

## HOW EFFECTIVE IS THE DISCOVERY LEARNING MODEL FOR INTENSIFYING MATHEMATICS LEARNING OUTCOMES FOR ELEMENTARY SCHOOL STUDENTS IN KLATEN REGENCY, INDONESIA?

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### Abstract

Mathematics as a basic skills subject should be taught at the elementary school level in priority. This study aims to measure the effectiveness of the application of the discovery learning model to intensify the mathematics learning outcomes at the elementary school level. This research was conducted at SD Negeri 1 Bandungan, Klaten Regency, Indonesia. The subjects of this study were the second grade students of SD Negeri 1 Bandungan, Klaten Regency, Indonesia as many as 24 students. To achieve the objectives of this research, the classroom action research was adapted which consists of planning, acting, observing, and reflecting activities. The data collection technique was an individual test which is carried out in the form of a written exam. The instrument used in this research was a multiple choice question which consists of 4 options. The findings indicated that: (1) The first cycle students' average score of mathematics learning outcomes was 52.17 with a pass percentage of 34.78%. (2) The second cycle students' average score of mathematics learning outcomes was 74.35 with a pass percentage of 91.30%. (3) The intensifying of students' mathematics learning outcomes from the first cycle to second cycle was 56.52%. So, the application of the discovery learning model was effective for intensifying students' mathematics learning outcomes at the elementary school level.

**Key Words:** Discovery Learning, Intensifying, Learning Objective

### INTRODUCTION

An in-depth understanding of the basics of mathematics is an indicator of the success of students taking elementary school education. Andri et al., (2020) and Asrianti & Puswati (2020) explained that the success of students participating in learning in elementary schools is being able to master basic skills such as numeracy skills, listening, reading, speaking, writing, and planting national character. Rismawati & Erni (2021) state that learning mathematics in elementary schools is taught to understand simple concepts to complex concepts to achieve deep mathematical understanding. Learning mathematics is identical to learning a concept because the correct teaching concept will affect students' mathematics learning outcomes and students' perspectives on mathematics lessons. Hutagaol (2019) stated that in the process of learning mathematics, the aspect of understanding a concept and its application is something that really needs to be mastered by students. Rismawati & Erni (2021) emphasize that if the basic concepts of learning mathematics are accepted by elementary school students, it will be difficult to improve again, especially if it has been applied in solving problems in answering questions. So that this condition results in students' interest and perception seeing mathematics as a difficult subject (Melinda et al., 2021).

Previous studies have shown that the ideal indicators of the mathematics lessons have not been achieved optimally by students because there were still many students who have difficulty in understanding patterns and concepts of learning mathematics. This difficulty was felt by students when learning formulas in mathematics, terms in mathematics, and symbols used for certain purposes. This difficulty has an impact toward the ability of students to solve problems in learning, discussion of complex problems, and answering the questions which formulated by the teacher. The most dominant problem found among elementary school students was the mindset and perspective of students towards mathematics lessons. Students already consider mathematics as a very difficult subject before starting learning in class. This information was revealed through research by Kholil & Zulfani (2020) which revealed that students' difficulties in learning mathematics were caused by the wrong mindset which was built from the beginning by students. Students had difficulty in understanding the material presented by the teacher in the classroom. In addition, the problem of students' thinking is not correct, student difficulties in learning can be classified into two problems, namely internal problems and external problems (Arifin, 2020).

In general, there are two factors that affect the level of difficulty of students in following and understanding mathematics lessons, namely internal and external factors. Subekti et al., (2021) describe the internal factors resulting in students' learning difficulties in mathematics subjects consisting of student interests, student motivation,

talents and things that come from students that become obstacles to participating in the learning process effectively. External factors arise from a learning environment which was not conducive, family support not totally, methods or learning media applied by teachers in the learning process were not in accordance with the character of students. Student learning difficulties caused by internal factors consist of 55.93% while student difficulties influenced by external factors are 59.2% (Asriyanti&Purwati, 2020). Both internal and external factors caused 36% of students to have difficulty understanding mathematics lessons in the realm of factual and conceptual knowledge. The external factor that most influences student difficulties is the lack of use of innovative learning media that can make it easier for students to understand the subject matter presented by the teacher in the classroom (Andri et al., 2020). In addition, the factor of irrelevant textbooks, Asrianti&Purwati (2020), and the presence of television at home are problems for students because they watch too much TV (Sopian et al., 2021).

