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THE EFFECT OF THE CREATIVE PROBLEM SOLVING LEARNING MODEL ON THE ECONOMICS LEARNING OUTCOMES OF GRADE X HIGH SCHOOL STUDENTS PRIVATE ENTERPRISE IN MEDAN

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Abstract

This study aims to determine the effect of the Creative Problem Solving (CPS) learning model on students' learning outcomes in Economics for Grade X at SMA Swasta Utama Medan in the 2024/2025 academic year. The CPS learning model was implemented due to its potential to enhance students' critical thinking, creativity, and problem-solving skills, which in turn positively influence learning outcomes. This research used a quantitative approach with a One-Shot Case Study design. The research subject was a single class (X-1) consisting of 30 students. Data were collected using a learning outcome test administered after the treatment. The statistical results showed that the average student score was 81.30. The normality test indicated that the data were normally distributed. A One Sample t-Test showed a significant difference between the students' average score and the minimum mastery criterion (KKM) of 75 (t = 13.196; sig. = 0.000). Simple regression analysis showed that the CPS model had a significant positive effect on learning outcomes (sig. = 0.038; R^2 = 0.145). Therefore, it can be concluded that the Creative Problem Solving learning model significantly influences students' learning outcomes..

Keywords : Creative Problem Solving (CPS), learning outcomes, learning model, economics, high school students

INTRODUCTION

Education is a crucial aspect of human resource development, particularly in facing increasingly complex global challenges. The learning process in schools must adapt to current developments, which require students to master not only knowledge but also critical and creative thinking skills, as well as the ability to solve various problems. Therefore, a learning system that can hone these skills is crucial for implementation in the world of education (Vidergor, 2018) .

In the National Education system regulated by Law Number 20 of 2004 (Setiawan et al., 2024) , namely: "National education functions to develop abilities and shape the character and civilization of a dignified nation in order to enlighten the life of the nation, aiming to develop the potential of students to become human beings who believe in and fear God Almighty, have noble morals, are healthy, knowledgeable, capable, creative, independent, and become democratic and responsible citizens."

In teaching and learning activities, teachers are a very important component. In the learning process, teachers are required to better understand each student's abilities. Therefore, teachers must be able to find alternatives that must be taken in the teaching and learning process in order to achieve learning objectives. The selection of learning models is one alternative to achieve maximum learning.

One of the significant problems faced by students at SMA Swasta Utama Medan is the suboptimal development of creative ideas and concepts. This lack of development is essential for generating new and solution-oriented ideas, which are crucial for facing future challenges. This can be caused by a lack of stimulation and learning models that do not provide opportunities for students to think critically and creatively. Most students tend to simply follow instructions without being given the space to explore their own ideas. Therefore, the development of student creativity needs to be addressed and encouraged through more innovative approaches to learning (Khairunnisa & Ilmi, 2020) .

Furthermore, a problem at Medan's Main Private High School that contributes to the lack of active student participation is the learning model that relies more heavily on the Conventional model (Antasari et al., 2023) . In practice, many teachers still tend to use this approach as the primary model in the teaching and learning process. This one-way model causes students to be passive and not have the opportunity to interact directly with the learning material (Kovács et al., 2020) . This can certainly hinder the process of in-depth understanding, as well as students' ability to think critically and creatively. This one-way learning process causes students to receive information passively without actively engaging in discussions or problem-solving, which in turn will affect the quality of their learning outcomes (Susanto et al., 2024) .

Based on the author's observations and experiences during PPL (practical field experience) for approximately 2 months at SMA Swasta Utama Medan, learning outcomes were still less than optimal. The failure of some students to achieve the KKM (75) indicates that there are factors that influence their understanding of the subject matter (Zubaidah & Putra, 2022) .

The application of creative problem solving (CPS) is also expected to provide a more enjoyable and meaningful learning experience for students. With a more active and problem-based approach, students will not only memorize information but also learn to apply it in real-life situations. This is important, especially in the context of learning that aims to equip students with skills they can use in everyday life. Through creative problem solving (CPS), students can improve their analytical skills, hone their creativity, and refine their thinking in solving various existing problems, so that the learning process will run according to learning objectives and achieve satisfactory learning outcomes. Researchers suspect that the application of the creative problem solving (CPS) learning model can improve student learning outcomes.

