

The Influence of the MURDER Learning Model on Mathematical Reflective Thinking Skills in Junior High School Students

Ria Rismayanti^{1*}, Azi Nugraha²

^{1,2} Universitas Sindang Kasih Majalengka

*Corresponding Author Email: riarismayanti@gmail.com

ABSTRACT

Reflective thinking skills are important for students because they enable them to connect previously acquired and currently learned knowledge to analyze, evaluate, and draw conclusions and solve problems. However, in reality, this ability is still low, so one solution is the use of an effective and efficient learning model, namely the MURDER learning model. This study aims to determine the effect of the MURDER (Mood, Understand, Recall, Detect, Elaborate, Review) learning model on mathematical reflective thinking skills. The research used a Quasi-Experimental Design with a Pretest-Posttest Equivalent Group design. The population for this study was seventh-grade students at SMP Negeri 1 Talaga. The sampling technique used was cluster random sampling. The sample consisted of grades VIII A and VIII B. Data collection instruments included tests and questionnaires. The data analysis used a mean difference test using an independent sample t-test using SPSS. The results of the study showed a two-tailed independent sample t-test with a significance value of 0.036, indicating that the MURDER learning model significantly impacts students' mathematical reflective thinking skills. Most students' responses to the MURDER learning model were positive, indicating that the MURDER learning model can help students improve their mathematical reflective thinking skills.

Keywords: MURDER Learning Model, Mathematical Reflective Thinking Skills, Junior High School Students

ABSTRAK

Kemampuan berpikir reflektif penting dimiliki oleh siswa karena merupakan suatu kemampuan yang dapat mengaitkan dari pengetahuan yang telah diidapat dan sedang dipelajari untuk menganalisis suatu permasalahan, mengevaluasi serta menyimpulkan dan menyelesaikan yang terbaik terhadap permasalahan yang telah diberikan. Namun pada kenyatannya, kemampuan ini masih rendah sehingga salah satu solusinya adalah penggunaan model pembelajaran yang efektif dan efisien yaitu model pembelajaran MURDER. Penelitian ini bertujuan untuk mengetahui pengaruh model pembelajaran MURDER (Mood, Understand, Recall, Detect, Elaborate Review) terhadap kemampuan berpikir reflektif matematis. Jenis penelitian yang digunakan adalah Quasi Eksperimental Design dengan desain penelitian yang digunakan Pretest Posttest Equivalent Group. Populasi untuk penelitian peserta didik kelas VII SMP Negeri 1 Talaga. Pengambilan sampel menggunakan teknik Cluster Random Sampling. Sampel penelitian kelas VIII A dan kelas VIII B. Teknik pengumpulan data menggunakan instrumen tes dan angket. Uji analisis data yang digunakan adalah uji beda rata-rata menggunakan uji independent sample t test melalui SPSS. Berdasarkan hasil penelitian diperoleh hasil uji independent sample t test dengan nilai sig 2 tailed sebesar 0,036 yang artinya terdapat pengaruh model pembelajaran MURDER terhadap kemampuan berpikir reflektif matematis siswa dan respons siswa terhadap model pembelajaran MURDER sebagian besar positif artinya model pembelajaran MURDER dapat membantu siswa dalam meningkatkan kemampuan berpikir reflektif matematisnya.

Kata Kunci : Model Pembelajaran MURDER, Kemampuan Berpikir Reflektif Matematis, Siswa SMP

Received: Oct 17, 2025 Revised: Dec 30, 2025 Accepted: Jan 17, 2026 Published: March 2, 2026

How to cite this article:

Rismayanti, R., & Nugraha, A. (2026). The Influence of the MURDER Learning Model on Mathematical Reflective Thinking Skills in Junior High School Students. *Journal of Contextual and Realistic Mathematics Education*, 1(1), 25-35.



1. INTRODUCTION

Mathematics is a discipline that serves as the foundation for the development of knowledge. Its position as the queen of other sciences, while also serving other sciences. Mathematics grows and develops for itself as a science, also to serve the needs of science in its development and operation (Indriani & Noordiana, 2022). Mathematics prioritizes students' thinking patterns and reasoning abilities, as stated by Isrokatun et al. (2020) that mathematics is a pattern of thinking, a pattern of organizing, and logical proof. Mathematics is a language that uses terms that are carefully defined, clear and accurate, and its representation is symbolic and concise. Because mathematics is a subject that needs to be taught at every level of education from elementary school to tertiary level.

