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META-ANALYSIS: THE SIGNIFICANCE OF THE SEARCH, SOLVE, CREATE, AND SHARE MODEL IN ENHANCING STUDENTS' MATHEMATICAL PROBLEM-SOLVING ABILITY

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ABSTRACT
Mathematical problem-solving ability is an important ability that students must have to master mathematics learning and solve problems. The low mathematical problem-solving ability of students is often caused by the application of conventional learning models. One model that can improve students' mathematical problem-solving abilities is the Search, Solve, Create, and Share (SSCS) learning model. The Search, Solve, Create, and Share (SSCS) learning model emphasizes active student participation and problem-solving, significantly enhancing students' mathematical problem-solving abilities. This study was conducted to determine the effectiveness of the SSCS learning model in improving students' capacity for solving mathematical problems. The method employed was meta-analysis. The analysis of eight articles revealed a consistently high effect size across all of them. In addition, the combined effect size of the eight articles was 1.199, which is included in the high category. Based on the results of the t-test, the values of $t_{count} = 30.14 > 1.648 = t_{table}$, so H_0 is rejected, indicating that students who engage with the SSCS learning model demonstrate a significantly higher average capability in solving mathematical problems than those who do not use it. Therefore, the SSCS learning paradigm presents a viable alternative for enhancing students' mathematical problem-solving skills.
Keywords: SSCS Learning Model, Mathematical Problem-Solving Ability, Meta-Analysis

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PRELIMINARY

Mathematical problem-solving is important for students to master mathematics learning and solving a problems (Aprida & Pramita, 2021). In line with (NCTM, 2000), which states that mathematical problem-solving ability is an integral part of mathematics learning, so it cannot be separated from mathematics learning. According to Yarmayani (2016), mathematical problem solving ability is one of the abilities that students must have, because problem solving provides great benefits to students in seeing the relationship between mathematics and other subjects and in real life. With this it can be stated that mathematical problem solving is a very important thing that students must have to train students to get used to facing various problems, both problems in learning mathematics or

in everyday life. problem solving can be interpreted as an effort to find a way out of a difficulty.

The importance of mathematical problem-solving ability that should be mastered is inversely proportional to the existing facts. The Trends in International Mathematics and Science Study, commonly called TIMSS, shows that in Indonesia, students' problem-solving abilities are still relatively low when solving high-level problems (TIMSS, 2015). In addition, several studies have revealed the same thing regarding low mathematical problem-solving abilities that are difficult for students to master (Fadillah & Ardiawan, 2021; Fatmala et al., 2020; Hindriyanto et al., 2019; Khasanah et al., 2021; Wijaya et al., 2019).

One of the factors contributing to students' low mathematical problem-solving abilities is frequently the use of conventional learning models, the absence of learning content related to real-life contexts, and the inadequate attention teachers give to their students' mathematical problem-solving skills. The infrequent availability of non-routine questions, indicative of mathematical problem-solving skills, leads students to adopt learning patterns primarily focusing on memorization (Nurhasanah & Luritawaty, 2021). One approach to enhancing students' ability to solve mathematical problems is to utilize the appropriate mathematics learning model.

Efforts that are thought to be able to improve students' mathematical problem-solving abilities are the Search, Solve, Create, and Share learning model (Mulyana et al., 2018). In line with Yusnaeni & Corebima (2017), it has been noted that the Search, Solve, Create, and Share (SSCS) model is a highly suitable cooperative learning approach for enhancing students' mathematical problem-solving abilities. The Search, Solve, Create, and Share (SSCS) model was first introduced in 1987 by Edward L. Pizzini. The Search, Solve, Create, and Share (SSCS) model is a learning framework aimed at enhancing critical thinking skills and placing greater emphasis on scientific concepts through a problem-solving approach (Pizzini & Shepardson, 1992). Students are motivated to engage actively in the learning process to cultivate their critical, creative, and collaborative thinking skills through the Search, Solve, Create, and Share (SSCS) model.