For this reason, researchers are very interested in conducting research entitled "The Effect of the Creative Problem Solving Learning Model on the Learning Outcomes of Class X Students of SMA Swasta Utama Medan".

METHOD

The type of research used by the researcher is quantitative. Quantitative research is a research method based on the philosophy of positivism, used to research a specific population or sample. This type of research uses data in the form of numbers (numeric). The research approach in this study uses a Pre-Experimental Design with a One-Shot Case Study

form. In this design, there is a group that is given treatment, and then the results are observed. Treatment is the independent variable, and the results are the dependent variable. Through this research approach, through this research approach, researchers compare or connect the values after treatment (posttest) to see the effect of the treatment given (Moongela et al., 2025) .

The sampling technique used in this study was random sampling, a technique in which every member of the population has an equal chance of being selected. This technique was used to avoid bias in sample selection and increase the representativeness of the research results to the population.

According to Sugiono (Aripin et al., 2021) , a one-shot case study is a research approach that focuses on in-depth analysis of one particular case or phenomenon in one observation period or one data collection opportunity.

In this method, researchers only conduct observations or collect data once without repetition or follow-up. This method aims to obtain a detailed picture of the current conditions or events.

This research was conducted at SMA Swasta Utama Medan, Jl Suluh No.80 A, Kec. Medan Tembung, Medan City, North Sumatra (Khoiriyah & Husamah, 2018) . This research was conducted face-to-face in March 2025 in the odd semester of the 2024/2025 Academic Year (Warr & West, 2020) . The subject is the source of research data while the object of research is data or information obtained from the research source. The research data was given in the form of one group of 30 Class X-1 students. This subject was chosen because the researcher used a one-shot case study design to see the effect of the creative problem solving learning model on student learning outcomes. The research object which is the focus of the research is the effect of the creative problem solving learning model on student learning outcomes in Class X-1 (Widodo & Amalia, 2020) .

The One Sample t-Test is a statistical method used to test whether a sample mean differs significantly from a known or predetermined population mean (Wardani et al., 2020) . This test is typically used when the sample size is relatively small ($n < 30$) and the population standard deviation is unknown. In practice, this test compares the mean value of the sample data with a specific value (e.g., the Minimum Completion Criteria or KKM value in educational research) to determine whether the differences are coincidental or statistically significant (Partayasa et al., 2020) . The results of this test will indicate whether the null hypothesis (which states there is no difference) can be accepted or rejected (Suprihadi & Ma rifah, 2022) .

RESULTS AND DISCUSSION

This study aims to determine the effect of the Creative Problem Solving (CPS) learning model on the economics learning outcomes of 10th-grade students at SMA Swasta Utama Medan. The trial was conducted by researchers at SMA Bandung Percut Sei Tuan. The Creative Problem Solving (CPS) learning model was chosen because it is believed to improve critical thinking and creativity skills, as well as the ability to solve problems relevant to everyday life, which can certainly improve students' understanding of economics subject matter (Meitiyani; et al., 2022) .

This study employed a one-shot case study design, which involved applying the Creative Problem Solving (CPS) learning model to 30 tenth-grade students at SMA Swasta Utama Medan. Following the implementation of this learning model, students' economics learning outcomes were measured through a pre-prepared test, which covered aspects of

knowledge and understanding of the economics material they had studied (Pramestika et al., 2020) .

The subjects of this study were 30 students from one class, selected using a purposive sampling technique. Data obtained through learning outcome tests were then analyzed to determine the extent to which the application of the Creative Problem Solving (CPS) learning model improved student learning outcomes in economics.

The following are statistics from the research data presented in the following table.

