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THE INFLUENCE OF THE JIGSAW TYPE COOPERATIVE LEARNING MODEL ON THE LEARNING OUTCOMES OF EIGHTH GRADE STUDENTS IN SOCIAL AT UPTD SMP NEGERI 12 PEMATANGSIANTAR

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Abstract

This study aims to determine the influence of the Jigsaw Type Cooperative Learning Model on student learning outcomes in Social Studies (IPS) for eighth-grade students at UPTD SMP Negeri 12 Pematangsiantar in the 2024/2025 academic year. The research employed a quantitative approach using a quasi-experimental method with a Pretest-Posttest Control Group Design. The sample was selected through purposive sampling: class VIII-4 as the experimental group using the Jigsaw Type Cooperative Learning Model, and class VIII-3 as the control group using the conventional (lecture) method, with 32 students in each class. The research instrument consisted of a multiple-choice test with 25 items, which had been tested for validity, reliability, difficulty level, and discriminating power. The validity test showed that all items were valid (r count > r table = 0.349), with the highest validity coefficient being 0.8019 and the lowest 0.3665. The instrument's reliability was 0.807 > 0.396, indicating that the test was reliable. The normality test indicated that both classes had normally distributed data (X^2 count < X^2 table), and the homogeneity test indicated that both groups were homogeneous (F count = 1.025 < F table = 1.804). The results showed that the experimental class had an average score of 80 with a standard deviation of 10.36, while the control class had an average score of 74.25 with a standard deviation of 10.10. The t-test revealed t count = 2.21 > t table = 1.67, indicating a significant difference in learning outcomes between the two classes. Therefore, it can be concluded that the Jigsaw Type Cooperative Learning Model has a significant influence on student learning outcomes in Social Studies and is more effective than the conventional method.

Keywords: ***Jigsaw Type Cooperative Learning, Learning Outcomes***

INTRODUCTION

Education is one of the main pillars of national development that plays a strategic role in improving the quality of human resources (HR). Good quality education will produce a generation that is intelligent, character-based, and competitive, so that it is able to face global challenges. Law Number 20 of 2003 concerning the National Education System emphasizes that education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have spiritual strength, self-control, personality, intelligence, noble character, and the skills necessary for themselves, society, nation, and state. In practice, school education aims not only to transfer knowledge but also to develop critical thinking skills, social skills, and character in students. An effective learning process can improve student learning outcomes, which include changes in cognitive, affective, and psychomotor abilities. According to Bloom (Anderson & Krathwohl, 2001), learning outcomes encompass three main domains: knowledge (cognitive), attitudes (affective), and skills (psychomotor). Optimal learning outcomes are an indicator of the success of an education system. However, the reality on the ground shows that the learning process in schools is often still dominated by conventional, teacher-centered methods. The teacher acts as the primary source of information, while students tend to passively receive the material. This learning model provides few opportunities for students to develop critical, creative, and collaborative thinking skills. These skills are crucial for facing the demands of the 21st century, which prioritizes collaboration, communication, critical thinking, and innovation (Trilling & Fadel, 2009). This problem was also found in Social Studies (IPS) learning at the UPTD of SMP Negeri 12 Pematangsiantar. Social Studies plays a

crucial role in shaping students' understanding of social, economic, and cultural life, as well as instilling national values. Social Studies is expected to encourage students to understand social phenomena, analyze societal problems, and make decisions based on Pancasila values. However, interviews with social studies teachers in February 2025 revealed that students were less enthusiastic about participating in social studies lessons using the lecture method. As a result, student participation in discussions was low, and most learning outcomes did not meet the Learning Objective Achievement Criteria (KKTP). Final Semester Examination (UAS) data shows that more than 95% of eighth-grade students at the school failed to achieve the minimum score of 80. This indicates that the learning methods used have not maximized students' learning potential. This aligns with Slavin's (2015) opinion that learning that focuses too much on conveying information without actively involving students tends to result in shallow understanding. One alternative solution to improve student engagement and learning outcomes is the implementation of a cooperative learning model. This model emphasizes collaboration among students in small groups to achieve shared learning goals. Among various types of cooperative learning, the Jigsaw model is considered effective in increasing interaction, individual responsibility, and material comprehension (Aronson, 2002; Sari & Setiawan, 2022). In the Jigsaw model, each student is responsible for learning a section of the material and then teaching it to their group members. This process encourages students to learn not only for themselves but also for others, fostering a sense of positive interdependence (Johnson & Johnson, 2014).