The main problem in this study was the learning model used by the teacher in the learning process which not in accordance with the character of the students and also the teaching material delivered. It was found that many teachers who teach mathematics do not master the theoretically relevant learning model and practice in the field in elementary schools (Gumilar, 2020., Andri et al., 2020, and Sopian et al., 2021). External factors which affect students' mathematics learning outcomes were the teacher's role in the classroom (Bunterm et al., 2014., Khalaf and Zin, 2018., Lian Zhai, 2019., Umbara et al., 2021., &Subekti et al., 2021). If the mathematics teacher does not use learning model which in accordance with the student's character, then this will have a negative impact on students. Students will become passive and uncreative learning participants in the classroom and students will quickly feel bored in following the learning process.

Based on the serious problems stated above, it is necessary to identify learning models which relevant to the character of students and the type of material being taught. Mathematics subject matter at the elementary school level is dominant with knowledge material that aims to improve understanding, for that discovery-based learning model is considered very relevant to be applied in the learning process. Discovery learning is learning based on inquiry (inquiry based), constructivist and theory about how to learn (Widyastuti, 2015). According to Alma (2010), the discovery learning model has a basic strategy pattern that can be classified into four stages of learning, namely determining the problem, formulating hypotheses, collecting and processing data, and formulating conclusions. Akinbobola& Afolabi (2010) added that the use of the discovery approach can involve students in problem solving activities, independent learning, critical thinking, understanding, and creative learning.

The previous empirical studies shown that the application of discovery learning can improve student learning outcomes. Suantara&Prabwanti (2021) apply discovery learning model through online learning where the results of the study shown that student learning outcomes can increase with an average value of 80.41. Research by Astuti et al., (2018) shows that the discovery learning model is able to improve learning outcomes in learning the material. Meanwhile, research by Patrianingsih&Kaseng (2016) shows that there is a significant difference in understanding biological concepts between students who are taught using discovery learning and direct instruction. Therefore, learning using the discovery learning model will be very helpful in constructing student understanding and empowering students' willingness to study in groups (Prasetyana, 2017).

According to Widyastuti (2015) discovery learning is a learning based on inquiry, constructivist and theory about how to learn. Furthermore, according to Alma (2010) the discovery learning model has a basic strategy pattern which can be classified into four stages of learning, namely determining the problems, formulating the hypotheses, collecting and processing the data, and formulating the conclusions. Akinbobola & Afolabi (2010) added that the use of the discovery approach can involve students in problem solving activities, independent learning, critical thinking, understanding, and creative learning. The discovery learning model is to understand the concepts, meanings, and relationships, through an intuitive process to finally arrive at a conclusion (Budi Ningsih, 2005). Discovery occurs when individuals are involved, especially in the use of their mental processes to discover some laws, concepts and principles, through observation, classification, measurement, prediction, determination and inference. The process is called the cognitive process while discovery itself is the mental process of assimilation concepts and principles in the mind (Pohan, 2019).

The learning objective of the discovery learning model is to increase the opportunity for students to be actively involved in learning. Students learn to find patterns in concrete and abstract situations. Students learn to formulate question and answer strategies that are not ambiguous and obtain useful information in finding. Helping students form effective ways of working together, sharing information with each other and listening to and using other people's ideas. Improve students' conceptual skills and principles that are more meaningful. Can transfer skills formed in discovery learning situations into activities in new learning situations.

