Application of SAVI Model on Addition and Subtraction Material In Class 2 MI to Improve Student Learning Outcomes

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Abstract: This study aims to determine the learning outcomes of grade II students of MI Muhammadiyah Jagalan, Salam District, Magelang Regency using the SAVI (somatic, auditory, visual, intelectuall) learning model based on the ravine board (addition and subtraction) in math learning. The method used in this research is classroom action research, with a sample size of 12 students with sampling using pre-test and post-test. Used as research instruments are teaching modules, observation sheets, and documentation. The results showed the use of the SAVI learning model, giving an influence on student abilities and a significant increase in student learning outcomes in addition and subtraction math lessons. It can be seen in the first cycle percentage of 55.5% and achieved a successful increase in the implementation of the second cycle action of 77.7%. The use of the abyss board can increase students to be more active in participating in the learning process, such as daring to ask questions, being able to practice with the abyss board media, being able to present the results of work in front of the class, and being able to work together with the group.

Keywords: SAVI learning model, mathematics, student learning outcomes

PRELIMINARY

Education is one aspect of life as a determinant in building a nation. In the SISDIKNAS Law No.20 of 2003 that education is a planned conscious effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble character, and skills needed by themselves (Marzuqi and Yusufi 2024). Learning is the process of channeling knowledge to students from a teacher or knowledgeable person, various actions are carried out in student learning activities in obtaining satisfactory learning outcomes (Muanifah and Halimah Sa'diyah 2018). In learning activities in order to produce satisfactory results, teachers need to develop learning strategies in accordance with subjects or adjust the ability of students' mindsets. However, not all students can

understand the learning methods presented by the teacher, because students' thinking abilities are certainly different.

In formal education, mathematics is a core subject with uses in almost all social sectors of life. The urgency that is the reference for mathematics lessons can be seen in the nature that is considered mandatory in every level of education. By learning mathematics, you will definitely explore understanding related to mathematical concepts. Understanding mathematical concepts is a basic concept in understanding every problem in mathematics or problems in life. If mathematical concepts are well understood, it makes it easier for students to strengthen memories, utilize, and be able to redesign a concept (Linggasari, Koswara, and Mardjohan 2023). Skills in understanding mathematical concepts are students' skills in explaining back in the students' own language and being able to apply the concept of a problem, and being able to relate to other concepts (Febriani, Wahyu Widada, and Dewi Herawaty 2019). There are various student activities carried out to deepen understanding including discussing, asking questions, watching videos, and giving problems. This is able to develop students' thinking about mathematics (Radiusman 2020).

Mathematics is a universal science and must be given to all students from elementary school to provide students with the ability to be logical, analytical, systematic, critical, and creative, as well as the ability to work together (Widiastuti and Rahmah 2023). To create quality students who can think critically in mathematics learning, teachers must play a lot of roles in the learning process, because teachers are role models for students (Apsoh and Setiawan 2023). In the learning process, students who have critical thinking skills can be given in-depth direction and guidance, so that students are able to solve problems optimally. Some students are able to think critically, so the learning process needs to be carried out in an appropriate way (Pipit Muliyah, Dyah Aminatun, Sukma Septian Nasution, Tommy Hastomo, Setiana Sri Wahyuni Sitepu 2020). An important factor in successful learning in complex subjects, one of which is mathematics, can be built from the start through a positive attitude (Siregar & Restati 2017). In the learning process, students will be taught to be able to think critically in order to be able to solve various problems, one of which is problems in mathematics.

In reality, every student assumes differently about math lessons. Of the many students who admit that mathematics is an easy and fun subject have a low percentage

compared to students who do not like mathematics (Merienta Nainggolan, Darinda Sofia Tanjung Simarmata 2021). Not a few students have a low interest in mathematics, because they are faced with the application of formulas and complex numerical concepts. Teachers need to take action to prioritize their role as facilitators and create fun learning (Haniva, Marta, and Rizal 2024). Mathematics is considered by students to be the most difficult subject, this reduces students' interest in mathematics. In the learning process, there needs to be a model, method, or learning media to change students' paradigm about math being more fun and not boring. It should be noted that mathematics is useful as a science that studies thinking patterns in helping to form human behavior.