Previous research supports the effectiveness of the Jigsaw model in social studies learning. For example, research by Renita Marpaung et al. (2023) at the UPTD of SMP Negeri 1 Pematangsiantar showed that students who learned using the Jigsaw model had significantly improved learning outcomes compared to students who learned using conventional methods. Similar results were also found by Kristiyani Mitan Keraf et al. (2022) and Shandy Santria (2024), who proved that the Jigsaw model was able to significantly improve student activity, collaboration, and learning outcomes. Based on the problems of low social studies learning outcomes, lack of student engagement, and findings from previous research, the implementation of the Jigsaw cooperative learning model is relevant to be tested at the UPTD of SMP Negeri 12 Pematangsiantar. It is hoped that this model can create an active, interactive, and collaborative learning atmosphere, thereby optimally improving student learning outcomes.

LITERATURE REVIEW

Learning model

A learning model is a conceptual framework used by teachers to organize the learning process to effectively achieve objectives (Majid, 2013). Selecting the right model can increase student engagement and learning outcomes (Slavin, 2015). Learning models are divided into various types, one of which is cooperative learning, which emphasizes student collaboration in small groups to solve problems.

Jigsaw Type Cooperative Learning Model

The Jigsaw model, introduced by Aronson (2002), places students in small groups, each responsible for learning a specific section of material and then teaching it to members of their original group. This model increases student interaction, engagement, and accountability (Johnson & Johnson, 2014). Research shows that Jigsaw is effective in improving learning outcomes and social skills (Sari & Setiawan, 2022).

Jigsaw Steps

The steps for implementing Jigsaw include: dividing students into groups, forming expert groups, in-depth discussions within the expert groups, returning to the original groups to share information, and joint evaluation. This process makes each student a "learning resource" for their group.

Advantages and Disadvantages

The advantages of Jigsaw include increased motivation, collaboration, conceptual understanding, and communication skills. Disadvantages include the need for more time and the challenges of managing large classes (Handayani et al., 2022).

Learning outcomes

Learning outcomes encompass cognitive, affective, and psychomotor domains (Anderson & Krathwohl, 2001). Factors influencing learning outcomes are divided into internal (interest, motivation, ability) and external (family environment, learning methods) (Salsabila, 2020).

METHOD

Types of research

This study used a quantitative approach with an experimental method. The design used was a quasi-experimental design with a nonequivalent pretest-posttest control group design. This design involved two groups: an experimental group treated with the Jigsaw cooperative learning model, and a control group using conventional methods.

Place and Time of Research

The research was conducted at the UPTD of SMP Negeri 12 Pematangsiantar, located at Jl. Sibolga No. 25, Karo, South Siantar District, Pematangsiantar City, North Sumatra. The research took place in the even semester of the 2024/2025 academic year, from May 27, 2025, to June 5, 2025.

Population and Sample

The study population was all 259 eighth-grade students. The sample was taken using a purposive sampling technique, with classes VIII-4 as the experimental group and VIII-3 as the control group, each consisting of 32 students.

RESULTS AND DISCUSSION

Instrument Trial

Test Item Validity

Table 1. Validity of Test Items

No.	Validity Coefficient	Interpretation	Information
1.	0.405679	Currently	Valid
2.	0.404353	Currently	Valid
3.	0.392973	Low	Valid
4.	0.411572	Currently	Valid
5.	0.390463	Low	Valid
6.	0.441454	Currently	Valid
7.	0.441358	Currently	Valid
8.	0.469387	Currently	Valid
9.	0.654395	Tall	Valid
10.	0.372767	Low	Valid
11.	0.427113	Currently	Valid
12.	0.369501	Low	Valid
13.	0.801949	Very high	Valid
14.	0.428575	Tall	Valid
15.	0.546932	Currently	Valid
16.	0.392261	Low	Valid
17.	0.386277	Low	Valid
18.	0.36655	Low	Valid
19.	0.3904363	Low	Valid
20.	0.437782	Currently	Valid
21.	0.412741	Currently	Valid
22.	0.538765	Currently	Valid
23.	0.382706	Low	Valid
24.	0.430006	Currently	Valid
25.	0.523471	Currently	Valid