Learning mathematics involves a thought process within every human being, leading to the attainment of various competencies, skills, and attitudes. Thinking is the activity of establishing connections between parts of knowledge. Thinking is a constant activity for every individual; therefore, it is internal, occurring within the individual and ongoing. Through thinking, humans can learn to improve their quality of life in society (Amalia, 2022). One of the thinking skills that must be possessed and developed is the ability to think reflectively in mathematics.

The ability to think reflectively in mathematics is an important aspect that must be developed in mathematics learning. This ability encompasses students' ability to reflect on, analyze, and evaluate their own thought processes in solving mathematical problems (Nursabilla et al., 2023). Having this ability makes students more diligent and careful in considering the information they receive (Muntazhimah, 2019). Students need to develop reflective thinking skills in the learning process because good mathematical reflective thinking skills will be comparable to their problem-solving abilities (Egmir & Ocak, 2020; Mulyani et al., 2020; Yasin et al., 2020). Mathematical reflective thinking skills make it easier for students to face and solve problems in mathematics (Betne, 2019; Noer et al., 2020). Thinking in a reflective thinking in the mathematics learning process can support students in selecting a solution plan and can make it easier for students to conclude problems accurately (Muzaimah & Noer, 2019; Öztürk, 2020). Reflective thinking skills are related to the ability to review, monitor, and monitor the solution-finding process when solving problems (Kusuma et al., 2020; Permatasari et al., 2020).

Reflection in mathematics can hone students' problem-solving skills systematically and conceptually (Noer et al., 2020; Syamsuddin, 2020). Reflective thinking skills are essential for finding solutions, developing ideas creatively, completing assignments, learning, acting to make decisions, and honing skills systematically and conceptually (Adha & Rahaju, 2020; Sihaloho & Zulkarnaen, 2019).

Based on the observation results, it is known that the mathematics learning outcomes of students at SMPN 1 Talaga are still low. This is caused by several factors including the assumption that learning mathematics is very difficult to understand and the lessons are not fun, low student interest in learning mathematics, the lack of variety of mathematical problems that relate to the surrounding environment and students are also not able to analyze and communicate their solutions, because students are only fixated on the examples that have been given and still experience difficulties in completing the material explained.

Monotonous learning models result in students becoming bored, and problem-solving that does not utilize reflective thinking skills results in a lack of improvement in students' thinking patterns and absorption capacity. Several relevant studies on mathematical reflective thinking have been conducted by previous researchers, and the results show that there is an increase in mathematical reflective thinking skills using the SSCS learning model (Yasin et al., 2020), and students' mathematical reflective thinking skills can be improved through project-based teaching materials (Amalia et al., 2020).

Based on the description above, MURDER learning provides students with the skills and learning experiences that enable them to solve problems or obstacles around them. In order to optimize learning, while MURDER can impact students' reflective mathematical thinking skills, teachers must

also monitor their learning levels and independence in solving mathematical problems. Therefore, efforts should be made to improve mathematics learning accuracy, sincerity, and patience, both in understanding concepts and in solving problems. Several studies have also shown that the MURDER model produces better results than direct learning models. Besides inappropriate learning models, motivational factors in learning are also important to consider.

Based on the description above, the author is interested in conducting research entitled "The Influence of the MURDER Learning Model (Mood, Understand, Recall, Detect, Elaborate, Review) on the Mathematical Reflective Thinking Ability of Junior High School Students".

2. METHOD

This research uses quantitative approach with the type quasi-experimental research. A quantitative approach was used because this research involves the collection and analysis of data in the form of numbers that are interpreted statistically. The design used is Posttest Only Control Group Design, which involves two groups, namely experimental class who received learning using the model MURDER (Mood, Understand, Recall, Detect, Elaborate, Review) And control class who received conventional learning. This study aims to determine the effect of implementing the MURDER learning model on junior high school students' mathematical reflective thinking skills.