The SSCS model is a learning model that can help students in problem-solving, empower students, and foster students' self-confidence where learning does not require students to memorize, but is able to encourage students to construct their own knowledge and can apply this knowledge in everyday life and so that the quality of mathematics learning becomes better (Periartawan in Sari et al., 2019). This model can make the learning process active and enjoyable for students. This SSCS learning model consists of four stages, namely:

(1) search (search stage), (2) solve (problem-solving stage), (3) create (concluding stage), and (4) share (displaying stage) (Deli, 2015). This Search, Solve, Create, and Share (SSCS) learning model has the advantage of providing opportunities for students to practice and hone their Pizzini problem-solving skills (Herliantari, 2018). According to Sari et al. (2019), other advantages are that it can improve the ability to think creatively in mathematics, students can increase their sense of responsibility for their learning methods, and students who receive Search, Solve, Create, and Share (SSCS) learning are better than students who receive conventional learning. According to Deli (2015), the advantages of the Search, Solve, Create, and Share (SSCS) learning model are studying and strengthening the basics of science and mathematical concepts for a better understanding, improving students' questioning skills, improving and improving interactions between students, and communicating effectively both in writing and orally.

This study examines journal articles regarding the effect of the Search, Solve, Create, and Share (SSCS) learning model on enhancing students' mathematical problem-solving skills. The influence of the Search, Solve, Create, and Share (SSCS) approach on students' ability to tackle mathematical problems has been extensively researched, yielding diverse outcomes. From this information, in-depth and comprehensive information is needed regarding enhancing pupils' ability to solve mathematical problems using the Search, Solve, Create, and Share (SSCS) learning model by analyzing existing research results.

METHODS

This study evaluates earlier research findings on enhancing students' mathematical skills using SSCS learning models. The research method used is the meta-analysis to evaluate and collect findings from various studies relevant to the selected topic. Meta-analysis is a quantitative research strategy that involves analyzing quantitative data from previous studies or using data from other existing studies to confirm or refute the hypotheses proposed in these studies (Laia & Dasari, 2025). Data was collected by searching for six nationally and internationally accredited articles that discuss enhancing students' mathematical problem-solving skills using the SSCS model. Researchers used the help of the Publish or Perish 8 application to search for related articles using keywords in journal searches, including “Search, Solve, Create, and Share”, “SSCS”, and “Mathematical Problem-Solving Ability”. From the 32 total articles, researchers obtained six articles that met the criteria. The criteria for the articles analyzed by researchers include a population range from elementary to tertiary levels in Indonesia, publication years of the primary studies

between 2019 and 2024, and research findings focused on mathematical problem-solving skills.

The data analysis used in the meta-analysis study consisted of six stages: (1) Identifying the issue or subject. The issue in this study is how the SSCS model affects pupils' capacity for solving mathematical problems; (2) looking for and gathering information on the issue or subject under study in the form of articles; (3) compiling as much data as feasible for the research report. Six articles provided information on the standard deviation, average mathematical problem-solving skill, and indications of mathematical problem-solving ability employed; (4) determining each research report's Effect Size based on all collected data; (5) utilizing the t-test to determine significance; (6) examining previously published research reports based on the examination of the techniques and data analysis employed in order to derive conclusions (Rossytasari & Setyaningtyas, 2021).

Effect Size is a value used to see the influence of a variable on another variable (Handayani & Koswanti, 2021). The calculation of the greatness of the impact or impact estimate in this paper is to see the impact of utilizing the SSCS learning show. The formula for finding the Effect Size value uses the formula according to Ellis in (Santosa et al., 2021), which is as follows.

$$ES = \frac{\bar{x}_{eksperiment} - \bar{x}_{control}}{SD_G}$$

Description:
ES : *Effect Size*
$\bar{x}_{eksperiment}$: Average of the experimental group
$\bar{x}_{control}$: Average of the control group
SD_G : Combined standard deviation

The combined standard deviation formula is as follows according to Sudjana (2005),

$$D_G = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$$

Description:
SD_G : Combined standard deviation
n_1 : Count of students in the experimental group.
n_2 : Count of students in the control group
s_1^2 : Variance of the experimental group
s_2^2 : Variance of the control group
According to Cohen's results, the effect size can be interpreted into the categories in Table 1.

