

Improving fifth-grade students' learning outcomes using the discovery learning model in integrated thematic learning

Rahma Ella Rahdia^{1*}, Mai Sri Lena²

¹Pendidikan Guru Sekolah Dasar, Universitas Negeri Padang, Padang, Indonesia

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ABSTRACT

The background of this research because the activities of providing material in schools many students are less active and cause their learning outcomes not to be maximized. This study uses research methods for planning, actions, observations, and reflections, and also by applying the discovery learning model. This study used 28 fifth grade students at SDN 12 Tanah Sirah Padang City as subjects. Data collection techniques through observation, non-test and test. This study produces data that shows an increase of learning activities and learning outcomes of fifth-grade students. From the results obtained, it can be concluded that the application of the discovery learning model increases the level of integrated thematic learning outcomes from students.

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Corresponding Author:

Rahma Ella Rahdia

Pendidikan Guru Sekolah Dasar, Universitas Negeri Padang, Padang, Indonesia

Email: rahdiarahmaella@gmail.com

INTRODUCTION

An integrated thematic approach is widely applied in elementary schools during the process of providing material. This condition is in line with the existence of regulations which state that if an integrated thematic approach is applied in the process of providing material in elementary schools, namely in Permendikbud No. 57 of 2014 concerning the 2013 Elementary School Curriculum.

According to the thoughts of Kadir and Asrohah (2015), the process of providing material based on a particular theme or topic, which will then be reviewed or observed from various aspects of the material contained in elementary schools is the notion of integrated thematic learning. Meanwhile, according to Mudjiono (2015) integrated thematic learning can be interpreted as a process of providing material that applies themes to combine several different materials with the aim of providing students with useful experiences.

In addition, integrated thematic learning also aims to make students more active in learning and can increase the level of creative thinking so as to produce maximum learning results. Some of the characteristics that must exist so that integrated thematic learning can be carried out smoothly according to Prasetyo and Abduh (2021), namely: 1) the provision of material is focused on students; 2) students provide direct experience; 3) grouping of different types of material; 4) combining concepts from several materials; 5) implemented flexibly; and 6) learning activities

carried out in an interesting way.

Based on the results of observations at SDN 12 Tanah Sirah on September 26 2022 in Theme 3 namely "Healthy Food", Sub-Theme 1 namely "How does the Body Process Food?", Lesson 1 namely Indonesian Language and Science, and on September 27 2022 in Theme 3 namely "Healthy Food", Sub-Theme 1 namely "How Does the Body Process Food?", Learning 2 namely Indonesian and Natural Sciences. The Elementary School has implemented the 2013 Curriculum at levels II, III, V, and level VI. Meanwhile, at levels I and IV apply the Independent Curriculum.

Some of the problems faced by teachers and students that the author knows, namely: a) Learning Implementation Plans (RPP) by teachers who are still underdeveloped, can be seen from the RPP that is applied only adheres to the teacher's book and is not further analyzed based on suitability of basic competencies, learning objectives, indicators, as well as some sources from the internet; b) teachers still do not use varied models in carrying out learning; c) there are many learning methods in lesson plans that have not been implemented; d) the provision of material is still centered on the teacher; e) the teacher lacks guidance in concluding at the end of learning; f) in a proving process, the teacher does not ask students' opinions regarding the learning that is carried out; and g) teachers are still uneven in the distribution of groups,

The problems that occurred had an impact on students, namely: a) students listened more to the teacher than were active in the process of giving material; b) some students do not dare to express their opinions; c) students become forgetful in remembering the lessons that have been learned; and d) students become unfocused during material giving activities.

Innovative learning models need to be applied to overcome problems encountered during observations with the aim of increasing the level of success and student activity. The Discovery Learning model is one of several types of models that can be applied to increase the level of student learning outcomes. This model will give students a good understanding of the material provided during the learning process.