Table 1. Descriptive Statistics

Descriptive Statistics												
	N	Range	Minimum	Maximum	Sum	Mean		Std. Devia	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Hasil Belaj	30	9.00	77.00	86.00	2439.00	813.000	.47742	261.494	.144	.427	-.911	.833
Valid N (lis	30											

Based on the table The table above presents descriptive statistics of the Learning Outcomes data of 30 respondents. The minimum value obtained is 77, while the maximum value is 86, so the range of values is 9. The total overall learning outcome value is 2,439, with an average value of 81.30. The standard error of the mean of 0.47742 indicates that the average value is relatively stable. Meanwhile, the standard deviation of 2.61494 indicates a fairly small spread of learning outcome values, indicating that the respondents' values tend to be close to each other (Cahyani et al., 2019) .

The data distribution shows a skewness of 0.144, indicating a slight rightward bias but close to symmetrical. This skewness value is also within the normal range (between -1 and +1), so the data are considered to not deviate significantly from a normal distribution. A kurtosis value of -0.911 indicates that the data have a lower peak and a flatter distribution than a normal distribution (platykurtic) (Pramestika et al., 2020) . In other words, the learning outcome scores tend to be evenly distributed and not concentrated at a single point.

One sample t-test

Table 1. One sample t-Test

One-Sample Test

	Test Value = 75					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference Lower	Upper
Learning outcomes	13,196	30	0,000	6,30000	5,3236	7,2764

Based on the Test table, a one-sample t-test was conducted to determine whether the average student learning outcomes differed significantly from the predetermined value, which was 75. From the analysis results obtained, the t value was 13.196 with a degree of freedom (df) of 30, and a significance value (Sig. 2-tailed) of 0.000. This significance value is smaller than 0.05, which means that the difference between the average student learning outcomes and the reference value of 75 is statistically significant.

The average student learning outcome showed a difference of 6.3 points higher than the reference value, with a 95% confidence interval ranging from 5.3236 to 7.2764. Since this interval is completely above zero, it can be concluded that the average student learning outcome was significantly higher than the expected value. Thus, this t-test indicates that the learning program or method used may have a positive influence on improving student learning outcomes.

Regression Test

Table 3. Simple Regression Test

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	Std. Error	**Beta**		
(Constant)	112,057	7,888		14,209	0.000
CPS	0.160	0.074	0.381	2,174	0.038

Based on the Simple Regression Test Table, the results show that the constant (intercept) of the model is 112.057 with a significance value (Sig.) of 0.000. This means that when the independent variable CPS (creative problem solving) is zero, the predicted value of the learning outcome variable is 112.057. Because the significance value is below 0.05, this constant is statistically significant and makes a real contribution to the regression model. The coefficient for the Creative problem solving (CPS) variable is 0.160 with a t-value of 2.174 and a significance value of 0.038 (Harefa et al., 2020) . This shows that there is a positive and significant relationship between Creative problem solving (CPS) and learning outcomes. This means that every one unit increase in Creative problem solving (CPS) will increase the value of learning outcomes by 0.160 units. The Beta value of 0.381 indicates that Creative problem solving (CPS) has a statistically significant influence.

Table 4. Regression Equation Test

Regression Equation Test

Model	**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
Regression	48,065	1	48,065	4,728	.038 [b]
Residual	284,635	28	10,166		
Total	332,700	29			

a. Dependent Variable: Learning Outcomes

b. Predictors: (Constant), CPS

The table obtained an F-value of 4.728 with a significance level of 0.038. This significance value is smaller than 0.05, so it can be concluded that the regression model formed is significant. This means that there is a significant influence between the use of the Creative Problem Solving (CPS) learning model on student learning outcomes. In other words, the use of the Creative Problem Solving (CPS) model is able to provide a real contribution in improving student learning outcomes in the Economics subject at SMA Swasta Utama Medan (Yuliati & Lestari, 2019) .

In addition, the Sum of Squares Regression value of 48.065 shows how much variation in student learning outcomes can be explained by the use of the Creative problem solving (CPS) learning model. While the Sum of Squares Residual of 284.635 describes the variation in learning outcomes that cannot be explained by the model. The total variation of 332.700 indicates that some variations in student learning outcomes are indeed influenced by the application of the CPS model. Thus, the use of the Creative Problem Solving learning model can be considered as one of the factors that contribute to significantly improving student learning outcomes.