The population in this study was all seventh grade students of SMPN 1 Talaga in the 2024/2025 academic year. Sampling was conducted using a purposive sampling technique. random sampling, until selected class VII A as an experimental class and class VII B as a control class. The research was conducted one even semester of the 2024/2025 academic year at SMPN 1 Talaga, Talaga District, Majalengka Regency. Research activities include title submission, proposal development, research implementation, thesis guidance, and thesis defense, which is planned to take place from October to June.

Research data was collected through tests and questionnaires. The test is in the form of three descriptive questions which is compiled based on indicators of mathematical reflective thinking ability, and is given at the end of the treatment (post-test). Meanwhile, the questionnaire contains 20 statements with a Likert scale to measure student responses to learning using the MURDER model. The test instrument was first tested for validity, reliability, discriminating power, and difficulty level, and met the criteria for validity and reliability. The data obtained were analyzed using Shapiro-Wilk normality test, Levene's Test homogeneity test, And independent sample t-test hypothesis test to find out the differences in reflective thinking abilities.

3. RESULTS AND DISCUSSION (12 PT)

This research was conducted at SMP Negeri 1 Talaga, using two classes as samples: an experimental class and a control class. The experimental class consisted of 24 students using the Murder learning model, and the control class consisted of 24 students using the conventional model. The design of this study was as follows: posttest only design. In this design, there are two groups, each group is randomly assigned. The first group is given treatment (X) and the second group is given treatment (X₂). After that, measurements are taken on the variables. The research uses a test instrument (posttest) to determine the effect of the Murder model on students' mathematical reflective thinking skills. The learning material in this study is a linear equation with one variable.

After being given different treatments, to measure reflective thinking skills with the topic of linear equations in one variable, both the experimental and control classes were given a mathematical reflective thinking ability test. The instrument had previously been tested for validity, reliability, difficulty level, and item discrimination and was proven suitable for use.

The following presents the data results posttest mathematical reflective thinking ability after learning was carried out in the experimental class and control class.

3.1 The Effect of Using the Murder Learning Model on Junior High School Students'

Mathematical Reflective Thinking Skills

Result dataposttest The mathematical reflective thinking ability of students in the experimental class with a total of 24 students who used the Murder model in their learning obtained an average value of mathematical reflective thinking ability of 46.67 with the lowest value of 22 and the highest value of 89. For more details, the test calculation results data are in the form of the following frequency distribution table.

Table 1 Frequency Distribution of Mathematical Reflective Thinking Ability in Experimental Class

Mark	Frequency	
	Be	F(%)
22-33	6	25
34-45	4	16,7
46-57	6	25
58-69	5	20,8
70-81	2	8,3
82-93	1	4,1
Amount	24	100,00

Table 1 shows the frequency distribution of mathematical reflective thinking skills in the experimental class, consisting of 24 students. It shows that 10 students scored below the average, representing 41.7%, while 14 students scored above the average, representing 58.3%. This indicates that more students in the experimental class scored above the class average than those below the average.

While the results dataposttest The mathematical reflective thinking ability of students in the control class with a total of 22 students who used conventional learning in their learning obtained an average value of mathematical reflective thinking ability of 37.79 with the lowest value of 0 and the highest value of 67. For more details, the data from the calculation results of the students' mathematical reflective thinking ability test are presented in the form of the following frequency distribution table:

Table 2 Frequency Distribution of Mathematical Reflective Thinking Ability in Control Class

Mark	Frequency	
	Be	F(%)
0-13	1	4,2
14-25	4	16,7
26-37	8	33,3
38-49	6	25
50-61	4	16,6
62-73	1	4,2

Amount	24	100,00
--------	----	--------

From table 2, it can be seen in the frequency distribution of students' mathematical reflective thinking abilities in the control class with a total of 24 students. It shows that the number of students who received scores below the average was 13 students with a percentage of 54.2% while the number of students who received scores above the average was 11 students with a percentage of 45.8%. This shows that the number of students in the control class who received scores above the class average was fewer than the number of students who received scores below the average.