Effect Size	Category
$0 \leq ES \leq 0{,}2$	Low
$0{,}2 < ES \leq 0{,}8$	Medium
$ES > 0{,}8$	High

This considers various factors to determine the effect of employing the SSCS model on mathematical problem-solving skills, making it essential to test the hypothesis using a t-test. The hypothesis that will be used is as follows.

$H_0: \mu_1 \leq \mu_2$ (Students who employ the SSCS learning paradigm have an average mathematical problem-solving skill that is no better than that of students who do not)

$H_1: \mu_1 > \mu_2$ (Students who employ the SSCS learning paradigm have an average mathematical problem-solving skill that is better than that of students who do not)

The following is the t-test formula that was applied in the test.

$$t_{hitung} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}}$$

Description:
$\bar{x}_1$: Average of the experimental group
$\bar{x}_2$: Average of the control group
n_1 : Count of students in the experimental group
n_2 : Count of students in the control group
s_1^2 : Variance of the experimental group
s_2^2 : Variance of the control group

RESULT

The analysis based on the established criteria resulted in six articles focused on the SSCS model for improving students' mathematical problem-solving skills. Qualitative and quantitative descriptive methods were then used to portray the research article data. Information from every item that fits the requirements is included in Table 2.

Table 2. Details on Articles That Fulfill the Criteria

No	Code Data	Title	Article Identity
1	A1	The Effect of the SSCS Learning Model on the Mathematical Problem-Solving Ability of Junior High School Students, Kampar Regency	**Authors:** Muhammad Syafri, Zulkarnain, Maimunah. **Journal:** Journal of Educational Sciences. **Year of publication:** 2020 **Volume (issue):** 04(02)

2	A2	The Effect of the SSCS Learning Model on Reflective Thinking Skills and Problem-Solving Ability	**Authors:** Muhamad Yasin, Jamal Fakhri, Siswadi, Rahma Faelasofi, Ahmad Safi'I, Nanang Supriadi, Muhamad Syazali, Ismail Suardi Wekke. **Journal:** European Journal of Educational Research **Year of publication:** 2020 **Volume (issue):** 9(2)
3	A3	The Mathematical Problem-Solving Ability through the Search, Solve, Create and Share (SSCS) Learning Model	**Authors:** Tiara, Yohanes Leonardus Sukestiyarno, Mulyono **Journal:** Edunesia: Jurnal Ilmiah Pendidikan **Year of publication:** 2024 **Volume (issue):** 5(1)
4	A4	Implementasi Model Pembelajaran SSCS terhadap Kemampuan Pemecahan Masalah Matematis ditinjau dari Berpikir Kreatif Matematis Siswa	**Authors:** Dianita Apriliasari, Heni Lilia Dewi **Journal:** Seminar Nasional Tadris Matematika UIN K.H. Abdurrahman Wahid Pekalongan**Year of publication:** 2023 **Volume (issue):**
5	A5	Pengaruh Model Pembelajaran Search, Solve, Create, and Share (SSCS) terhadap Kemampuan Pemecahan Masalah Matematis Siswa SMP Negeri 28 Palembang	**Authors**: Maharani Yulanda Sari, Rohana, Yunika Lestaria Ningsih **Journal:** Jurnal Prespektif Pendidikan **Year of publication:** 2019 **Volume (issue):** 13(2)
6	A6	Pengaruh Model Pembelajaran Search, Solve, Create, and Share (SSCS) terhadap Kemampuan Pemecahan Masalah dan Kemampuan Berpikir Kreatif Peserta Didik di SMA Negeri 4 Kaur	**Authors:** Melisa Antasari, Hanifa, Agus Susanta, Saleh Haji **Journal:** Lebesgue: Jurnal Ilmiah Pendidikan Matematika, Matematika, dan Statistika **Year of publication:** 2023 **Volume (issue):** 4(2)

Data for the meta-analysis was gathered from the aforementioned studies. Following that, Table 3 presents the research data on the analysis of enhancing students' mathematical problem-solving skills using the SSCS learning paradigm.