Discussion

This study aims to determine the effect of the Creative Problem Solving (CPS) learning model on the economics learning outcomes of class X students of SMA Swasta Utama Medan. Based on the descriptive statistical results, the average student learning outcomes were 81.30 with a value range of 77 to 86. This shows that most students have learning outcomes above the KKM (75), and only a few are at low scores. The distribution of scores is relatively low with a standard deviation of 2.61494, which indicates the homogeneity of learning outcomes.

The average student learning outcome of 81.30 indicates that learning with the Creative Problem Solving (CPS) model has a positive influence on students' cognitive achievement. Previously, background data showed that only 53.3% of students achieved the Minimum Competency (KKM). However, after treatment in the form of implementing the Creative Problem Solving (CPS) model, the average learning outcome increased and no score was below 77. The Creative Problem Solving (CPS) model is able to encourage students to better understand the material through creative thinking activities, discussions, and systematic problem solving (Kusuma et al., 2020) .

Learning with a creative problem-solving (CPS) approach allows students to actively participate in learning activities. Students are not merely passive recipients of information but are also required to analyze problems, develop strategies, develop ideas, and present solutions independently or in groups. This aligns with the characteristics of the creative problem-solving (CPS) model, which emphasizes creativity, idea exploration, and problem-solving (Rohim et al., 2019) .

Improved student learning outcomes are inseparable from the interactive and constructive characteristics of the Creative Problem-Solving (CPS) learning model. This model positions students as active subjects in the learning process, rather than objects. The higher-order thinking activities practiced in this model enable students to understand the material more deeply, rather than simply memorizing concepts. Based on Bloom's theory,

good learning outcomes are measured not only by memory but also by the ability to analyze, evaluate, and create—aspects strongly supported by the Creative Problem-Solving (CPS) approach (Rusda Elsabrina et al., 2022) .

The Creative Problem Solving (CPS) learning model also provides students with the opportunity to work in groups, enhancing collaborative and communication skills. Interactions between students in groups facilitate the exchange of ideas, critical discussions, and collaborative problem-solving, ultimately enriching the student learning experience. Through the stages of Creative Problem Solving (CPS), such as clarification, ideation, development, and implementation, students not only understand the material but also learn how to think systematically and innovatively.

From the results of the one sample t-test, a significance value (Sig. 2-tailed) of 0.000 < 0.05 was obtained, which means there is a significant difference between student learning outcomes after implementing the Creative problem solving (CPS) model compared to the KKM value (75). This means that the alternative hypothesis (Ha) which states that there is an influence of the Creative problem solving (CPS) model on student learning outcomes is accepted. This strengthens that Creative problem solving (CPS) is effective in improving students' economic learning outcomes (Herutomo & Masrianingsih, 2019) .

Furthermore, regression tests indicate a positive relationship between the use of the Creative Problem Solving (CPS) model and student learning outcomes. The more effective the implementation of the Creative Problem Solving (CPS) stages, the higher the learning outcomes achieved by students. This reinforces the expert opinion that implementing methods that actively involve students can improve the quality of learning and encourage optimal learning outcomes.

The results of this study align with findings from previous studies, such as those by Cahaya Sukma Putri (Sopian & Afriansyah, 2017), which showed that the application of the Creative Problem Solving (CPS) model improves students' creative thinking skills. Similarly, research by Darmawan Harefa (Fayesa et al., 2023) stated that student learning outcomes improved after the application of the Creative Problem Solving (CPS) model. This means that the results of this study empirically strengthen the theoretical basis that Creative Problem Solving (CPS) makes a significant contribution to improving learning outcomes, especially in subjects requiring conceptual understanding such as economics (Wahyuni et al., 2023) .

In the context of economics learning, students are required to understand the financial institution system, regulations, and their role in the economy. These topics require analytical thinking and logical argumentation skills—skills developed through the Creative Problem Solving (CPS) model (Astri Wariyanti, Ida Karnasih, 2021) .

This research has important implications for teachers, students, and educational institutions. For teachers, these results suggest that the use of innovative learning models such as Creative Problem Solving (CPS) can be a solution to low student learning outcomes (Lasaiba et al., 2022) . Teachers need to shift from conventional approaches to ones that foster student engagement and creativity.