Source: data processed in 2025

Based on Table 1, it can be seen that each question item has a varying validity coefficient. The lowest validity coefficient value is 0.36655 which is found in question number 18. The highest coefficient value is 0.801949 which is found in question number 13. In this study, the test questions used were with the provision that r

count > r table, namely 0.349. Therefore, all questions were used in the study. In conclusion, 25 questions could be used in this study.

Test Reliability

The test reliability coefficient is 0.807 which is obtained by using the Kuder – Richardson 20 (KR 20) formula in CHAPTER III. The complete calculation to obtain the reliability coefficient can be seen in appendix 8. The test reliability coefficient of 0.807 is compared with the critical rtable value of the product moment for α = 0.05 and n = 25, namely rtable = 0.396. Thus, rcount > rtable or 0.807 > 0.396. The conclusion is that the test is reliable.

Test Item Difficulty Level

The test item difficulty level uses the formula P = B / JS as stated in chapter III. The calculation to obtain the item difficulty level is as presented in the following table 4.3 (The calculation to obtain the item difficulty level is attached in appendix 9). The following table presents the results of the calculation of the test item difficulty level:

Table 2. Level of Difficulty of Test Items

No.	B	P	Information
1.	14	32	Currently
2.	17	32	Currently
3.	19	32	Currently
4.	19	32	Currently
5.	21	32	Currently
6.	18	32	Currently
7.	20	32	Currently
8.	19	32	Currently
9.	19	32	Currently
10.	18	32	Currently
11.	17	32	Currently
12.	15	32	Currently
13.	15	32	Currently
14.	14	32	Currently
15.	20	32	Currently
16.	15	32	Currently
17.	13	32	Currently
18.	21	32	Currently
19.	21	31	Currently
20.	15	32	Currently
21.	22	32	Currently
22.	19	32	Currently
23.	20	32	Currently
24.	18	32	Currently
25.	20	31	Currently

Source: data processed in 2025

Based on Table 2, it can be concluded that each item has a varying level of difficulty. The smallest difficulty level value is 0.40, which is found in item number 17. The largest difficulty coefficient value is 0.68, which is found in item number 21. This means that 25 items are suitable for testing in the research sample.

Discriminating Power of Test Items

The discriminatory power of test items using the formula$D = \frac{B_A}{J_A} - \frac{B_B}{J_B}$ The calculation to obtain the discriminatory power of test items is as presented in table 4.4 below (The calculation to obtain the discriminatory

power of test items is attached in appendix 10). The following table presents the results of the calculation of the discriminatory power of test items:

Table 3. Distinguishing Power

Item No.	B_A	B_B	J_A	J_B	$D = \frac{B_A}{J_A} - \frac{B_B}{J_B}$	Information
1.	10	4	16	16	0.375	Enough
2.	12	5	16	16	0.437	Good
3.	11	6	16	16	0.312	Enough
4.	13	6	16	16	0.437	Good
5.	14	7	16	16	0.437	Good
6.	12	6	16	16	0.375	Enough
7.	13	7	16	16	0.375	Enough
8.	14	5	16	16	0.562	Good
9.	15	4	16	16	0.687	Good
10.	12	6	16	16	0.375	Enough
11.	11	6	16	16	0.312	Enough
12.	10	5	16	16	0.312	Enough
13.	14	1	16	16	0.812	Very good
14.	10	4	16	16	0.375	Enough
15.	14	6	16	16	0.5	Good
16.	10	5	16	16	0.312	Enough
17.	8	5	16	16	0.187	Very Low
18.	13	8	16	16	0.312	Enough
19.	13	8	16	16	0.312	Enough
20.	11	4	16	16	0.437	Good
21.	14	8	16	16	0.375	Enough
22.	13	6	16	16	0.437	Good
23.	12	8	16	16	0.25	Enough
24.	12	6	16	16	0.375	Enough
25.	14	6	16	16	0.5	Good

Source: data processed in 2025

Based on Table 3, it can be concluded that each question item has varying discriminatory power. The smallest discriminatory power value is 0.187, which is found in question item number 17. The largest discriminatory power value is 0.812, which is found in question number 13. This means that 25 questions have different discriminatory power. Based on the results of the analysis of the calculation of the validity of test items, test reliability, level of difficulty of test items and the discriminatory power of test items, this research instrument meets the requirements for use in data collection with a test of 25 questions.