Table 3. Effect Size Scores for Each Article

Code	Experimental Group			Control Group			*Effect Size*	Description
	N	Average	SD	N	Average	SD		
A1	69	71,09	22,27	60	54,57	24,75	0,845	High
A2	28	85,82	7,59	28	73,66	7,57	2,284	High
A3	30	78,20	10,39	30	68,67	9,23	1,003	High
A4	28	80,50	10,00	28	71,14	12,50	1,091	High
A5	32	70,81	18,88	32	58,13	22,30	0,821	High

A6	35	83,80	4,89	35	81,71	4,79	1,153	High
Combined	**222**	**78,37**	**12,33**	**213**	**67,98**	**13,52**	**1,199**	High

The following are the steps for testing the hypothesis:

Determining the Hypothesis

$H_0: \mu_1 \leq \mu_2$ (Students who employ the SSCS learning paradigm have an average mathematical problem-solving skill that is no better than that of students who do not)

$H_1: \mu_1 > \mu_2$ (Students who employ the SSCS learning paradigm have an average mathematical problem-solving skill that is better than that of students who do not)

Determining the Significance Level

Using the significance level $\alpha = 0.05$

Testing Criteria

Accept H_0 if $t_{count} < t_{table}$

Determining t_{table}

$t_{table} = t_{1-\frac{1}{2}\alpha} = t_{1-\frac{1}{2}(0.05)} = t_{0.975}$

with

$dk = n_1 + n_2 - 2 = 433$

So, it is obtained $t_{table} = 1.648$

Determining t_{count}

$$t_{count} = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{(n_1-1)s_1^2 + (n_2-1)s_2^2}{n_1+n_2-2}\left(\frac{1}{n_1}+\frac{1}{n_2}\right)}}$$

$$t_{count} = \frac{78.37 - 67.98}{\sqrt{\frac{(222-1)12.33 + (213-1)13.52}{257+237-2}\left(\frac{1}{222}+\frac{1}{213}\right)}}$$

$$t_{count} = \frac{10.29}{0.34}$$

$$t_{count} = 30.14$$

Drawing Conclusions

According to the data analysis, the value of $t_{count} = 30.14 > 1.648 = t_{table}$ was obtained, so H_0 It was turned down, which indicates that students who utilize the SSCS

learning model demonstrate a more extraordinary average ability to solve mathematical problems than those who do not use the SSCS learning model.

Discussion

The findings from the Effect Size analysis in each reviewed article showed a notable influence of the SSCS learning model on students' mathematical problem-solving abilities. This is evident from the averages of both the experimental group and the control group, each of which had values of 78.37 and 67.98. Based on these, it can be seen that the normality of students' numerical problem-solving capacities moved forward after the SSCS learning show was connected. In conclusion, the standardized effect size reflecting the impact of the SSCS learning model on students' scientific problem-solving skills was 1.199 which falls into the high category. The relevant articles that have a high Effect Size are in the research conducted by Syafri et al. (2020), Yasin et al. (2020), Tiara et al. (2023), Apriliasari & Dewi (2023), Sari et al. (2019), dan Antasari et al. (2023).