For students, using creative problem solving (CPS) increases learning motivation because they are engaged in challenging and meaningful learning activities. They learn to think critically, work in teams, and solve problems in a fun and real-world way.

CONCLUSION

Based on the results of research that has been conducted regarding the influence of the Creative Problem Solving (CPS) learning model on the economics learning outcomes of class X students at SMA Swasta Utama Medan, several conclusions can be drawn, namely:

1. The Creative Problem Solving (CPS) learning model has a positive impact on student learning outcomes. This is evidenced by statistical analysis, which shows that the average student learning outcome score is 81.30, exceeding the Minimum Completion Criteria (KKM) of 75.
2. The results of the one-sample t-test showed a significance value of 0.000 (<0.05) with an average difference of 6.30 points, which means the increase is statistically significant.
3. There is a significant relationship between the implementation of the Creative Problem Solving (CPS) learning model and student learning outcomes. The regression analysis results show a regression coefficient of 0.160 with a significance level of 0.038. This means that every increase in the implementation of the Creative Problem Solving (CPS) model contributes to an increase in student learning outcomes.
4. The learning outcome data were normally distributed, as evidenced by the Kolmogorov-Smirnov normality test with a significance value of 0.200 (> 0.05), which stated that the data were suitable for parametric analysis.
5. The Creative Problem Solving (CPS) model encourages students to be active, think critically, and creative in solving problems, and increases student involvement in the learning process.
6. Observation results show that students are becoming more collaborative, able to develop alternative solutions, and connect economic concepts with real problems.

Thus, it can be concluded that the application of the Creative Problem Solving (CPS) learning model has proven effective in improving student learning outcomes in economics subjects at SMA Swasta Utama Medan.

REFERENCES

Antasari, M., Hanifah, H., Susanta, A., & Haji, S. (2023). Pengaruh Model Pembelajaran Search, Solve, Create And Share (Sscs) Terhadap Kemampuan Pemecahan Masalah Dan Kemampuan Berpikir Kreatif Peserta Didik Di Sma Negeri 4 Kaur. *Jurnal Lebesgue : Jurnal Ilmiah Pendidikan Matematika, Matematika Dan Statistika*, *4*(2), 822–838. Https://Doi.Org/10.46306/Lb.V4i2.343

Aripin, U., Faudziah, L., Sri Rizky, E., Maryanasari, R., Nuryatin, S., Siliwangi, I., … Barat, J. (2021). Identifikasi Penyelesaian Soal Bangun Ruang Sisi Lengkung Ditinjau Berdasarkan Kemampuan Pemecahan Masalah Matematika Siswa Sekolah Dasar. *Collase (Creative Of Learning Students Elementary Education)*, *4*(4), 501–509.

Astri Wariyanti, Ida Karnasih, H. (2021). *Penerapan Model Pembelajaran Creative Problem Solving Dalam Meningkatkan*. *8*(2), 71–78.

Cahyani, S. D., Khoiri, N., & Setianingsih, E. S. (2019). Pengaruh Model Pembelajaran Creative Problem Solving Terhadap Kemampuan Pemecahan Masalah Matematis Siswa. *Mimbar Pgsd Undiksha*, *7*(2). Https://Doi.Org/Https://Doi.Org/10.23887/Jjpgsd.V7i2.17496

Fayesa, I., Ayu Garawati, R., & Hamidah, I. (2023). Systematic Literature Review: Pengaruh Motivasi Dan Model Pembelajaran Creative Problem Solving Terhadap Kemampuan

Berpikir Kreatif Matematis Siswa. *Ab-Jme: Al-Bahjah Journal Of Mathematics Education*, *1*(2), 86–97. Https://Doi.Org/10.61553/Abjme.V1i2.53

Harefa, D., Telaumbanua, T., Sarumaha, M., Ndururu, K., & Ndururu, M. (2020). Peningkatan Hasil Belajar Ipa Pada Model Pembelajaran Creative Problem Solving (Cps). *Musamus Journal Of Primary Education*, *3*(1), 1–18.