Based on the data resultsposttest As previously described, students' mathematical reflective thinking abilities in the experimental and control classes showed differences. The following is a comparison between the experimental and control classes in tabular form:

Table 3 Comparison of Mathematical Reflective Thinking Abilities of Students in the Experimental Class and the Control Class

Descriptions									
		Statistic	Std. Error			Statistic	Std. Error		
CLASS COUNT EXPER IMENTAL	Mean	37,79	3,016	CLASS EXPER IMENTAL	Mean	46,67	3,649		
	95% Confidence Interval for Mean	Lower Bound	31,55			95% Confidence Interval for Mean	Lower Bound	39,12	
		Upper Bound	44,03				Upper Bound	54,22	
	5% Trimmed Mean		38,17			5% Trimmed Mean		45,79	
	Median		33,00			Median		44,00	
	Variance		218,259			Variance		319,623	
	Std. Deviation		14,774			Std. Deviation		17,878	
	Minimum		0			Minimum		22	
	Maximum		67			Maximum		89	
	Range		67			Range		67	
	Interquartile Range		11			Interquartile Range		23	
	Skewness		-,296		,472	Skewness		,620	,472
	Kurtosis		,677		,918	Kurtosis		-,097	,918

From the table above, we can see a comparison of the mathematical reflective thinking skills of the experimental class and the control class with the same number of students, namely 24 students. The minimum scores in the experimental class and the control class are 22 and 0, respectively. And the maximum score of the experimental class is higher than the maximum score of the control class, namely $89 > 67$ with a difference of 22 points. In addition, the average score obtained the experimental class was higher than the control class, namely $37.79 > 46.67$ with a difference of 8.88 points. Furthermore, the median and mode in the experimental class were higher than those in the control class. This indicates that the frequency distribution of mathematical reflective thinking ability in the experimental class was higher than that of the control class.

The standard deviation in the experimental class appears to be larger than the standard deviation in the control class, indicating that the mathematical reflective thinking ability scores of students in the experimental class are more diverse compared to the scores of students in the control class.

Furthermore, the difference in variance between the experimental and control class data shows that the experimental class has a larger variance than the control class. This indicates that the distribution of data in the experimental class is more spread out and varies from the class average, while in the control class it tends to be more clustered.

Furthermore, to answer the research hypothesis, a test was used independent sample t test to see whether there is an influence of the use of the murder learning model on students' mathematical reflective thinking abilities. Previously, the prerequisites were tested by testing the normality and homogeneity of the data. The following are the test results.

a. Normality Test

The test used in this study is the Spiro-Wilk test in SPSS software. The results of the data calculations are as follows:

Table 4 Results of the Normality Test of Mathematical Reflective Thinking Ability in the Experimental Class and the Control Class

<i>Tests of Normality</i>			
	Shapiro-Wilk		
	Statistic	df	Sig.
Class Control	,958	24	,399
Class Experiment	,934	24	,121

From the data above, it can be seen that the results of the normality test calculation using the SPSS 26 application in the experimental class obtained a significant value (sig.) of 0.399 in the control class obtained a significant value (sig.) of 0.121 because the significant value if the experimental class and control class are above 0.05, it is stated that they are normally distributed.

b. Homogeneity Test

After obtaining the results of the normality test which stated that the experimental class and the control class were normally distributed, the next step was to test the homogeneity of the variance of the two classes using the test.Levene Test on SPSS 26 software with the following results:

Table 4 Results of the Homogeneity Test of Mathematical Reflective Thinking Ability in the Experimental Class and the Control Class

<i>Test of Homogeneity of Variances</i>	Sig.
Based on Mean	,778

The Lavene Test homogeneity test table above shows a significant value of 0.778 because the significant value is greater than 0.05, so the data is declared homogeneous. Based on the results of the normality and homogeneity tests, it shows that the results of the mathematical reflective thinking ability test of students in the experimental and control classes are normally distributed and the variances of both classes are homogeneous. Then, the research hypothesis test was conducted using the testIndependent Sample T Test which is in the SPSS software which is presented in the following table:

Table 6 Results of Hypothesis Testing of Mathematical Reflective Thinking Ability of Students in Experimental and Control Classes

Independent Samples Test	Sig.(2-tailed)
Equal variances assumed	,036

Equal variances not assumed	,036
-----------------------------	------

Based on the test results independent samples t-test above valuesig 2 tailed of 0.036 because the significant value is smaller than 0.05, then Ho is rejected, meaning there is a difference between learning using the Murder model and learning that uses conventional learning on students' mathematical reflective thinking abilities.

