani, N., & Isawati, I. (2019). Penerapan model pembelajaran kooperatif tipe Think Pair Share dengan multimedia interaktif untuk meningkatkan kerja sama dan Candi: *Jurnal Pendidikan dan Kebudayaan, 19(1),* 40–54.
8. Gayatri, A. N., Saputra, H. J., & Untari, M. F. A. (2018). Keefektifan model Make a Match berbantu media kartakalung terhadap hasil belajar matematika siswa. *Jurnal Ilmiah Sekolah Dasar, 2*(4), 474–481. https://doi.org/10.23887/jisd.v2i4.16198
9. Habe, H., & Ahiruddin, A. (2017). Sistem pendidikan nasional. Ekombis Sains: *Jurnal Ekonomi, Keuangan dan Bisnis*, 2(1), 39–45. https://doi.org/10.24967/ekombis.v2i1.48
10. Husen, A. (2023). Strategi pemasaran melalui digital marketing pada Toyota Nasmoco Bantul. *Business Law Binus, 7*(2), 33–48.
11. Indonesia. (2003). Undang-Undang Republik Indonesia Nomor 20 Tahun 2003 tentang Sistem Pendidikan Nasional.
12. Irwan, I., & Kamarudin, K. (2021). Implementasi Kinerja Guru Pada Pembelajaran PPKn. *Jurnal Basicedu*, *5*(4), 1862–1869. https://doi.org/10.31004/basicedu.v5i4.1054

13. Jannah, N. D. M., & Mareza, L. (2026). Penerapan Model Pembelajaran Kooperatif Tipe Make a Match Untuk Meningkatkan Prestasi Belajar Pada Materi Bertukar dan Membayar di Kelas IV SDN Datar. *Jurnal Pendidikan Sosial Keberagaman*, *13*(1), 173–180. https://doi.org/10.29303/juridiksiam.v13i1.551
14. Junaedi, J., & Wahab, A. (2023). Hipotesis penelitian dalam kesehatan. *Jurnal Pendidikan dan Teknologi Kesehatan*, *6*(2), 142-146.
15. Khasanah, F. U. (2017). Peningkatan kemampuan kerjasama melalui Team Games Tournament di taman kanak-kanak. *Jurnal Pendidikan Anak Usia Dini, 6(4), 357–364.*
16. Khusna, F. L., Purbasari, I., & Kanzunnudin, M. (2020). Sikap kerja sama siswa pada pembelajaran sosial melalui model Think Pair Share (TPS). *Jurnal Prakarsa Paedagogia, 3(1).* https://doi.org/10.24176/jpp.v3i1.4636
17. Magta, M., Ujianti, P. R., & Permatasari, E. D. (2019). Pengaruh metode proyek terhadap kemampuan kerjasama anak kelompok A. *Mimbar Ilmu,* 24(2), 212. https://doi.org/10.23887/mi.v24i2.21261
18. Ma'rifat, R. A., Suraharta, I. M., & Jaya, I. I. (2024). Pelatihan Produksi Konten Digital Berbasis Mobile Filmmaking. *Jurnal Pengabdian Masyarakat*, *2*(1), 306-312.
19. Mira Anggela, J. (2025). Pengembangan video pembelajaran interaktif dengan tipe Make a Match. *Jurnal Penelitian dan Pendidikan Agama Islam, 2*(2), 106–118.
20. Mita Apprillia Sari. (2023). Penerapan model pembelajaran Make a Match untuk meningkatkan hasil belajar siswa pada muatan pelajaran PPKn. *PESHUM: Jurnal Pendidikan, Sosial dan Humaniora,* 2(3), 361–366. https://doi.org/10.56799/peshum.v2i3.1497
21. Nurohma, S., Karyadi, B., & Irawati, S. (2018). Penerapan model kooperatif tipe Make a Match dengan media kartu QA untuk meningkatkan hasil belajar IPA siswa SMP. *Diklabio: Jurnal Pendidikan dan Pembelajaran Biologi, 2*(1), 1–4. https://doi.org/10.33369/diklabio.2.1.1-4
22. Peraturan Daerah Provinsi Jawa Barat Nomor 14 Tahun 2014 tentang Perubahan atas Peraturan Daerah Provinsi Jawa Barat Nomor 5 Tahun 2003 tentang Pemeliharaan Bahasa, Sastra, dan Aksara Daerah.
23. Rosita, I., & Leonard, L. (2017). Meningkatkan kerja sama siswa melalui pembelajaran kooperatif tipe Think Pair Share. Formatif: *Jurnal Ilmiah Pendidikan MIPA*, *3*(1), 1–10. https://doi.org/10.30998/formatif.v3i1.108
24. Saptriani, K., Darmayanti, M., & Saputri, A. E. (2026). Pengaruh Model Kooperatif Tipe TGT untuk Meningkatkan Keterampilan Kerja Sama Siswa Kelas IV Sekolah Dasar. *Jurnal Didaktika Pendidikan Dasar*, *10*(1), 123-138.
25. Sari, R. D. K., & Arifin, M. (2022). Penerapan model pembelajaran Make a Match untuk meningkatkan motivasi belajar siswa kelas IV MI Miftahul Ulum Kraton pada tema 6. MODELING: *Jurnal Program Studi PGMI, 9*, 281–291.
26. Seftiani, D. S., Uswatun, D. A., & Amalia, A. R. (2022). Analisis perbandingan motivasi belajar siswa pada pembelajaran jarak jauh dan pembelajaran tatap muka terbatas. *Jurnal Basicedu*, *6*(4), 6412-6418.

27. Sintia, I., Pasarella, M. D., & Nohe, D. A. (2022, May). Perbandingan Tingkat konsistensi uji distribusi normalitas pada kasus tingkat pengangguran di Jawa. *Prosiding Seminar Nasional Matematika, Statistika, dan Aplikasinya*, 2(2), 322-333.
28. Siregar, N., Jalal, M., & Jayanti, T. (2022). Penerapan Media Scrapbook Pembelajaran Tematik untuk Meningkatkan Kemampuan Kerja Sama Siswa Kelas V MI AL-Munawwarah Kota Jambi. *Jurnal Panca Widha*, *1*(2), 26-38.
29. Sudana, I. P. A., & Wesnawa, I. G. A. (2017). Penerapan model pembelajaran tipe STAD untuk meningkatkan hasil belajar IPA. *Primary: Jurnal Pendidikan Guru Sekolah Dasar,* 1(1), 1–8.
30. Suprianto, S. (2024). Meningkatkan Hasil Belajar Siswa Dengan Menggunakan Model Pembelajaran Make a Match. *Jurnal Ilmu Tarbiyah dan Keguruan (JITK)*, *2*(2), 209-214.
31. Tampubolon, M. (2023). *Metode Penelitian Kualitatif.* Jakarta: Global Eksekutif Teknologi.
32. Wahyudi, M., & Hidayat, A. R. (2021). Strategi cooperative learning tipe student teams achievement division (STAD) pada mata pelajaran bahasa arab. *Asatiza: Jurnal Pendidikan*, *2*(3), 197-205.
33. Wulaandari, S., Meizatri, R., Erita, Y., & Mansurdin, M. (2026). Peningkatan Hasil Belajar Peserta Didik pada Pembelajaran IPAS Menggunakan Model Problem Based Learning di Kelas IV SD Negeri 11 Pauh Kota Padang. *Jurnal Yudistira: Publikasi Riset Ilmu Pendidikan dan Bahasa*, *4*(4), 431–445. https://doi.org/10.61132/yudistira.v4i4.3180