Teachers consider that their job is to channel their knowledge to students with the materials listed in the curriculum so as to meet the target of delivering learning topics (Sumiatie 2017). There are still many teachers who use conventional learning methods or by using more lecture methods because this method is easy to apply. These learning methods give teachers the demand to be more active than students. This makes students less involved or passive during the learning process and usually students do not focus on the lesson, will play alone when the teacher explains the material in front of the class. So, teachers need to improve learning methods that can attract students to focus more on math lessons. During the learning process, it would be better to have communication and interaction between teachers and students with various learning resources (Muanifah and Halimah Sa'diyah 2018). Students will understand and remember more easily when they are directly involved or with practice in the learning process. Teachers need to innovate to create a math learning process that supports student success.

In learning grade 2 mathematics at MI Muhammadiyah Jagalan, Salam District, various problems were found, including some students having difficulty understanding mathematics subjects, one of which was in the material for counting operations on addition and subtraction. When the teacher explains the material some students are engrossed in playing alone, joking, and chatting with their friends. Because they think math is a boring and difficult lesson, it triggers students to not be able to master the material optimally and causes low student scores.

However, the teacher has tried to apply various methods in math lessons including using the differentiation method, with this method the teacher hopes that students will easily learn math. But in reality, there are still students who find it difficult. Basically,

students' intelligence is different, some are able to master in the social field, the art field, and so on. Thus, teachers need to make lesson plans that contain the contents of effective learning strategies so that they can understand math subject matter easily and attract students' interest in learning fun math.

Knowing the explanation of the problem, it is necessary to have models, strategies, and methods that are more student-centered or students centered learning (SCT) that can have a positive impact on students regarding mathematical understanding of arithmetic operation material on addition and subtraction. SAVI (somatic, auditory, visual, intellectual) is one of the learning models that can involve students, expected to be a solution to the problem (Apsoh and Setiawan 2023). SAVI (somatic, auditory, visual, intellectual) model is learning that collaborates physical movement and intellectual abilities, as well as the utilization of all senses that have a significant influence.

The teaching and learning process using the SAVI model, students can express actively when learning takes place, then extracting knowledge can be more meaningful because students do it themselves (Putri, Panjaitan, and Sujana 2024). The SAVI model helps students learn not only to pay attention to the theory delivered by the teacher, but with movement and action activities so that students can solve the problems faced. Then, by learning communication and respecting other students who are presenting, where this becomes a lesson for students to dare to give opinions and respect fellow peers. Then, students are able to retell what they know and students can learn to solve problems (Nirwana Anas and Khairi Syafitri 2019). The SAVI model can be applied in math lessons, because students need a deep understanding through various stages in the SAVI model. Students not only observe, but can be directly involved during learning. In research that has been conducted on mathematics learning that applies the SAVI model, has the aim of increasing active student participation during the learning process, helping students understand mathematical concepts concretely with the teaching media that has been provided, and building students' communication skills through group discussions in solving a problem related to mathematics. The benefits of the research in using the SAVI model include making students and teachers more interactive in the learning process, students are able to understand the concept of material more deeply, student communication skills can be developed with group discussions, and mathematics learning becomes more effective.

METHOD

This research uses the method of classroom action research (PTK). This research was conducted in two cycles. Cycle I was carried out for one meeting, cycle II was carried out for one meeting. Each meeting consists of two lesson hours. This research has planning in cycle I research and cycle II research, with the possibility of changes in two cycles. The stages in each cycle, including the planning stage, the implementation stage, the observation stage, and the reflection stage. The subjects of this study were students of MI Muhammadiyah Jagalan Subdistrict, Salam Regency, with a total of 114 students. The research was conducted on math lessons with the material of addition and subtraction counting operations. This study used learning media such as chasm boards, addition and subtraction boards, and student worksheets (LKPD) which included pre-test and post-test. The data collection techniques used in this study were observation, tests, interviews, and documentation. Data analysis techniques were carried out using qualitative and quantitative descriptive analysis obtained from test results, and presented in tabular form. The results of the data analysis provide a comprehensive picture of the effectiveness of the SAVI model in math lessons based on the abyss board media in improving student learning outcomes. The following is a chart of the research implementation process in a cycle with the John Elliot model.