Research Result Data

This research was conducted from May 27 to June 5, 2025, at the UPTD of SMP Negeri 12 Pematangsiantar. The test results obtained from the two classes that served as the experimental sample are presented in Appendix 11.

Calculation of Mean and Standard Deviation

The calculation of the mean and standard deviation is attached in appendix 12. The following table presents two statistics from two groups:

Table 4. Statistics of the Test Results of the Two Samples

Types of Statistics	Jigsaw Type Cooperative Class Score	Conventional Class Scores
N (Number of Samples)	32	32
Highest Score	100	92
Lowest Score	60	56
Average	80	74.25
Variance	107.35	102.12
Standard Deviation	10,3612	10,1058

Source: data processed in 2025

From table 4, statistical data on the values of the two samples shows that the learning outcomes of social sciences (IPS) in the Jigsaw type Cooperative learning group are better than the social science learning outcomes of students in the conventional learning group.

Data Normality Test

a. Initial Conditions (Pre-Test Value)

A normality test was conducted to determine the normality of the data distribution. In this study, the chi-square test was used. The results of the normality test calculations (see Appendix 13) for the sample using the initial data are shown in the following table.

Table 5. Normality of Pre-Test Value Data

Class	Df	X^2 count	X^2 table	Information
Experiment	6	5,12822	12.59	Normal
Control	6	5,125	12.59	Normal

Source: data processed in 2025

The results of the normality test show that the mid-semester scores of the experimental group and the control group have normally distributed data. The normality test shows the X2count value = 5.12822 in the experimental group and 5.125 in the control group. With a level of 5% and df = 6 for the experimental group and df = 6 for the control group, it is known that the X2table value is 12.59 for the experimental group and 12.59 for the control group, so that X2count <X2table. This means that the learning outcomes in the experimental group and the control group are normally distributed at the time of the Pre-test value.

b. Final Condition (Post Test)

The results of the normality test calculations for samples using the final data can be seen in the following table:

Table 6. Normality of Post-Test Value Data

Class	df	X^2 count	X^2 table	Information
Experiment	7	7.38194	14,067	Normal
Control	6	6,25063	12.59	Normal

Source: data processed in 2025

The results of the normality test show that the learning outcomes of the experimental group and the control group have normally distributed data. The normality test shows the X2count value = 7.38189 in the experimental group and 6.25063 in the control group. With a level of 5% and df = 7 for the experimental group and df = 6 for the control group, it is known that the X2table value is 14.067 for the experimental group and 12.59 for the control group, so that X2count < X2table. This means that the learning outcomes in the experimental group and the control group are normally distributed.

Homogeneity of Variance Test

a. Initial conditions (Pre-Test)

The homogeneity test was conducted to determine the variance of the two data groups, namely the pre-test value of the experimental group and the post-test value of the control group (see appendix 14). The results of the homogeneity test can be seen in the following table.

Table 7. Homogeneity of Pre-Test Variance

Class	N	Variance (V)	F count	F table
Experiment	32	10.24852	1	1,804
Control	32	10.24852		

Source: data processed in 2025

The table shows that the calculated F value is 1, while the F table value for n = 32.32 is 1.804. Thus, the calculated F value is smaller than the F table. This can be interpreted as meaning that both groups of student pre-test data from the experimental group and the control group are homogeneous.

b. Final Condition (Post-Test) A homogeneity test was conducted to determine the variance of the two data groups, namely the learning outcomes of the experimental group and the control group. The results of the homogeneity test can be seen in the following table.