Indonesian Ministry of Education (2013) explained the steps in applying the discovery learning model in the classroom are as follows. First, planning. Some of the activities at this planning stage include determining learning objectives, identifying student characteristics (initial abilities, interests, learning styles, etc.), selecting subject

matter, determining topics that students must study inductively (from generalization examples), developing learning materials in the form of examples, illustrations, assignments and so on for students to learn, arranging lesson topics from simple to complex, from concrete to abstract, or from enactive, iconic to symbolic stages, and doing assessment of student learning processes and outcomes. Second, implementing on stimulation at this stage students are faced with something that causes confusion, then proceed not to give generalizations, in order to arise the desire to investigate on their own. Besides that, teachers can start teaching and learning activities by asking questions, recommending reading books, and other learning activities that lead to the preparation of problem solving. Stimulation at this stage serves to provide conditions for learning interactions that can develop and assist students in exploring materials. Problem statement. After stimulation, the next step is the teacher gives students the opportunity to identify as many problem agendas as possible that are relevant to the subject matter, then one of them is selected and formulated in the form of a hypothesis. Data collection. When the exploration takes place, the teacher also provides opportunities for students to collect as much relevant information as possible to prove whether the hypothesis is true or not. This stage serves to answer questions or prove whether the hypothesis is true or not, thus students are given the opportunity to collect various relevant information, read literature, observe objects, interview sources, conduct their own trials and so on.

Data processing is an activity to process data and information that has been obtained by students either through interviews, observations, and so on, and then interpreted. All information from reading, interviews, observations and so on, are all processed, randomized, classified, tabulated, even if necessary, calculated in a certain way and interpreted at a certain level of confidence. Verification at this stage, students conduct a careful examination to prove whether or not the hypothesis has been set with alternative findings, linked to the results of data processing. Verification according to Bruner, aims that the learning process will run well creatively if the teacher provides opportunities for students to find a concept, theory, rule or understanding through examples that they encounters in his life. The generalization stage or drawing conclusions is the process of drawing a conclusion that can be used as a general principle and applies to all events or the same problem by paying attention to the results of verification. Based on the results of the verification, the principles that underlie the generalization are formulated.

## **RESEARCH METHOD**

The research design used by the researcher was a class action research with the type of individual action research. According to Sugiyono (2018), action research is a scientific way to obtain data with the aim of finding new problems and actions that can be used to solve problems, improve or improve work situations. To obtain effective and efficient action, the action is tested through several cycles, until a consistent action is found that can improve the situation. Meanwhile, individual action research is research conducted individually on social situations on a small scale such as in organization, production, and class.

This research was conducted at SD Negeri 1 Bandungan, Klaten Regency, Indonesia in the 2021-2022 academic year. The subjects of this study were the second grade students of SD Negeri 1 Bandungan, Klaten Regency, Indonesia with total of 23 students. The type of data in this study was quantitative data in ordinal form. Ordinal data is quantitative data in the form of rankings taken from measurement results (Sugiyono, 2019). The instrument used to collect data was test in the form of multiple choice which consisting of 4 choices. Data were collected through a written tests at SD Negeri 1 Bandungan, Klaten Regency, Indonesia. Data were analyzed descriptively to describe and explain the improvement of student learning outcomes based on cycles. The method used to analyze the data from this research was descriptive method. For quantitative data, it was analyzed by finding the mean, median, mode, and presenting it in tabular form. The data were analyzed to explain the results of the actions given in each research cycle and to compare the results of the actions given between one cycle and another. The research procedure can be seen below:

### **1. Planning**

At this stage the researcher developed lesson plan in accordance with the provisions of the national curriculum policy at the elementary school level, namely a scientific and thematic-based learning plan. In developing problem-based scientific and thematic learning plans, the researcher consulted with other teachers to create instruments and develop teaching materials. At the preparation stage, an agreement was made between the subject teachers. The design was carried out jointly between researchers who will take action with other teachers.

### **2. Actuating**

The implementation phase of the action is carried out by learning in second grader of SD Negeri 1 Bandungan, Klaten Regency, Indonesia. At this stage, the researcher was active in taking action using the discovery learning model. This learning design has previously been carefully studied to be applied in the classroom according to the learning steps based on the syntax of the discovery learning model. Learning scenarios were implemented effectively to achieve the learning goals.