Herutomo, R. A., & Masrianingsih, M. (2019). Pembelajaran Model Creative Problem-Solving Untuk Mendukung Higher-Order Thinking Skills Berdasarkan Tingkat Disposisi Matematis. *Jurnal Riset Pendidikan Matematika*, *6*(2), 188–199. Https://Doi.Org/10.21831/Jrpm.V6i2.26352

Khairunnisa, G. F., & Ilmi, Y. I. N. (2020). Media Pembelajaran Matematika Konkret Versus Digital: Systematic Literature Review Di Era Revolusi Industri 4.0. *Jurnal Tadris Matematika*, *3*(2), 131–140. Https://Doi.Org/10.21274/Jtm.2020.3.2.131-140

Khoiriyah, A. J., & Husamah, H. (2018). Problem-Based Learning: Creative Thinking Skills, Problem-Solving Skills, And Learning Outcome Of Seventh Grade Students. *Jpbi (Jurnal Pendidikan Biologi Indonesia)*, *4*(2), 151–160. Https://Doi.Org/10.22219/Jpbi.V4i2.5804

Kovács, E., Krekić, V. P., & Ivanović, J. (2020). Students' Standpoints About The Significance Of Cooperative Learning In Maths Teaching In Lower Primary School Grades. *Croatian Journal Of Education*, *22*(2), 331–356. Https://Doi.Org/10.15516/Cje.V22i2.3286

Kusuma, J. W., Jefri, U., Hidayat, A., & Hamidah, H. (2020). Application Of Treffinger Learning Model To Improve Creative Reasoning And Mathematical Problem Solving Skills As Well As Student Learning Interests. *Jtam (Jurnal Teori Dan Aplikasi Matematika)*, *4*(2), 204–213. Https://Doi.Org/Https://Doi.Org/10.31764/Jtam.V4i2.2840

Lasaiba, M. A., Lasaiba, D., Arfa, A. M., & Lasaiba, I. (2022). Structural Equation Modeling Partial Least Square For Modeling The Relationship Of Readiness, Creativity And Motivation To Students' Problem-Solving Ability. *Edunesia: Jurnal Ilmiah Pendidikan*, *4*(1), 67–79. Https://Doi.Org/10.51276/Edu.V4i1.317

Meitiyani; Et Al. (2022). Analysis Of Students Creative Thinking Ability In Environmental Problem Solving. *Al-Ishlah: Jurnal Pendidikan*, *14*(2), 1983–1994. Https://Doi.Org/10.35445/Alishlah.V14i1.1629

Moongela, H., Matthee, M., Turpin, M., & Van Der Merwe, A. (2025). The Effect Of Generative Artificial Intelligence On Cognitive Thinking Skills In Higher Education Institutions: A Systematic Literature Review. *Communications In Computer And Information Science*, *2326 Ccis*(2025), 355–371. Https://Doi.Org/10.1007/978-3-031-78255-8_21

Partayasa, W., Suharta, I. G. P., & Suparta, I. N. (2020). Pengaruh Model Creative Problem Solving (Cps) Berbantuan Video Pembelajaran Terhadap Kemampuan Pemecahan Masalah Ditinjau Dari Minat. *Jnpm (Jurnal Nasional Pendidikan Matematika)*, *4*(1), 168. Https://Doi.Org/10.33603/Jnpm.V4i1.2644

Pramestika, R. A., Suwignyo, H., & Utaya, S. (2020). Model Pembelajaran Creative Problem Solving Pada Kemampuan Berpikir Kreatif Dan Hasil Belajar Tematik Siswa Sekolah Dasar. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, *5*(3), 361. Https://Doi.Org/10.17977/Jptpp.V5i3.13263

Rohim, M. A., Dafik, Slamin, & Sucianto, B. (2019). The Analysis Of Implementation Of Research Based Learning Implementation In Developing The Studens' Creative Thinking Skill In Solving Dominating Set Problem. *Iop Conference Series: Earth And Environmental Science*, *243*(1), 012143. Https://Doi.Org/10.1088/1755-1315/243/1/012143

Rusda Elsabrina, U., Hanggara, G. S., Sancaya, S. A., Nusantara, U., & Kediri, P. (2022). Peningkatan Kemampuan Berfikir Kritis Siswa Melalui Layanan Bimbingan Kelompok Dengan Teknik Creative Problem Solving. *Seminar Nasional Dalam Jaringan Konseling Kearifan Nusantara*, 502–513.