Table 8. Homogeneity of Variance of Learning Outcome Values

Class	N	Variance (V)	F count	F table
Experiment	32	10.36	1,025	1,804
Control	32	10.10		

Source: data processed in 2025

The table shows that the calculated F value is 1.025, while the F table value for n = 32.32 is 1.804. Thus, the calculated F value is smaller than the F table. This indicates that both groups of student learning outcome data, namely the post-test scores of students from the experimental group and the control group, are homogeneous.

Research Hypothesis Testing

Hypothesis testing was conducted after the homogeneity of variance and normality tests. Hypothesis testing was conducted through a test of the difference between two means using the t-statistic. Hypothesis testing was conducted to determine the normal distribution of data on student learning outcomes with the Jigsaw cooperative learning model and the conventional learning model.

H0 : σ_1=σ_(2,) (the sample mean of the Jigsaw type cooperative learning model group and the Conventional learning model group is not significantly different)

Ha : σ_1≠σ_(2,) (the sample mean of the Jigsaw cooperative learning model group and the Conventional learning model group differs significantly)

The calculation in appendix 15 shows the results obtained, namely thit = 2.21254 After comparing thit with ttable with a significance level of α = 0.05 and dk = 62, the points obtained were -t(0.95; 62) = - 1.67 and t(0.95; 62) = 1.67. It turns out that thit is in the critical area because 2.21254 > 1.67. Therefore, H0 is rejected and Ha is accepted. The conclusion is that there is an influence of the Jigsaw type cooperative learning model on the learning outcomes of class VIII students in social studies learning at the UPTD of SMP Negeri 12 Pematangsiantar.

RESEARCH DISCUSSION

This research is entitled "The Effect of the Jigsaw Type Cooperative Learning Model on the Learning Outcomes of Class VIII Students in Social Studies Subjects at the UPTD of SMP Negeri 12 Pematangsiantar". The results of the normality test before the study showed that both classes were normally distributed. The results of the homogeneity test before the study showed that the two classes that would be the research samples were homogeneous. The classes taken by the researcher as research samples were classes VIII 3 and VIII 4. Class VIII 4 became the experimental class with the Jigsaw Type Cooperative learning model, while class VII 3 became the control class using the conventional learning model.

The main problem to be answered through this research is: Is there a significant influence of the Jigsaw Type Cooperative learning model on the learning outcomes of class VIII students in Social Studies subjects at the UPTD of SMP Negeri 12 Pematangsiantar in the 2024/2025 academic year. The purpose of this research is: To determine how significant the differences in student learning outcomes using the Jigsaw Type Cooperative learning model are with student learning outcomes using conventional learning methods in Social Studies learning at the UPTD of SMP Negeri 12 Pematangsiantar in the 2024/2025 academic year. The trial results show that the questions given are of good quality because the research instrument is valid. The lowest validity coefficient value is 0.36655 which is found in question item no. 18. The highest coefficient value is 0.80194 which is found in question item no. 13. In this study, the test questions used are provided with the provision that r count > r table, namely 0.349. There are 25 questions used in this study. The test is reliable because the test reliability coefficient is 0.860 compared to the critical r table value of the product moment for α = 0.05 and n = 25, namely r table = 0.396. Thus, r count > r table or 0.807 > 0.396.

The smallest test difficulty level value is 0.40 which is found in question item no. 17. The highest coefficient difficulty level value is 0.68 which is found in question item no. 21. The smallest value of the discriminating power of the item is 0.187 which is found in question item number 17. The highest discriminating power value is 0.812 which is found in question item number 13. Thus it can be said that the quality of the test is good and can be used as a data collector in this research. The results of the normality test using chi square show that the data from the two groups are normally distributed, X2 count = 7.38194 in the experimental group and 6.25063 in the control group. With a level of 5% and df = 7 for the experimental group and df = 6 for the control group, it is known that the X2 table value is 14.067 for the experimental group and 12.59 for the control group, so that X2 count < X2 table. Based on the student learning outcome scores, the results of the sample homogeneity test using the F test obtained an F count value of 1.025, while the F table value for n = 32.32 is 1.804. Thus, the F count value is smaller than F table. So that both sample classes are homogeneous.