### 3. Observing

This stage actually runs concurrently with the implementation of learning. Observations were made when the action was running, so both took place at the same time. At this stage the teacher who acts as a researcher made observations and records all things that occur during the implementation of the ongoing learning. This data collection was carried out using students' achievement tests, including the results of careful observations in the classroom from time to time and their impact on student learning processes and outcomes.

### 4. Reflecting

This stage was intended to thoroughly review the actions that have been taken, based on the data that has been collected, then evaluation was carried out in order to make better the next action. Reflection in research included analysis, synthesis, and assessment of the results of observations of the actions taken. The problems from the reflection process in the first cycle, the review process was carried out through the next second cycle which included activities re-planning, re-action, and re-observation so that problems can be resolved.

## RESEARCH RESULTS AND DISCUSSION

### 1. The Result of First Cycle

In order to apply the discovery learning model in the first cycle, 4 meetings were held. Researcher made observations in the first cycle after the learning process using the discovery learning model was completed in 4 meetings. The next step gave the exams to students to measure students' learning outcomes. The results of observations in first cycle can be seen in the following table below:

Table 1. Student Learning Outcomes of First Cycle

Criteria	Scores
Score Totally	1.200
Evarage	52.17
Highest Score	65
Lowest Score	30
Median	55
Modus	45
Number of Students Passing	8
Number of Students Not Passing	15
Passing Percentage	34.78%

### 2. The Result of Second Cycle

In the second cycle, the learning process was carried out for 4 meetings. Researcher tried to improve the shortcomings and weaknesses which occurred when carrying out the process of giving action in the previous cycle. Some of the important steps carried out can be described as follows. Researcher made observations in this second cycle after the learning process using the discovery learning model in 4 meetings. The next step gave the exams to students to measure students' learning outcomes whether there was an increase or not. The results of observations in the second cycle can be seen in the following table below:

Table 2. Student Learning Outcomes of Second Cycle

Criteria	Scores
Score Totally	1.710
Evarage	74.35
Highest Score	100
Lowest Score	50
Median	70
Modus	70
Number of Students Passing	21
Number of Students Not Passing	2
Passing Percentage	91.30%

### 3. Discussion

Empirically the application of the discovery learning model was proven to be able to improve mathematics learning outcomes for second grader of students at SD Negeri 1 Bandungan, Klaten Regency. This can be seen from the increase in students' mathematics learning outcomes from first cycle to second cycle by 56.52%. In the first

cycle, students' mathematics learning outcomes have not reached the standard of completeness set because the implementation of the discovery learning model has not been optimally implemented. Students' mathematics learning outcomes in the first cycle are shown by an average score of 74.35 with a passing grade of 91.30. This learning result has increased after giving re-treatment in the second cycle of 91.30. This learning outcome increased because the learning design based on the steps of the discovery learning model was further refined based on the deficiencies in the first cycle stage. The researcher analyzed students' weaknesses in the mathematics learning process based on the results of observations and reflections on previous teaching materials.

Learning activities designed based on discovery learning in the classroom can encourage students to be actively involved, especially looking for information to find answers to the questions posed in the questioning process. In addition, through the submission of hypotheses in learning, it can encourage students to more easily achieve learning objectives and the methods taken to answer these hypotheses. This condition made students more aware of their own knowledge and accustomed to working in teams (Amna & Muhammadiyah, 2020). Where the results of the research show an increase in asking skills by 12.5% and answering questions by 3.47% in second cycle. Suantara & Prabwanti (2021) apply a discovery learning model through online learning where the research results show student learning outcomes can increase with an average value of 80.41. Research by Astuti et al., (2018) shows that the discovery learning model is able to improve learning outcomes in learning teaching materials. This result is also reinforced by the results of research by Endang., La Anse & Suardika (2020) where student learning outcomes from first cycle to second cycle have increased. In the first cycle it reached an average value of 62.75 and in the second cycle it reached an average value of 82.35 with a passing percentage of 88.24%.