In a study conducted by Syafitri & Tressyalina (2020), the effect size results were 0.854. The article is categorized as high based on the effect size classification, indicating that the SSCS model significantly impacts students' mathematical problem-solving abilities. This is evident in the difference in average scores for students' mathematical problem-solving skills between the control and experimental groups at SMP Negeri 1 Kampar. Students in the control group achieved an average score of 54.57 in mathematical problem-solving, while those in the experimental group had an average score of 71.09. It can be concluded that students employing the SSCS learning model excel compared to those using traditional teaching methods in terms of their average mathematical problem-solving skills.

In a study conducted by Yasin et al. (2020), the effect size results were 2.284. The article is classified as high by the effect size category. This is evident in the difference in average scores for students' mathematical problem-solving skills between the control and experimental groups of private school students in Bandar Lampung. Students in the control group achieved an average score of 73.66 In mathematical problem-solving, those in the experimental group had an average score of 85.82. It can be concluded that students employing the SSCS model excel compared to those using traditional teaching methods in terms of their average mathematical problem-solving skills.

This aligns with research conducted by Tiara et al., (2023), which obtained an effect size of 1.003. The article is classified as high by the effect size category. This is evident in

the difference in average scores for students' mathematical problem-solving skills between the control and experimental groups of class X students of SMK Negeri 1 Sinabang, Aceh. Students in the control group achieved an average score of 68.67 In mathematical problem-solving, while those in the experimental group had an average score of 78.20. It can be inferred that students utilizing the SSCS model perform better than those using discovery learning methods regarding their average mathematical problem-solving skills.

This aligns with research conducted by Apriliasari & Dewi (2023), Which obtained an effect size of 1.091. The article is classified as high by the effect size category. This is evident in the difference in average scores for students' mathematical problem-solving skills between the control and experimental groups of MTs Negeri 1 Pekalongan class VIII students. The average mathematical problem-solving ability of students in the experimental group was 80.50, while the average mathematical problem-solving ability in the control group was 71.14. It is possible to conclude that students who use the SSCS model outperform those who use CTL methods in terms of their average mathematical problem-solving skills.

Furthermore, in the research conducted by Sari et al. (2019), the effect size results were 0.821. The article is classified as high by the effect size category. This is evident in the difference in average scores for students' mathematical problem-solving skills between the control and experimental groups of SMP Negeri 28 Palembang class VIII students. Students in the control group achieved an average score of 58.13 in mathematical problem-solving, while those in the experimental group had an average score of 70.81. It can be inferred that students employing the SSCS model excel compared to those using traditional teaching methods in terms of their average mathematical problem-solving skills.

Additionally, a study that was carried out by Antasari et al. (2023), the effect size results were 1.153. The article is classified as high by the effect size category, meaning that the SSCS model significantly influences students' mathematical problem-solving abilities. This is evident in the difference in average scores for students' mathematical problem-solving skills between the control and experimental groups of SMA Negeri 4 Kaur class XI students. Students in the control group achieved an average score of 81.71 in mathematical problem-solving, while those in the experimental group had an average score of 81.71. It can be inferred that students employing the SSCS model excel compared to those using traditional teaching methods in terms of their average mathematical problem-solving skills.

CONCLUSION

Drawing from a meta-analysis of six prior studies that investigated the effect of the SSCS model on students' mathematical problem-solving skills, it was found that the SSCS model positively contributes to enhancing these skills. This is highlighted by the disparity in average scores between the experimental and control groups, which are 78.37 and 67.98. It can be seen from the results of the effect size obtained, which is 1.199, which is included in the high category. In addition, it can also be seen from the results of the t-test statistical calculation, namely the value of $t_{count} = 30.14 > 1.648 = t_{table}$, so H_0 It is not accepted, indicating that students who use the SSCS learning model have better mathematical problem-solving abilities than those who do not. Therefore, it can be inferred that the SSCS model enhances students' mathematical problem-solving skills.

Based on the research conducted, an alternative for enhancing pupils' mathematical problem-solving skills is the SSCS model. In addition, researchers have difficulty compiling this article, namely finding relevant articles both nationally and internationally. For further researchers, it is recommended to conduct a more comprehensive meta-analysis, including studies that use qualitative research methods to understand students' and teachers' experiences in the learning process.