3.2 Student Responses to the Use of the Murder Learning Model to Improve Mathematical Reflective Thinking Skills

This student response questionnaire contains statements about the use of the Murder learning model on students' mathematical thinking skills in the material of linear equations of one variable which are then answered by respondents or students using the alternative answers provided, namely SS (Strongly Agree), S (Agree), TS (Disagree) and STS (Strongly Disagree). The researcher made 10 statements, 7 positive statements and 3 negative statements. This questionnaire was given to students at the end of the lesson after carrying out posttest.

Table 8 Summary of Student Response Results to the Murder Learning Model

Aspect	Indicator	Rate-Rate Percentage		Information
		Positive	Negative	
Student response to learning using learning models Murder	Showing interest in learning mathematics using the Murder model	40%	13%	part big positive
	Demonstrate the usefulness of following mathematics learning with using the Murder model	30%	17%	part big positive
Amount		70%	30%	part big positive

Based on the table above through Likert scale calculations, it can be seen that the three aspects of the statements that have been provided are student responses to mathematics lessons with indicators showing interest in mathematics lessons which obtained a positive percentage of 70% and a negative percentage of 30% and indicators showing the indicators showing student responses to mathematics learning using Murder obtained a positive percentage of 40% and 13% negative. In the indicator showing the usefulness of following mathematics learning using the Murder model, a positive percentage of 30% and a negative percentage of 17% were obtained. So the three aspects above obtained an average for positive statements of 70% and an average for negative statements of 30%. Therefore, it can be concluded that students' responses to the use of the Murder learning model were mostly positive or in the good category. Students felt helped in improving their mathematical reflective thinking skills in the learning material of one variable linear equations by using the Murder learning model.

Discussion

This research was conducted at SMP Negeri 1 Talaga in class VIII A and class VIII B. Class VIII A is the class that uses the Murder learning model during the learning process, while class VIII B is the class that uses the conventional learning model during the learning process.

The Murder learning model is a learning strategy designed to increase student understanding

and engagement through systematic steps. This model consists of six stages: Mood, Understand, Recall, Detect, Elaborate, dan Review. This model is relevant for mathematics learning because it requires active student involvement in the learning process, from mental preparation to evaluating understanding. Conventional learning models, on the other hand, are teacher-centered, with students acting as readers and listeners of the material presented by the teacher. The following is a discussion of the research findings.

3.1 The Effect of Using the Murder Learning Model on Junior High School Students' Mathematical Reflective Thinking Skills

After obtaining research data in the field using posttest, then the data processing was carried out, and the results of the statistical calculations were obtained. Data analysis began with a prerequisite analysis test. The results of the normality test showed that the data were normally distributed, meaning that the data from the experimental class using the Murder learning model and the data from the control class using the conventional learning model were normally distributed. The results of the homogeneity test showed that the data from the experimental class and the control class were homogeneous. Furthermore, the results of the homogeneity test showed that the data from the experimental class and the control class were homogeneous. Independent Samples t-test This means that H_0 is rejected. This means that there is a difference between learning using the Murder model and learning using conventional learning on students' mathematical reflective thinking abilities.

Overall, the reason for the difference in the average value of each indicator of mathematical reflective thinking ability is because the experimental class students used the Murder learning model in which at each stage it can train students to improve the indicators of mathematical reflective thinking ability, while in the control class students, the learning did not train students to improve the indicators of mathematical reflective thinking ability. At the stage Mood (preparing the learning atmosphere) namely helping students enter a positive, calm learning atmosphere, and be mentally prepared for mathematical reflective thinking skills related to a positive mood encouraging students to be more open to new ideas, ready to receive information, and able to reflect on previous experiences. In this study, the stage Mood designed by researchers through the implementation ice breaking before learning so that students can be more comfortable and less tense when learning. At this stage understand (understanding the material) which aims to help students grasp the basic topics or concepts to be studied. The link to mathematical reflective thinking skills is that initial understanding serves as the foundation for in-depth reflection. Students begin to relate new information to existing knowledge. In this study, the understand The researcher provided apperception before learning by reviewing the material related to the material to be discussed, namely by providing reinforcement material on arithmetic operations.