Discovery learning model can also improve students' critical thinking skills because learning activities in groups systematically encourage students to think in an actual and scientific manner guided by the teacher. This is in line with Sherviyana & Mansurdin (2020). The learning process carried out in teamwork made students become the students who has critical thinking skills because in groups students could exchange ideas or thoughts to solve a problem. At the beginning of learning, students were invited to think through observing pictures and videos that are displayed by the teacher. In the next activity, the teacher asked several questions related to the information observed by the students. After students understood various information related to mathematics learning materials, students were given the opportunity to conduct experiments related to the material being studied. Systematically all students were involved in the learning process. The experimental stage was the stage where students were guided by the teacher to plan and conduct experiments to find concepts (Rusli, 2020). All the hypotheses that were questioned in the previous stage can be investigated for answers at this stage. In addition, students who previously tended to be passive can further develop their psychomotor skills through experimental activities at this stage so that students were able to understand the subject matter through experiments (Amna & Muhammadiyah, 2020., Sherviyana & Mansurdin, 2020, and Resnani, 2019).

Activities that affect student success in learning discovery learning were student-centered learning processes and students have the opportunity to collaborate with other students and other study groups. This is in line with Rusli (2020) who said that discovery learning is student-centered learning, where students are more active during the learning process. Students are involved in preparing teaching materials and use the internet to find the required teaching materials. In the activity of analyzing information, students were helped by the concept of online learning because they can directly search for various information to compare and detail subjects to more specific ones. Thus, students are able to determine the truth of one information with other information through comparison. The ability of students to detail and compare various information to find the truth is a characteristic of critical thinking skills. This ability made students able to think scientifically. This is in line with Asbar (2018) and Harianto & Agung (2019) stated that student learning outcomes and scientific attitudes appear to have increased and were interconnected in discovery learning. The formation of this scientific attitude was because the concepts and steps of discovery learning were in accordance with scientific steps. The learning process encouraged students to be able to find answers to the hypotheses proposed at the beginning of learning. Through activities of collecting information, analyzing information, and proving and communicating various types of information, students can formulate a conclusion as a proven correct answer to answer the hypothesis proposed by the teacher.

## CONCLUSIONS

Based on the results of the research and discussion above, the results of this study can be concluded that:

1. The application of the discovery learning model can intensify the mathematics learning outcomes of second grader students at SD Negeri 1 Bandungan, Klaten Regency, Indonesia.
2. The average mathematics learning outcomes of second grader students at SD Negeri 1 Bandungan, Klaten Regency, Indonesia, in the first cycle was 52.17 with passing rate of 34.78%.

3. The average mathematics learning outcomes of second grader students at SD Negeri 1 Bandung, Klaten Regency, Indonesia, in the second cycle was 74.35 with passing rate of 91.30%.
4. The increasing of mathematics learning outcomes of second grader students at SD Negeri 1 Bandung, Klaten Regency, Indonesia from first cycle to second cycle was 56.52%.
5. The explanation of these results proves that the discovery learning model is very effectively to apply in the learning process.

## SUGGESTIONS

Based on the results of the research and the conclusions above, the suggestions are as follows:

1. For mathematics teachers at the elementary school level, considering that this model has been proven to be effective in intensifying students' learning outcomes, it is recommended that they need to apply the discovery learning model in the learning process.
2. For other researchers, study there are still things that have not been perfectly done, therefore it is recommended to other researchers who are interested in researching the topic. The same goes for researching parts that have not been studied.
3. For education developers, to improve teacher creativity and professionalism, further research is needed to verify the data from this research so that the conclusions obtained are able to provide the validity of the overall use of the model.