Discovery Learning according to Efrina and Lena (2020) is a model of providing cognitive material with the aim that a student can gain knowledge by developing his own learning method with active learning conditions and with supervision from the teacher. Meanwhile, according to Marisyah and Sukma (2020) the Discovery Learning model can be applied to make the learning process which was initially passive become active and creative, besides that students who initially only receive material from the teacher in this model must try to obtain their own material. These conditions will trigger students to think and work independently. Then according to Hosnan (in Lestari, 2020) the learning model of Discovery Learning (discovery) is an act of providing material with the concept of not providing information directly,

From some of the expert thoughts that have been described, it is concluded that if the model *Discovery Learning* is a model of giving material with the concept that the teacher will not explain the whole material but students who will independently understand and learn the material being discussed.

According to Lestari (2020) there are several steps in the model *Discovery Learning*, namely the first is stimulation, then identification of the problem, then collecting data, then processing the data, then providing evidence, and the last is drawing conclusions.

Lestari (2020) explains that the application of the Discovery Learning model is carried out by starting the activity of receiving material with the first step of giving stimulation. Students are given stimulation such as asking questions about the material to be provided. The second step is identification of the problem (problem statement), students then identify the various types of problems that might arise in the material being taught, which one will be chosen to write down in

the form of a hypothesis. Next is data collection, in which students get time to collect appropriate material to answer questions or answer hypotheses. The fourth step is data processing (data processing) where students will process the material and data that has been obtained before. possible problem agendas. The fifth step is verification, this stage requires students to check whether or not a hypothesis is true through a careful process of proof and then the results will be linked to the results of data processing. The final step is drawing conclusions (generalization), at this stage the process of drawing conclusions.

Some research states that if the application of the Discovery Learning model can be successful, namely, Setiani (2019) which describes if Theme 6 students in class IV of SDN Cebongan 02 Salatiga managed to increase their level of learning outcomes thanks to the Discovery Learning model. The same thing was found in research conducted by Khasanah and Suprihartini (2019) which describes Discovery Learning accompanied by games will be able to increase the results of giving material from class IV students at SDN Gajah mungkur 04 Semarang. Besides that, Anisa and Septiana (2020) in the journal describes if student learning outcomes at SDN 1 Kebonadem Kendal Regency have increased thanks to the implementation of the Discovery Learning model. And finally according Astuti (2015) which explains if the learning output of class II students at SDN Slungkep 03 increases with the implementation of the Discovery Learning model.

Based on the description of the opinion statement, the writer is then interested in applying the Discovery Learning model to the activity of providing material in class V SD. Therefore, the authors took research on the topic of Improving Student Learning Outcomes in Integrated Thematic Learning Using the Discovery Learning Model in Class V SDN 12 Tanah Sirah, Padang City.

LITERATURE REVIEW

Learning Outcomes

Learning outcomes according to Lena (2021) can be interpreted as something obtained either in the form of a transition after existence treatment or learning activities can determine the extent the acquisition of knowledge obtained by a student. Learning outcomes can be interpreted as transformations that exist in students, both regarding cognitive and affective perspectives and psychomotor as a result of learning actions (Susanto, 2013), whereas according to Dimayati (2015) Learning Outcomes are the result of an interaction of learning actions and teaching actions. From several opinions above, it can be concluded that Learning outcomes are changes that occur in students both from the aspects of knowledge, attitudes and skills achieved children in learning activities and adapted to the objectives learning.

Integrated Thematic Learning

Integrated thematic learning is learning that uses themes to connect several subjects to provide meaningful experiences to students (Erita, 2020). Thematic learning is defined as learning that uses themes to associate several subjects to provide meaning to students' experiences (Syamsuddin, 2021). It can be concluded that integrated thematic learning is learning that integrates several subjects in one theme to provide meaningful experiences to students.