At the level Recall (repeating information) which aims for students to recall important relevant information from previous material and its relation to mathematical reflective thinking skills is to help students to evaluate their understanding and realize the gap between what is already known and new material. At this stage in the research that has been carried out is the stage of understand by repeating so that students understand better, namely by giving practice questions. At this stage detect (detecting errors or problems) aims for students to identify things they do not understand or errors in their thinking process and its relationship to mathematical reflective thinking skills is the core of mathematical reflective thinking, namely analyzing and evaluating one's own thinking process to find errors or alternative ways of thinking. In this study, an evaluation of the work carried out by students was carried out.

After learning the material on linear equations in one variable, practice questions are given, then presented and discussed together at the end of the presentation. At this stage elaborate (elaborating or expanding understanding) aims to help students expand their understanding by re-explaining concepts, providing examples, or connecting them to other contexts. The link to mathematical reflective thinking skills is facilitating in-depth and analytical thinking, which is a characteristic of reflective thinking. In this study, the researcher presented contextual problems in

everyday life that can be solved using a linear equation in one variable. At this stage, review (reviewing) aims for students to review the entire learning process to ensure understanding and correct errors. The link with reflective thinking is providing an opportunity for students to reflect on the strategies used, the effectiveness of learning, and improvement plans. In this study, a final evaluation was conducted after all the material was delivered, the researcher provided worksheets to each group of students to work on together. Then the results of the group work were presented and evaluated. This is what caused the average score of students' mathematical reflective thinking skills in the experimental class to be higher than that of students in the control class.

It can be concluded that the experimental class that used the Murder learning model in its learning process received a better effect than the control class that used conventional learning. This indicates that there is a difference between learning using the Murder model and learning using conventional learning on students' mathematical reflective thinking abilities. This research is in line with research by Rakhmawati & Sugiarto (2019) which showed that the application of the MURDER model in mathematics learning significantly improves students' reflective thinking abilities compared to conventional learning.

3.2 Student Responses to the Use of the Murder Learning Model to Improve Mathematical Reflective Thinking Skills

The research results showed a positive student response to the use of the Murder model in the topic of linear equations with one variable. 70% of students responded positively and 30% negatively. This indicates that the MURDER model was well-received by students and was able to create a fun, challenging, and meaningful learning experience.

This positive response can occur because the MURDER model is designed systematically through six stages: Mood, Understand, Recall, Detect, Elaborate, And Review. This stage not only involves students cognitively, but also affectively and metacognitively. Mood help students prepare a good emotional condition for learning, while the stage Understand And Recall support understanding and activation of prior knowledge. At this stage Detect And Elaborate, students are encouraged to find errors and develop solutions reflectively, so that their reflective thinking skills are honed. Finally, the stage Review help students review their learning process as a whole.

However, 30% of students still showed negative responses, which could be used for further evaluation. Nevertheless, the predominance of positive responses indicates that the MURDER model has the potential to increase student motivation and engagement in mathematics learning, particularly in materials that require conceptual understanding, such as linear equations with one variable. Strengthening teacher training in implementing this model effectively and adapting it to student characteristics is believed to increase its effectiveness in the future. This finding aligns with research by Rofiah (2019) in the journal *Edumatica*, which shows that the MURDER model can increase student activity and engagement in learning, especially in mathematics learning that requires in-depth conceptual understanding. In his research, students felt helped by the clear learning structure and the opportunity to detect errors and reflect on answers.

4 CONCLUSION

Based on the research results and discussions described above, researchers can provide the following conclusions.

1. There is an influence of the use of the MURDER learning model on the mathematical reflective thinking abilities of junior high school students, as evidenced by the results of the independent sample t test which obtained a value of sig 2 tailed of 0.036 because the significant value is smaller than 0.05, H_0 is rejected, meaning that there is a difference between learning using the MURDER model and learning using conventional learning on students' mathematical reflective thinking abilities.

2. Students' responses to the use of the Murder learning model were mostly positive or in the good category. Students felt helped in improving their mathematical reflective thinking skills in the learning material of one variable linear equations by using the Murder learning model.

ACKNOWLEDGEMENTS

The researcher would like to express his gratitude to the supervising lecturer for providing suggestions and input and to the school for granting research permission.