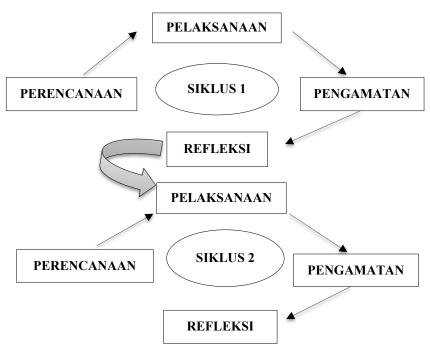


Figure 1. Design of John Elliot's Classroom Action Research Steps (Priatna, T., 2013)

The picture above can be explained as follows.

1. Research Design

Activities that need to be carried out in planning include:

a. Observation

To identify problems that arise, observations are made in a class. Problem identification is carried out by interviewing the teacher, observing the learning process, and giving questionnaires to students, then continued with discussions related to the steps to be taken by researchers and teachers.

b. Problem solving from various identified problems

Researchers collaborate with teachers in determining actions as an effort to solve problems with actions that have been planned and agreed upon by researchers and teachers, namely using the SAVI (somatic, auditory, visual, intellectual) model which can make changes to student learning outcomes in mathematics subjects.

c. Determination of planning

In working on a problem, what teachers and researchers must do is plan the research to be carried out. All information obtained is taken into consideration to make decisions in the efforts that will be made in the research.

d. Action preparation

What needs to be done in preparation by researchers and teachers include:

- 1) Develop a math lesson plan.
- 2) Prepare the facilities and infrastructure needed.
- 3) Prepare research instruments in the form of tests, observation guidelines and documentation. Observation according to Mustaqim (2001: 158) is an assessment of individual behaviour or an event that occurs to be measured by research both when actual conditions and planned conditions (Nasution, Nurbaiti, and Arfannudin 2021). Observation guidelines are a way of collecting components of information obtained through structured research and writing on events used for research purposes. Test is defined as an instrument used to test the understanding of the target on a particular content or material (Dachliyani 2019). Documentation is a record of events resulting from an observation. Documentary forms vary such as photographs, written records, and others to complement observational data (Wekke and Dkk 2019).

2. Implementation

The implementation stage is the implementation of activities that have been prepared. The importance of reviewing before the action is implemented regarding the feasibility of the formulation of problems and hypotheses made. The implementation of class action in this study uses one of the learning models that makes students active during the teaching and learning process, namely somatic, auditory, visual, and intellectual (SAVI). The steps of the SAVI learning model are:

- a. Preparation, fostering students' interest by giving positive feelings related to the learning experience to be learned. The teacher evokes students' memories of previous learning materials. Then the teacher can divide the group according to the number of students in the class.
- b. Delivery, the teacher helps students understand the learning material in a way that is fun, interesting, relevant, and involves the five senses. Teachers can innovate for learning methods.
- c. Training, the teacher gives practice questions to students in groups and helps each other and makes questions and answers about the material.
- d. Appearance of results, the teacher gives assignments to students and each group displays the results of the problems that have been solved, and the teacher provides an evaluation to provide feedback to students to strengthen student knowledge.

3. Observation

In the observation stage, the researcher makes notes about what happened to obtain valid data as a reference for making improvements in the next cycle. The observation process is applied while doing. Researchers can observe when the implementation of the SAVI learning model is applied by teachers in mathematics subjects. Classroom action research observations are made by taking field notes, recording, or documenting what is found when implementing an action.

4. Reflection

In the reflection stage, researchers or teachers make efforts to find things that are in accordance with planning, as well as find things that need to be revised to improve learning methods. In addition, it is necessary to reveal the advantages and disadvantages of the SAVI learning model according to the research results. If

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classroom action research is carried out several cycles, then during the final reflection activity, the researcher needs to convey the design of the next research.