## REFERENCE

- Akinbobola, A. O., & Afolabi, F. (2010). Analysis of Science Process Skills in West African Senior Secondary School Certificate Physics. *American-Eurasian Journal of Scientific Research*, 4(5), 234-240.
- Alma, H. B. (2010). *Guru Profesional Menguasai Metode dan Terampil Mengajar*. Bandung: Penerbit Alfabeta.
- Almuntasheri, S., Gillies, R. M., & Wright, T. (2016). The Effectiveness of a Guided Inquiry-based, Teachers' Professional Development Programme on Saudi Students' Understanding of Density. *International Journal of Science Education*, Volume 27(1), 16-39.
- Amna, Z. Y & Muhammadiyah. (2020). Penerapan Model Discovery Learning Untuk Meningkatkan Hasil Belajar Pada Tematik Terpadu Kelas IV SD (Studi Literatur). *E-Jurnal Inovasi Pembelajaran SD*, Volume 8, Nomor 6, 2020, 1-11.
- Andri., Dores, O. J., & Lina, A. H. (2020). Analisis Faktor Penyebab Kesulitan Belajar Matematika Pada Siswa SDN 01 Nanga Kantuk. *Jurnal Pendidikan Matematika*, Volume 2(1), 158-167.
- Arifin, M. F. (2020). Kesulitan Belajar Siswa Dan Penanganannya Pada Pembelajaran Matematika SD/MI. *Jurnal Penelitian Pendidikan*, Volume 1(5), 989-1000.
- Asrianti, F. D & Puswati, I. S. (2020). Analisis Faktor Kesulitan Belajar Ditinjau Dari Hasil Belajar Matematika Siswa Kelas V Sekolah Dasar. *Sekolah Dasar: Kajian Teori dan Praktik Pendidikan*, Volume 29(1), 2020, 79-87.
- Astuti, H. M., Bayu, G. W., & Aspini, N. N. A. (2021). Penerapan Model Pembelajaran Problem Based Learning untuk Meningkatkan Hasil Belajar Matematika Siswa. *Jurnal Mimbar Ilmu* Volume 26, Number 2, 2021 pp. 243-250.
- Bunterm, T., Kerry Lee, Lan Kong, J. N., Srikoon, S., Vangpoomyai, P., Rattanavongsa, J., & Rachahoon, G. (2014). Do Different Levels of Inquiry Lead to Different Learning Outcomes? A comparison between guided and structured inquiry. *International Journal of Science Education*, Volume 36(12), 1937-1959.
- Endang., La Anse., & Suardika, I. K. (2020). Penerapan Model Pembelajaran Discovery Learning Untuk Meningkatkan Hasil Belajar Siswa Pada Tema Daerah Tempat Tinggalku Kelas IV SDN 5 Pasir Putih. *Jurnal Ilmiah Pembelajaran Sekolah Dasar* Volume 2 Nomor 1, 38-46.
- Gumilar, R. P., Wardani, S., & Lisdiana. (2020). The Implementation of Guided Inquiry Learning Models on The Concept Mastery, Scientific Attitude, and Science Process Skill. *Journal of Primary Education* 9 (2), 148-154.
- Hutagaol, P. (2019). Penerapan Metode Inkuiri Untuk Meningkatkan Hasil Belajar Matematika Siswa Kelas V SD Negeri 023905 Kebun Lada. *Jurnal Pendidikan Guru Sekolah Dasar Juril Aquinas*, Volume 2(1), 69-77.
- Khalaf, B. K & Zin, Z. B. M. (2018). Traditional and Inquiry-Based Learning Pedagogy: A Systematic Critical Review. *International Journal of Instruction*, Volume 11(4), 545-564.
- Kholil, M & Zulfiani, S. (2020). Faktor-Faktor Kesulitan Belajar Matematika Siswa Madrasah Ibtidaiyah Da'watul Falah Kecamatan Tegaldimo Kabupaten Banyuwangi. *EDUCARE: Journal of Primary Education*, Volume 1, No 2, Juni 2020, pp. 151-168.
- Kumar, S. (2022). A quest for sustainium (sustainability Premium): review of sustainable bonds. *Academy of Accounting and Financial Studies Journal*, Vol. 26, no.2, pp. 1-18