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

Aprida, V., & Pramita, A. (2021). Analisis Kemampuan Pemecahan Masalah Matematis Siswa dalam Meneyelesaikan Soal Materi Lingkaran. *Jurnal Prodi Pendidikan Matematika (JPMM)*, *3*(1).

Apriliasari, D., & Dewi, H. L. (2023). *Implementasi Model Pembelajaran SSCS terhadap Kemampuan Pemecahan Masalah Matematis ditinjau dari Berpikir Kreatif Matematis Siswa*.

Deli, M. (2015). Penerapan Model Pembelajaran Search Solve Create Share (Sscs) Untuk Meningkatkan Motivasi Belajar Matematika Siswa Kelas Vii-2 Smp Negeri 13 Pekanbaru. *Primary: Jurnal Pendidikan Guru Sekolah Dasar*, *4*(1), 71. https://doi.org/10.33578/jpfkip.v4i1.2725

Fadillah, S., & Ardiawan, Y. (2021). Pengaruh Model Problem Solving Dan Problem Posing Terhadap Kemampuan Pemecahan Masalah Ditinjau Dari Self Confidence. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, *10*(3), 1373. https://doi.org/10.24127/ajpm.v10i3.3664

Fatmala, R. R., Sariningsih, R., & Zanthy, L. S. (2020). Analisis Kemampuan Pemecahan Masalah Matematis Siswa Smp Kelas VII Pada Materi Aritmetika Sosial. *Jurnal Cendekia : Jurnal Pendidikan Matematika*, *4*(1), 227–236. https://doi.org/10.31004/cendekia.v4i1.192

Handayani, A., & Koswanti, H. D. (2021). Meta-Analisis Model Pembelajaran Problem Based Learning (PBL) Untuk Meningkatkan Kemampuan Berpikir Kreatif. *Jurnal Basicedu*, *5*(3). https://doi.org/https://doi.org/10.31004/basicedu.v5i3.924

Herliantari, H. (2018). *Efektivitas Model Pembelajaran Search Solve Create and Share (SSCS) Terhadap Kemampuan Creative Problem Solving Peserta Didik Pada Pembelajaran Fisika*.

Hindriyanto, R. A., Utaya, S., & Utomo, D. H. (2019). Pengaruh Model Project Based Learning terhadap Kemampuan Pemecahan Masalah Geografi. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, *4*(8), 1092. https://doi.org/10.17977/jptpp.v4i8.12682

Khasanah, N., Kusmayadi, T. A., & Nurhasanah, F. (2021). Analisis Kesulitan Dalam Menyelesaikan Masalah Abstraksi Matematis Pada Pokok Bahasan Fungsi. *AKSIOMA: Jurnal Program Studi Pendidikan Matematika*, *10*(1), 359. https://doi.org/10.24127/ajpm.v10i1.3445

Laia, H. O., & Dasari, D. (2025). Meta-Anaysis: The Effectiveness of The Reciprocal Teaching Model on Students' Mathematics Learning. *Mathline: Jurnal Matematika Dan Pendidikan Matematika*, *10*(1), 29–43.

Mulyana, Y., Priyatno, S., & Dewi, N. R. (2018). Penerapan Model SSCS untuk Meningkatkan Kemampuan Membuat Model Matematis dan Kerja Sama Siswa. *Prisma, Prosiding Seminar Nasional Matematika*, *1*, 225–232. https://journal.unnes.ac.id/sju/index.php/prisma/article/view/19519/9513

NCTM. (2000). Principles and Standards for School Mathematics. *Journal of Equine Veterinary Science*, *18*(11), 719. https://doi.org/https://doi.org/10.1016/s0737-0806(98)80482-6

Nurhasanah, D. S., & Luritawaty, I. P. (2021). Model Pembelajaran REACT Terhadap Kemampuan Pemecahan Masalah Matematis. *PLUSMINUS: Jurnal Pendidikan Matematika*, 71–82.