The data analysis technique used in this class action research uses two techniques, namely qualitative data analysis techniques and quantitative data analysis techniques.

1. Qualitative

The data analysis technique used to measure the improvement of student learning outcomes in learning addition and subtraction arithmetic operations by testing the percentage to categorise. Qualitative is data presented in verbal or narrative format and collected through focus groups, interviews, open item questionnaires, and other less structured situations. qualitative data is objective, this will make it easier for everyone who reads to create different interpretations.

2. Quantitative

The data analysis technique used to determine the condition of students after and after the action was carried out using the t-test. Quantitative data is data expressed in numbers, where numerical values can be small or large. Numerical data may correspond to certain categories or labels. This quantitative data is obtained through surveys to get rigid answers in the form of numbers (Handayani 2022).

RESULT

Before conducting research, observations of learning carried out in mathematics subjects and interviews with mathematics teachers were the first steps in carrying out class action research. At the stage of these activities obtained the results that the ability of students to perform addition and subtraction calculations is still low, these problems are the background of the research. The implementation of this class action research was carried out in class II madrasah ibtidaiyah consisting of 2 research cycles. The research was carried out using research instruments in the form of teaching modules, observation sheets, and documentation. The following is a description of the results of cycle 1 from the pre-test and post-test. The results are used to evaluate learning and serve as the basis for improving the actions in the next cycle. This step is essential to ensure that the learning strategies applied are more targeted and responsive to students' actual needs in the following cycle.

Table 1. Student Learning Outcomes in Cycle 1 Action

No.	Student Name	Pre Test	Post Test
1.	Linda	70	70
2.	Kinar	70	80
3.	Raissa	100	90
4.	Mahfud	40	90
5.	Afif	70	90
6.	Maliqh	100	100
7.	Aya	50	70
8.	Hamzah	40	50
9	Amel	40	60
	Avarage	64,4	77,7
	Presentase	22,2%	55,5%

Based on the results of the action in cycle 1, the implementation of class action research on student learning outcomes has not yet reached the predetermined criteria. There are several things that must be improved in order to optimize the application of the SAVI learning model, so additional actions need to be taken to continue to cycle II. It takes a method that can improve student understanding in the process of learning addition and subtraction math in the application of the SAVI learning model. The method used in the implementation of cycle II is the problem-based learning (PBL) method. The following are the results of the post test scores in cycle 1.

Table 2. Student Learning Outcomes in Cycle II Action

No.	Student Name	Post Test
1.	Linda	80
2.	Kinar	100
3.	Raissa	80
4.	Mahfud	100
5.	Afif	100
6.	Maliqh	100
7.	Aya	100
8.	Hamzah	70
9	Amel	70
	Avarage	88,8
	Presentase	77,7%

DISCUSSION

Cycle I began with the planning stage. Planning in cycle I was based on the results of the pre-research by making an arrangement of student teaching modules accompanied by student observation sheets. Preparation of teaching modules is prepared in accordance

with the guidelines in mathematics subjects with the SAVI learning model. Classroom action is carried out starting from introductory activities to closing activities.

1. Preliminary Activities:

- a. The teacher opens the activity by praying, greeting students, and checking student attendance).
- b. Followed by providing motivation related to discipline and the benefits of achieving goals.
- c. Conducting apperception linking the previous lesson.
- d. Provided ice breaking before learning began to build student enthusiasm.
- e. Then the teacher conveyed the learning objectives.

2. Core Activities

- a. Students do the pre-test questions first.
- b. Students explore to do various ways to do addition.
- c. There are students who count using pebbles, abacus, and fingers.
- d. Then the teacher introduces some addition and subtraction strategies found in the student book, namely the addition of saving techniques and techniques without saving, and subtraction of borrowing techniques and techniques without borrowing.
- e. Then the teacher develops these strategies by providing different strategies, namely by using the gorge board props (addition and subtraction boards).
- f. The teacher gives examples of how to use the chasm board props and gives examples of solving problems using the chasm board. After that, one by one, students were asked to come forward to try the chasm board props.
- g. The teacher gave post-test questions to the students to measure their understanding after using the learning media.
- h. After completing the questions, the teacher explained again as reinforcement how to use the abyss board media (addition and subtraction board), so that students would understand better.