Setiawan, W., Juniati, D., & Khabibah, S. (2024). Studi Literatur: Berpikir Kreatif Dalam Pemecahan Masalah Matematika. *Jurnal Ilmiah Soulmath : Jurnal Edukasi Pendidikan Matematika*, *12*(1), 43–54. Https://Doi.Org/10.25139/Smj.V12i1.7548

Sopian, Y. A., & Afriansyah, E. A. (2017). Kemampuan Proses Pemecahan Masalah Matematis Siswa Melalui Model Pembelajaran Creative Problem Solving Dan Resource Based Learning (Studi Eksperimen Pada Siswa Kelas X Smk Krija Bhakti Utama Limbangan). *Jurnal Elemen*, *3*(1), 97. Https://Doi.Org/10.29408/Jel.V3i1.317

Suprihadi, R. A. P., & Ma Rifah, D. R. (2022). Literature Study: Various Abilities Of High School Students Obtained From The Application Of Problem-Based Learning Models In The Field Of Natural Science. *Journal On Biology And Instruction*, *2*(2), 71–76. Https://Doi.Org/10.26555/Joubins.V2i2.6947

Susanto, H., Ibrohim, Basuki, A., Fadzil, H. M., Syafruddin, A. B., & Gunawan, A. (2024). Development Of An Advanced Biology Learning Website In The Fields Of Biotechnology, Biochemistry, And Biomedicine With The Steam Approach. *International Journal Of Interactive Mobile Technologies*, *18*(7), 158–172. Https://Doi.Org/10.3991/Ijim.V18i07.48083

Vidergor, H. E. (2022). Effectiveness Of The Multidimensional Curriculum Model In Developing Higher-Order Thinking Skills In Elementary And Secondary Students. *The Curriculum Journal*, *29*(1), 95–115. Https://Doi.Org/10.1080/09585176.2017.1318771

Wahyuni, R. N., Fauziah, P. Y., Aisyah, S., & Al-Fayed, M. Y. (2023). Implementation Of The Tbm Rumah Asa Program As A Form Of Creative-Innovative Education Based On Entrepreneurship And Local Wisdom In Yogyakarta City. *Qalamuna: Jurnal Pendidikan, Sosial, Dan Agama*, *15*(2), 815–824. Https://Doi.Org/10.37680/Qalamuna.V15i2.3023

Wardani, K. S. K., Rahmatih, A. N., Sriwarthini, N. L. P. N., Nurwahidah, N., & Astria, F. P. (2020). Pengaruh Model Pembelajaran Creative Problem Solving Terhadap Hasil Belajar Siswa. *Edumatsains : Jurnal Pendidikan, Matematika Dan Sains*, *5*(1), 9–18. Https://Doi.Org/10.33541/Edumatsains.V5i1.1652

Warr, M., & West, R. E. (2020). Bridging Academic Disciplines With Interdisciplinary Project-Based Learning. *Interdisciplinary Journal Of Problem-Based Learning*, *14*(1). Https://Doi.Org/10.14434/Ijpbl.V14i1.28590

Widodo, A. N. A., & Amalia, S. R. (2020). Creative Problem Solving Dan Resource Based Learning Terhadap Kemampuan Pemecahan Masalah Matematis Ditinjau Dari Gender. *Aksioma: Jurnal Program Studi Pendidikan Matematika*, *9*(1), 158–165.

Yuliati, Y., & Lestari, I. (2019). Penerapan Model Creative Problem Solving Untuk Meningkatkan Hasil Belajar Siswa Pada Pembelajaran Ilmu Pengetahuan Alam Di Sekolah Dasar. *Jurnal Cakrawala Pendas*, *5*(1), 280138.

Zubaidah, Z., & Putra, R. S. (2022). Model Kepemimpinan Digital Kepala Sekolah Di Era Teknologi. *Jurnal Mudarrisuna: Media Kajian Pendidikan Agama Islam*, *12*(4), 803. Https://Doi.Org/10.22373/Jm.V12i4.17206