From the results of data analysis, the calculated average and standard deviation of the group using the Jigsaw Cooperative learning model are $\bar{X}$ = 80 and S = 10.36. The calculated average and standard deviation of the group using the conventional model are $\bar{Y}$ = 74.25 and S = 10.10, meaning that the average of students using the jigsaw cooperative learning model is higher than students using the conventional learning model. For the test of the difference between the two means, thitung = 2.21 and ttabel = 1.67 are in the critical area because thitung > ttabel, namely 2.21 > 1.67 so that the average of the two samples is significantly different. Thus, it can be concluded that (1) There is an influence of the Jigsaw Type Cooperative Learning Model on the learning outcomes of class VIII students in the Social Studies subject at the UPTD of SMP Negeri 12 Pematangsiantar (2) The learning outcomes of students who use the jigsaw type cooperative learning model are better than the learning outcomes of students who use the conventional model. This can be seen from the results of the average score of the student learning outcome test with the jigsaw type cooperative learning model which is higher than the average score of the student learning outcome test with the conventional model, namely 80.

CONCLUSION

Based on the research results as described above in chapter IV, the research instrument is declared to be of good quality because it is valid and reliable. Of the 25 questions, all meet the validity requirements (r count > r table) with validity coefficients ranging from 0.36655 to 0.80194, and high reliability with a coefficient of 0.860. The level of difficulty and discriminatory power of the questions also indicate adequate quality. The normality and homogeneity test of the data showed that both groups were normally and homogeneously distributed. The average learning outcomes of students using the Jigsaw Cooperative Learning Model ($\bar{X}$ = 80) were higher than those using conventional learning ($\bar{X}$ = 74.25), and the t-test results showed a significant difference between the two (t count = 2.21 > t table = 1.67). Thus, it can be concluded that the instrument used is feasible, and the Jigsaw Cooperative Learning Model has a positive influence on student learning outcomes. So it can be concluded that there is an influence of the Jigsaw Type Cooperative Learning Model on the learning outcomes of class VIII students in the Social Studies subject at the UPTD of SMP Negeri 12 Pematangsiantar, namely 2.21254.

REFERENCES

Abdullah, (2017). "Pengaruh Penerapan Model Pembelajaran Kooperatif Tipe Jigsaw Pada Mata Pelajaran Kimia Di Madrasah Aliyah". Lantanida Journal, 5(1), 13.

Abraham et al, (2022). "Desain Kuasi Eksperimen Dalam Pendidikan: Literatur Review". Jurnal Ilmiah Mandala Education (JIME), 8(3), 2476-2482.

Akbar et al, (2023). "Experimental Research Dalam Metodologi Pendidikan". Jurnal Ilmiah Wahana Pendidikan, 2(1), 465–474.

Alfazr et al, (2016). "Penerapan Model Pembelajaran Jigsaw Untuk Meningkatkan Hasil Belajar Siswa Dalam Menemukan Kalimat Utama Pada Tiap Paragraf". Jurnal Pena Ilmiah, 1(1), 111–120.

Anitra, (2021). "Pembelajaran Kooperatif Tipe Jigsaw dalam Pembelajaran Matematika di Sekolah Dasar". JPDI (Jurnal Pendidikan Dasar Indonesia), 6(1), 8.

Asyafah, (2019). "Menimbang Model Pembelajaran (Kajian Teoretis-Kritis Atas Model Pembelajaran Dalam Pendidikan Islam)". Tarbawy : Indonesian Journal of Islamic Education, 6(1), 19–32.

Fadilah et al, (2023). Konsep umum populasi dan sampel dalam penelitian. Jurnal Pilar: Jurnal Kajian Islam Kontemporer, 14(1), 15–31.

Farhan et al, (2024). "Experimental Research Dalam Penelitian Pendidikan." Journal Of Social Science Research 4:5497–5511.

Handayani et al, (2022). "Model Pembelajaran Kooperatif Tipe Jigsaw Untuk Meningkatkan Pemahaman Konsep Peserta Didik". Jurnal Sosial Humaniora Sigli, 5(2), 125–130.

Hera et al, (2023). "Pengaruh Model Talking Stick Berbantuan Media Tiga Dimensi Terhadap Hasil Belajar Bahasa Indonesia Kelas III SD Negeri 3 Sirah Pulau Padang". Pendas: Jurnal Ilmiah Pendidikan Dasar, 8(1), 5993-6002.