3. Closing Activities

- a. The teacher gives reinforcement related to the learning that has been carried out by giving input/additions.
- b. The teacher and students together conclude the learning that has been done.

- c. The teacher gives appreciation to students.
- d. Implementation of teacher and student reflection by asking questions whether the lesson was fun and whether it was difficult to understand the material, and the teacher assesses how to teach whether the delivery is easy for students to understand or not.
- e. The teacher conveys the next learning material.
- f. The teacher conveys moral messages related to learning materials, and ends the lesson by praying and saying greetings.

Helping Students Understand Better





Figure 2.

Explaining the concept of addition and subtraction using the chasm board media

The results of the implementation in cycle 1 show that the students' addition and subtraction calculation skills cannot be said to be complete. It can be seen in the process of implementing the action that 7 out of 9 students experienced confusion in solving addition and subtraction problems using the technique of saving, technique without saving, borrowing technique, and technique without borrowing. So that students still have errors in using the correct addition and subtraction techniques. When students work on pre-test questions, there are 2 students who are able to do the task with all correct answers. When working on post test questions there were 5 students who were able to reach above the KKM criteria, namely 75. The percentage results in the first cycle on the pre-test question were 22.2% and on the results of the percentage of working on the post-test question 55.5%. Students do not really understand the concept of addition and subtraction calculations, even though they have been helped to use the abyss board media (addition and subtraction boards), because it is only the media introduction stage and students are

using the media for the first time. Gap board media is a tool in learning mathematics to

Implementation of research actions in cycle II, the stages carried out by researchers are the same as cycle I. By preparing lesson plans and making teaching modules. By preparing lesson plans and making teaching modules that are adjusted to the guidelines in mathematics subjects with the SAVI learning model. Classroom action is carried out starting from introductory activities to closing activities.

learn the principles of counting regarding addition and subtraction (Putri et al. 2024).

1. Preliminary Activities

- a. The teacher opens the activity by greeting students, praying, and checking student attendance.
- b. Followed by providing motivation related to discipline and the benefits of achieving goals.
- c. Conducting apperception linking the previous lesson.
- d. Provided ice breaking before learning began to build student enthusiasm.
- e. Then the teacher conveyed the learning objectives.

2. Core Activities

- a. Students explore to do various ways to do addition.
- b. Then the teacher repeats the addition and subtraction strategies contained in the student book, namely addition of saving techniques and techniques without saving, and subtraction of borrowing techniques and techniques without borrowing.
- c. Furthermore, the teacher develops the strategy by providing a different strategy, namely by using the gorge board props (addition and subtraction board).
- d. The teacher models again how to use the chasm board props and gives examples of solving problems using the chasm board. After that, one by one, students were asked to come forward to try the chasm board props.
- e. The teacher associates the students into groups, then each group is given a story problem.
- f. The teacher asks the learners to solve the story problem in groups. They can use strategies that they understand.
- g. The teacher can provide opportunities for learners to explain their findings.

3. Closing Activity

- a. The teacher gives reinforcement related to the learning that has been carried out by giving input/additions.
- b. The teacher and students together conclude the learning that has been done.
- c. The teacher gives appreciation to students.
- d. Implementation of teacher and student reflection by asking questions whether the lesson was fun and whether it was difficult to understand the material, the teacher assesses how to teach whether the delivery is easy for students to understand or not,
- e. The teacher conveys the next learning material.
- f. The teacher conveys moral messages related to learning material, and ends the lesson by praying and saying greetings.

Student Communication Skills





Figure 3. Presenting the results of working on addition and subtraction problems in groups

The results in cycle II, there was an increase in student learning outcomes in understanding the concept of calculating the concepts of addition and subtraction. The percentage increase in research results from cycle I to cycle II is 77.7%. There are 7 students who have understood the problem correctly and are able to get learning outcomes exceeding the set KKM, however, there are 2 students who have not reached the KKM. When working on story problems in groups, students learn to work together with their friends to help each other provide understanding to their friends who do not understand how to add with the use of saving techniques, techniques without saving, as well as in subtraction with borrowing techniques and techniques without borrowing. After completing the work, students in groups went to the front of the class to present the results obtained from their work. This can increase student confidence and build student courage.