REFERENCES

- Adha, S. M., & Rahaju, E. B. (2020). Profil berpikir reflektif siswa SMA dalam memecahkan masalah matematika ditinjau dari kecerdasan logis-matematis. *Jurnal Penelitian Pendidikan Matematika dan Sains*, 4(2), 61–71.
- Amalia, M. (2022, July). Inovasi Pembelajaran Kurikulum Merdeka Belajar Di Era Society 5.0 Untuk Revolusi Industri 4.0. In *Seminar Nasional Sosial, Sains, Pendidikan, Humaniora (SENASSDRA)* (Vol. 1, No. 1, pp. 1-6).
- Amalia, M. (2022, July). Inovasi Pembelajaran Kurikulum Merdeka Belajar Di Era Society 5.0 Untuk Revolusi Industri 4.0. In *Seminar Nasional Sosial, Sains, Pendidikan, Humaniora (SENASSDRA)* (Vol. 1, No. 1, pp. 1-6).
- Betne, P. (2019). Reflection as a learning tool in mathematics. *Transit: The LaGuardia Journal; on Teaching and learning*, 4, 92–101.
- Egmir, E., & Ocak, I. (2020). The relationship between teacher candidates' critical thinking standards and reflective thinking skills. *International Journal of Progressive Education*, 16(3), 156– 170. <https://doi.org/10.29329/ijpe.2020.248.12>
- Indriani, H., & Noordiana, M. A. (2022). Kemampuan komunikasi matematis siswa pada materi penyajian data di desa bojong. *Plusminus: Jurnal Pendidikan Matematika*, 2(1), 131-140.
- Isrokatun, I., Hanifah, N., Maulana, M., & Suhaebar, I. (2020). *Pembelajaran Matematika dan Sains secara Integratif melalui Situation-Based Learning*. UPI Sumedang Press.
- Kusuma, I. cahya I., Noer, S. H., & Caswita. (2020). Pengembangan PBM dengan tahapan TPS untuk meningkatkan kemampuan berpikir reflektif matematis dan self-efficacy siswa. *Jurnal Cendekia: Jurnal Pendidikan Matematika*, 4(2), 870–885. <https://doi.org/10.31004/cendekia.v4i2.321>
- Mulyani, E., Ratnaningsih, N., & Sirri, E. L. (2020). Analisis kesulitan peserta didik dalam menyelesaikan soal kemampuan berpikir reklektif matematis ditinjau dari tipe kepribadian. *Journal Of Authentic Research on Mathematics Education (JARME)*, 2(1), 46–56.
- Muntazhimah. (2019). Pengembangan Instrumen Kemampuan Berpikir Reflektif Matematis siswa Kelas 8 SMP. *Imaginer: Jurnal Matematika Dan Pendidikan Matematika*, 1(5), 237–242
- Noer, S. H., Gunowibowo, P., & Triana, M. (2020). Improving students' reflective thinking skills and self-efficacy through scientific learning. *Journal of Physics: Conference Series*, 1581(1), 1–9. <https://doi.org/10.1088/1742-6596/1581/1/012036>
- Nursabilla, F., Putra, B. Y. G., & Saputra, J. (2023). Implementasi Model Pembelajaran Flipped Classroom Berbantuan Video Pembelajaran terhadap Kemampuan Pemahaman Konsep Matematis. *JP3M (Jurnal Penelitian Pendidikan dan Pengajaran Matematika)*, 9(1), 81-88.
- Öztürk, M. (2020). The relationship between self-regulation and proportional reasoning: The mediating role of reflective thinking towards problem solving. *TeEğitim VBilim*, 45(204), 143–155. <https://doi.org/10.15390/eb.2020.8480>
- Rofiah, N. (2019). Penerapan Model Pembelajaran MURDER untuk Meningkatkan Aktivitas dan Hasil Belajar Matematika Siswa SMP. *Jurnal Edumatica*, 9(2), 137–145.

- Syamsuddin, A. (2020). Identifikasi kedalaman berpikir reflektif calon guru matematika dalam pemecahan masalah matematika melalui taksonomi berpikir reflektif berdasarkan gaya kognitif. *Jurnal Elemen*, 6(1), 128–145. <https://doi.org/10.29408/jel.v6i1.1743>
- Yasin, M., Fakhri, J., Siswadi, Faelasofi, R., Safi'i, A., Supriadi, N., Syazali, M., & Wekke, I. S. (2020). The effect of SSCS learning model on reflective thinking skills and problems solving ability. *European Journal of Educational Research*, 9(2), 743–752. <https://doi.org/10.12973/eujer.9.2.743>