Kahar et al, (2020). "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw Terhadap Peningkatan Hasil Belajar". Keberhasilan suatu pe. 9(2), 279–295.

Majid, (2013). "Peningkatan keterampilan menulis puisi melalui model pembelajaran Quantum Teaching tipe TANDUR". Jurnal Pendidikan Bahasa dan Sastra Indonesia, 2(1),

Maulana, (2022). "Analisis Validitas, Reliabilitas, dan Kelayakan Instrumen Penilaian Rasa Percaya Diri Siswa". Jurnal Kualita Pendidikan, 3(3), 133-139.

Mirdad et al, (2020). "Model-Model Pembelajaran (Empat Rumpun Model Pembelajaran)". 2(1), 14–23.

Nurjanah et al, (2021). "Konsep Dasar Ilmu Pengetahuan Sosial Dalam Dunia Pendidikan." Chronologia 3 (2): 38–48.

Parhati, (2020). "Peningkatan efektivitas pembelajaran dengan penguatan iklim sekolah dan pengetahuan guru tentang Kurikulum 2013". Jurnal Education and Development, 8(4), 459–464.

Parni, (2017). "Faktor internal dan eksternal pembelajaran". Tarbiya Islamica, 5(1), 17–30.

Plenden et al, (2021). "Manajemen Evaluasi Hasil Belajar Kognitif, Afektif, Psikomotorik: Tatap Muka Dan Daring." Jurnal Prakarsa Paedagogia 4 (2).

Pradita et al, (2023). "Analisis tingkat kesukaran, daya pembeda, dan fungsi distraktor PTS Matematika SMPN Jakarta". Himpunan: Jurnal Ilmiah Mahasiswa Pendidikan Matematika, 3(1), 109-118.

Purwaningsih et al, (2022). Efektivitas penggunaan model blended learning terhadap motivasi belajar dan hasil belajar IPS. Jurnal Basicedu, 6(1), 1252–1262.

Rahmi et al, (2024). "Analisi Metode Pembelajaran Kooperatif Jigsaw Untuk Meningkatkan Keaktifan Dan Hasil Belajar Siswa Dinda Aulia Rahmi". Jurnal Inovasi Ilmu Pendidikan, 2(1), 35–41.

Salsabila et al, (2020). "Faktor-faktor yang mempengaruhi prestasi belajar siswa sekolah dasar". Pandawa: Jurnal Pendidikan dan Dakwah, 2(2), 278–288.

Subhaktiyasa, (2024). "Evaluasi Validitas dan Reliabilitas Instrumen Penelitian Kuantitatif: Sebuah Studi Pustaka". Journal of Education Research, 5(4), 5599-5609.

Sukmanasa, (2016). Hubungan antara disiplin belajar dengan hasil belajar pada mata pelajaran Ilmu Pengetahuan Sosial. Jurnal Kreatif: Jurnal Kependidikan Dasar, 7(1), 11–24.

Susanto et al, (2023). "Pengembangan Alat dan Teknik Evaluasi Tes dalam Pendidikan." Fix+Jurnal Siap, 51–60.

Syarifuddin, (2011). "Penerapan model pembelajaran cooperative: Belajar dan faktor-faktor yang mempengaruhinya". TA'DIB, 16(1), 114–136.

Uki et al, (2021). "Pengaruh Model Pembelajaran Kooperatif Tipe Jigsaw dan Make A Match terhadap Hasil Belajar Kognitif Siswa". Jurnal Basicedu, 5(6), 5542–5547.

Yandi et al, (2023). "Faktor-faktor yang mempengaruhi hasil belajar peserta didik (literature review)". Jurnal Pendidikan dan Sosial Humaniora, 1(1), 13–24.

Yolanda (2023). Pengaruh Model Pembelajaran Make A Match terhadap Hasil Belajar Siswa pada Pembelajaran IPA Materi Bagian Tumbuhan dan Fungsinya Kelas IV MI Al-Abrar Kota Makassar. Skripsi, Universitas Muhammadiyah Makassar.