The use of the short method is carried out by subtracting two numbers arranged downwards, if the first number is smaller than the one being subtracted, it is necessary to use the borrowing technique, the number that is positioned in front as tens is taken one larger, which will obtain the subtraction result (Laila et al. 2024). In addition, the use of saving techniques can give students the confidence and skills needed to face various math challenges at a high level (Fatmawati 2024).

The application of the SAVI model in learning addition and subtraction math for 2 cycles, shows the acquisition of results with a good increase. The results of data analysis of the overall ability in addition and subtraction of math lessons that cycle I resulted in a percentage of 55.5%, and in cycle II experienced an increase of 77.7%. This shows that by using the SAVI model, it has a positive influence on students' numeracy skills and students are able to solve addition and subtraction problems by presenting story problems. The use of the abyss board (addition and subtraction board) can increase students' interest in solving addition and subtraction problems. The SAVI model in elementary school mathematics learning is able to provide an understanding of mathematical concepts with sensory or motor experiences, as well as interactive students (May Riska Kristin Waruwu, Nanda Alysyawati, Desi Karunia Cibro 2024).

CONCLUSION

The provision of learning actions using the SAVI model based on the abyss board learning media and the use of problem-based learning (PBL) methods, can improve students' abilities in mathematics, can be seen in the percentage of student learning outcomes in each cycle. In cycle I, the results were 55.5%, and increased in cycle II, namely 77.7%. These results show that the SAVI learning model based on the ravine board learning media and the provision of problem-based learning methods can improve students' abilities and learning outcomes in mathematics. The use of the ravine board can increase students to be more active in participating in the learning process, such as daring to ask questions, being able to practice with the ravine board media, being able to present the results of work in front of the class, and being able to work together with the group.

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REFERENCES

- Apsoh, Siti, and Awan Setiawan. (2023). "Pengaruh Model Pembelajaran SAVI (Somatic, Aiditory, Visual, Intelektual) Terhadap Kemampuan Pemahaman Matematis Siswa Kelas V. *Jupeis: Jurnal Pendidikan Dan Ilmu Sosial*. 2(1): 105-114.
- Dachliyani, Liya. 2019. "Instrumen Yang Sahih: Sebagai Alat Ukur Keberhasilan Suatu Evaluasi Program Diklat (Evaluasi Pembelajaran)." *MEDIKA: Media Informasi dan Komunikasi Diklat Kepustakawanan* 5(1):57–65.
- Priatna, Tedi, M. A. 2013. "Penelitian Tindakan Kelas. Indramayu Jawa Barat. CV. Adanu Abimata
- Fatmawati, Risdiana Andika. 2024. "Bilangan Penjumlahan Teknik Menyimpan Pada Siswa Kelas 4 SDN 34 Parit Madura." 5(5):5527–34.
- Febriani, Peni, Wahyu Widada, and Dewi Herawaty. 2019. "Pengaruh Pembelajaran Matematika Realistik Berbasis Etnomatematika Terhadap Kemampuan Pemahaman Konsep Matematika Siswa SMA Kota Bengkulu." *Jurnal Pendidikan Matematika Raflesia* 04(02):120–35.
- Handayani, L. T. (2023). Buku Ajar Implementasi Teknik Analisis Data Kuantitatif (Penelitian Kesehatan). PT. Scifintech Andrew Wijaya.
- Haniva, Putri, Rusdial Marta, and M. Syahrul Rizal. 2024. Peningkatan Kemampuan Berpikir Kritis Melalui Pembelajaran Problem Based Learning Siswa Di Sekolah Dasar. *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 11(1):89–104.
- Darmayanti, D. L. I. (2024). Studi Kasus: Peningkatan Kemampuan Operasi Hitung Pada Siswa Autis Menggunakan Media Intelligence Stick. *Postulat: Jurnal Inovasi Pendidikan Matematika*, 5(2), 220-236.
- Linggasari, Ajeng, Ucu Koswara, and Mardjohan. 2023. "Penerapan Model Pembelajaran Somatic-Auditory-Visualization Intellectually (SAVI) Untuk Meningkatkan Kemampuan Pemahaman Konsep Matematis." *Jurnal Pendidikan Matematika Sebelas April* 1(2):1–10.
- Marzuqi, M. Ismail, and Adnan Yusufi. 2024. "Pengaruh Model Pembelajaran SAVI Terhadap Hasil Belajar Matematika Siswa Materi Perpangkatan Dan Penarikan Akar Kelas V." 11(1):1084–93.
- May Riska Kristin Waruwu, Nanda Alysyawati, Desi Karunia Cibro, Putri Novelina Sihombing. 2024. "Pengaruh Model Pembelajaran (Somatic, Auditory, Visual, Intelectual) SAVI Terhadap Hasil Belajar Matematika Di Sekolah Dasar." 15(2):236–43.
- Merienta Nainggolan, Darinda Sofia Tanjung Simarmata, Ester J. Simarmat. 2021. "Pengaruh Model Pembelajaran SAVI Terhadap Hasil Belajar Matematika Siswa Di Sekolah Dasar." 5(4):2617–25.
- Muanifah, Mahmudah Titi, and Halimah Sa'diyah. 2018. "pendekatan savi sebagai metode alteratif untuk untuk memaksimalkan gaya belajar siswa sekolah dasar." 393–99.