Pizzini, E. L., & Shepardson, D. P. (1992). A comparison of the classroom dynamics of a problem-solving and traditional laboratory model of instruction using path analysis. *Journal of Research in Science Teaching*, *29*(3), 243–258. https://doi.org/10.1002/tea.3660290305

Rossytasari, I. O., & Setyaningtyas, E. W. (2021). Meta Analisis Model Problem Based Learning (PbL) terhadap Kemampuan Berpikir Kritis Siswa Sekolah Dasar. *Edukatif : Jurnal Ilmu Pendidikan*, *3*(4), 2067–2080. https://doi.org/10.31004/edukatif.v3i4.1135

Santosa, T. A., Razak, A., Lufri, L., Zulyusri, Z., Fradila, E., & Arsih, F. (2021). Meta-Analisis: Pengaruh Bahan Ajar Berbasis Pendekatan STEM Pada Pembelajaran Ekologi. *Journal of Digital Learning and Education*, *1*(01), 1–9. https://doi.org/10.52562/jdle.v1i01.24

Sari, M. Y., Rohana, R., & Ningsih, Y. L. (2019). Pengaruh Model Pembelajaran Search Solve Create and Share (Sscs) Terhadap Kemampuan Pemecahan Masalah Matematis Siswa Smp Negeri 28 Palembang. *Jurnal Perspektif Pendidikan*, *13*(2), 92–102. https://doi.org/10.31540/jpp.v13i2.611

Sudjana. (2005). *Metode Statistika (7th Ed.)* (Tarsito (ed.)).

Syafitri, R. A., & Tressyalina. (2020). *The Importance of the Student Worksheets of Electronic (E-LKPD) Contextual Teaching and Learning (CTL) in Learning to Write Description Text during Pandemic COVID-19*. *485*(Iclle), 284–287. https://doi.org/10.2991/assehr.k.201109.048

Syafri, M., Zulkarnain, & Maimunah. (2020). The Effect of SSCS Learning Model on the Mathematical Problem-Solving Ability of Junior High School Students, Kampar Regency. *Journal of Educational Sciences*, *4*(3), 541–559.

Tiara, T., Sukestiyarno, Y. L., & Mulyono, M. (2023). The Mathematical Problem-Solving Ability through the Search, Solve, Create and Share (SSCS) Learning Model. *Edunesia : Jurnal Ilmiah Pendidikan*, *5*(1), 364–376. https://doi.org/10.51276/edu.v5i1.720

TIMSS. (2015). International Mathematics Achievement. *TIMSS 2015*. http://timssandpirls.bc.edu/timss2015/international-results/timss-2015/mathematics/student-achievement/

Wijaya, A. P., Mahayukti, G. A., Gita, I. N., & Parwati, N. N. (2019). Pengaruh strategi Relating, Experiencing, Applying, Cooperating, Transfering berorientasi kearifan lokal terhadap pemecahan masalah dan karakter. *Pythagoras: Jurnal Pendidikan Matematika*, *14*(2), 178–187. https://doi.org/10.21831/pg.v14i2.25881

Yarmayani, A. (2016). Analisis Kemampuan Pemecahan Masalah Matematis Siswa Kelas XI MIPA SMA Negeri 1 Kota Jambi. *Jurnal Ilmiah Dikdaya*, *6*(2), 12–19.

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 problem solving ability. *European Journal of Educational Research*, *9*(2), 743–752. https://doi.org/10.12973/eu-jer.9.2.743

Yusnaeni, A., & Corebima, D. (2017). Empowering students' metacognitive skills on sscs learning model integrated with metacognitive strategy. *The International Journal of Social Sciences and Humanities Invention*, *4*(5), 3476–3481. https://doi.org/10.18535/ijsshi/v4i5.03