- Allugunti V.R (2022). A machine learning model for skin disease classification using convolution neural network. *International Journal of Computing, Programming and Database Management* 3(1), 141-147
- Lian Zhai. (2019). An Inquiry Teaching Mode Based on STEM Education. *International Journal Education and Teaching*, Volume 14(17), 44-58.
- Melinda, R., Andri., &Wulandari, O. P. (2021). AnalisisFaktor-FaktorKesulitanBelajarMatematikaSiswa Pada Masa Pandemi Covid-19.
- Patrianingsih, E. A., &Kaseng, E. S. (2016). Model Pembelajaran Discovery Learning PemahamanKonsepBiologi, Dan SikapIlmiah. *Indonesian Journal of Educational Studies*, 19(2), 74-86.
- Pohan, A. E. (2020). *Konsep Pembelajaran Dalam Jaringan Berbasis Pendekatan Ilmiah (Scientific Approach)*. Boyolali: CV. Sarnu Untung.
- Prasetyana, S. D. (2017). Peningkatan Hasil BelajarKognitifMahasiswaMelalui Model Pembelajaran Group Discovery Learning (GDL) Pada MatakuliahPengetahuanLaboratorium di IKIP Budi Utomo Malang. *Edubiotik: Jurnal Pendidikan, Biologi Dan Terapan*, 2(1), 1-6.
- Resnani. (2019). Penerapan Model Discovery Learning untukPeningkatanAktivitas dan Hasil BelajarSiswa Pada PembelajaranTematik Kelas VC SDIT Generasi Rabbani Kota Bengkulu. *Jurnal Pendidikan Guru Sekolah Dasar*, Volume 12 (1), 9-14.
- Rismawati, M &Erni, R. (2021). Peningkatan Hasil BelajarMatematikaSiswa Kelas III Menggunakan Alat PeragaDekak-Dekak. *Jurnal Pendidikan Matematika*, Volume 3(2), 367-376.
- Sanjaya, Wina. 2013. *Strategi PembelajaranBerorientasiStandar Proses Pendidikan*. KencanaPrenada Media: Jakarta.
- Setyaningrum, W., Riani, A. L., dan Waldani, D. K. (2020). Efektivitas Model Pembelajaran Problem Based Learning (PBL) Ditinjau Dari Curiosity, KemampuanBerfikir Tingkat Tinggi, Dan KompetensiPesertaDidik. *ProcedingLiterasiDalam Pendidikan di Era Digital UntukGenerasiMilenial*.
- Sherviyana&Mansurdin. (2020). Penerapan Model Discovery Learning untukMeningkatkan Hasil BelajarTematikTerpadu di Sekolah Dasar (StudiLiteratur). *Jurnal Pendidikan Tambusai*, Volume 4 Nomor 3 Tahun 2020, 2083-2096.
- Sopian, D., Dores, O. J., & Andri. (2021). Analisis Hasil BelajarSiswaMatematikaSiswaBerdasarkanTaksonomi Bloom. *Jurnal Pendidikan Matematika*, Volume 3(2), 357-366.
- Suantara, I. G. A &Prabwanti, P. I. (2021). PenerapanPembelajaran Daring Berbasis Model Discovery Learning UntukMeningkatkan Hasil Belajar IPA. *Journal for Lesson and Learning Studies* Volume 4, Number 2, 137-142.
- Subekti, M. R., Kurniati, A., &Firda, T. (2021). AnalisisMinatBelajarMatematikaSiswa Kelas IV SDN 25 Gurung PeningkahKayahilirTahun 2020-2021. *Jurnal Pendidikan Matematika*, Volume 3(2), 417-4266.
- Sugiyono, Sugiyono. (2019). *Quantitative Approach Management Research Methods, Qualitative, Combination (Mixed Method), Action Research, and Evaluation Research*. In Book Chapter, ed. Setiyawan. Bandung: Alfabeta Publisher.
- Umbara, U., Munir., Susilana, R., &Puadi, E. (2021). Algebra Dominoes Game: Re-Designing Mathematics Learning During the Covid-19 Pandemic. *International Journal of Instruction*, Volume 14(4), 483-502.
- Widyastuti, E. S. (2015). Penerapan Model PembelajaranDiscovery Learning Pada MateriKonsepIlmuEkonomi. *Prosiding Seminar Nasional*, 33-40. Retrieved from[http://eprints.uny.ac.id/21658/1/04\\_EllyzaSriWidvastuti.pdf](http://eprints.uny.ac.id/21658/1/04_EllyzaSriWidvastuti.pdf)