DOI: https://doi.org/10.29407/jpdn.v11i1.24931

- Nasution, Suhailasari, Nurbaiti, and Arfannudin. 2021. *Teks Laporan Hasil Observasi Untuk Tingkat SMP Kelas VII*. edited by A. S. Nasution. Guepedia.
- Nirwana Anas, M. P., and S. P. Khairi Syafitri. 2019. "Pengaruh Model SAVI (Somatic, Auditory, Visual Intelectual) Terhadap Hasil Belajar." IX(1):37–47.
- Pipit Muliyah, Dyah Aminatun, Sukma Septian Nasution, Tommy Hastomo, Setiana Sri Wahyuni Sitepu, Tryana. 2020. "Peran Guru Dalam Meningkatkan Kemampuan Berpikir Kritis Siswa Melalui Soal Cerita Matematika." *Journal GEEJ* 7(2):1098–1103.
- Putri, Ghaluh Mutiara, Regina Lichteria Panjaitan, and Atep Sujana. 2024. "Penerapan Pendekatan SAVI Untuk Meningkatkan Hasil Belajar Siswa Pada Materi Gaya Mempengaruhi Gerak Dan Bentuk Benda." *Jurnal Pena Ilmiah* 2(1):361–70.
- Radiusman, Radiusman. 2020. "Studi Literasi: Pemahaman Konsep Anak Pada Pembelajaran Matematika." *FIBONACCI: Jurnal Pendidikan Matematika Dan Matematika* 6(1):1. doi: 10.24853/fbc.6.1.1-8.
- Siregar & Restati. 2017. "Persepsi Siswa Pada Pelajaran Matematika: Studi Pendahuluan Pada Siswa Yang Menyenangi Game." *Prosiding Temu Ilmiah X Ikatan Psikologi Perkembangan Indonesia* 224–32.
- Sumiatie. 2017. "Penerapan Metode Diskusi Untuk Meningkatkan Keaktifan Belajar Siswa Dalam Pembelajaran Sejarah Kelas X DI SMA PGRI 2 Palangkaraya." 4. *Jurnal UPGRIPLK.*, 4(2): 114-125.
- Wekke, Ismail Suardi, and Dkk. 2019. *Metode Penelitian Sosial*. Yogyakarta: Gawe Buku.
- Widiastuti, Firni, and Siti Rahmah. 2023. "Matematika Dan Berpikir Kritis Di Era Global." *Gunung Djati Conference Series* 32:52–60.