Discovery Learning Model

According to Fajri (2019) Discovery Learning is a learning process in which a concept is not presented in finished (final) form, but students are required to organize their own way of learning in discovering concepts. The Discovery Learning Model according to Lestari (2020) states that a learning model is to develop an active way of learning for students by discovering for themselves,

investigating for themselves, then the results obtained will be loyal and long-lasting in memory, and will not be easily forgotten by students. Based on the opinions of the experts above, it can be concluded that the Discovery Learning model is a learning model in which students discover the concepts or material being studied themselves and the teacher does not tell students the complete concept or material being studied.

METHOD

Kunandar (2016) explains that Classroom Action Research is parties in the world of education who carry out self-reflection in order to improve rationality and justice regarding several matters, namely: (a) the implementation of educational activities; (b) understanding regarding the activity; and (c) the conditions under which the activity is carried out. Besides that, Juanda (2016) also explained that PTK is a scientific action carried out in a reflective, rational, and systematic manner by educators by developing strategies from planning to taking student grades in class in order to increase results and improve the conditions for providing material (Komara et al., 2020; Irant, 2023). Meanwhile, according to Arikunto, et al (2015) PTK is a type of research that contains an explanation of the process and results in order to increase the level of results of providing material in class. The author applies this type of research because it is easy to apply to students.

The research was carried out during Semester 1 during the 2022/2023 school year where the research implementation focused on integrated thematic learning on Theme 5, namely related to "Ecosystems", and focused on class V of Elementary School. This research took place at SDN 12 Tanah Sirah, Padang City.

RESULTS

Research on this class action is research that is carried out in cycles, the authors carry out research in 2 cycles. Cycles 1 and 2 were held in 3 meetings and cycle 2 once. In its implementation, researchers collaborated with level V teachers at SDN 12 Tanah Sirah Padang City and colleagues. For a more detailed explanation, the research results can be seen as follows:

Cycle I Research Results

Cycle I research was held in 2 meetings where learning was carried out in 4 stages, namely: a) planning, b) implementation, c) observation, and d) reflection.

Observation Result Of RPP Aspec

Based on research conducted on November 21 2022, the results were obtained from the value in the lesson plan during cycle I of the first meeting, namely the score at number 33, with a maximum score at number 40. Then the results after being presented with cycle I of the second meeting were at 82.5%. , for which the qualification is B (Good). The following table represents the data obtained, namely:

Table 1. Observation Analysis of RPP Aspects of Cycle I Meeting 1

No.	Rated aspect	Qualificati on	Weight
1.	RPP identity	Very good	4
2.	Basic competencies	Very good	4

3.	Formulation of indicators	Enough	2
4.	Formulation of learning objectives	Good	3
5.	Learning materials	Good	3
6.	Selection of learning resources	Enough	2
7.	Instructional Media	Good	3
8.	Learning model	Very good	4
9.	Learning scenario	Very good	4
10.	Evaluation	Very good	4
Number of Scores obtained			33
Presentation			82.5%
Qualification			B

The results of the research at the first meeting showed that there were several deficiencies in the learning planning aspect. Based on this, meeting 2 was held on November 28, 2022. In cycle I meeting 2, the RPP assessment from the observer's observations was 35 out of a maximum score of 40. Therefore the percentage of the assessment was at 87.5%, which qualified well (B) . The details are as follows:

Table 2. Observation Analysis of RPP Aspects of Cycle I Meeting 2

No.	Rated aspect	Qualification	Weight
1.	RPP identity	Very good	4
2.	Basic competencies	Very good	4
3.	Formulation of indicators	Good	3
4.	Formulation of learning objectives	Good	3
5.	Learning materials	Good	3
6.	Selection of learning resources	Very good	4
7.	Instructional Media	Good	3
8.	Learning model	Very good	4
9.	Learning scenario	Good	3
10.	Evaluation	Very good	4
Number of Scores obtained			35
Presentation			87.5%
Qualification			B

Observation Results of Cycle I Teacher Aspects

Based on the observations carried out on the teacher aspect from the results of the observer's assessment, the percentage achieved was 84.3%. The results obtained belong to the categories carried out by the teacher when providing integrated thematic material based on the Discovery Learning model syntax. The qualifications achieved by the teacher are included in the qualifications, namely the Good category (B). Details of the observer's observations on the teacher aspect, namely:

Table 3. Observation Analysis of Teacher Aspect Learning Process Cycle I Meeting 1

No.	Rated aspect	Qualification	Weight
1.	Initial activity	Very good	4
2.	Core activitiesstimulation/Providing stimulation	Very good	4
3.	Problem statement/Identification of problems	Very good	4

4.	data collection/Data collection	Good	3
5.	processing data/Data processing	Good	3
6.	verification/Proof	Good	3
7.	Generalization/Draw a conclusion	Good	3
8.	Closing activities	Good	3
Total score			27
Percentage			84.3%
Qualification			B

The results of the research from observing the process of giving material to aspects of the teacher cycle I at the first meeting indicated that there were improvements that had to be made. So the research was continued at the second meeting on November 28, 2022. At the second meeting, the percentage of assessments showed an increase with a score of 28 and a percentage value of 87.5%. This can be understood from the following table, namely:

Table 4. Observation Analysis of Teacher Aspect Learning Process Cycle I Meeting 2

No.	Rated aspect	Qualification	Weight
1.	Initial activity	Very good	4
2.	Core activities stimulation/Providing stimulation	Very good	4
3.	Problem statement/Identification of problems	Very good	4
4.	data collection/Data collection	Good	3
5.	processing data/Data processing	Good	3
6.	verification/Proof	Good	3
7.	Generalization/Draw a conclusion	Good	3
8.	Closing activities	Very good	4
Total score			28
Percentage			87.5%
Qualification			B

Observation Results of Student Aspects Cycle I

After the implementation of the research cycle I at the first meeting gave research results on student activities during the delivery of material with integrated thematic holding steps from the Discovery Learning model obtaining a score of 26 with a percentage obtained 81.2%, this percentage was obtained based on the descriptors that appeared during learning going on. Qualifications from the aspect of students are included in the Good qualification (B). This means that students are quite enthusiastic about participating in the material delivery activities that apply the Discovery Learning model. The details are as follows:

Table 5. Analysis of Observation of Learning Process Aspects of Students in Cycle I Meeting 1

No.	Rated aspect	Qualification	Weight
1.	Initial activity	Very good	4

2.	Core activitiesstimulation/Providing stimulation	Very good	4
3.	Problem statement/Identification of problems	Very good	4
4.	data collection/Data collection	Good	3
5.	processing data/Data processing	Good	3
6.	verification/Proof	Not enough	1
7.	Generalization/Draw a conclusion	Very good	4
8.	Closing activities	Good	3
Total score			26
Percentage			81.2%
Qualification			B

Research cycle I meeting 1 shows if there has been an improvement in order to make students play an important role in the activity of providing material so that it is more optimal. So it continued with the second cycle of research in the second meeting on aspects of student activity which then resulted in a score of 28, the percentage of which was 87.5%. This can be seen in detail as follows:

Table 6. Observation Analysis of Student Learning Process Cycle I Meeting 1

No.	Rated aspect	Qualification	Weight
1.	Initial activity	Very good	4
2.	Core activities stimulation/Providing stimulation	Very good	4
3.	Problem statement/Identification of problems	Very good	4
4.	data collection/Data collection	Good	3
5.	processing data/Data processing	Good	3
6.	verification/Proof	Good	3
7.	Generalization/Draw a conclusion	Good	3
8.	Closing activities	Very good	4
Total score			28
Percentage			87.5%
Qualification			B

Student Learning Outcomes

During the activity of providing material in cycle I in the first meeting, the research results were taken into account from the aspects of attitude, knowledge, skills. From the aspect of attitude there are 5 dominant individuals, 3 dominant individuals in positive and 2 dominant individuals in negative are given no further. In the knowledge aspect, based on the results of the final evaluation value of learning, the average score is 81.7, where the predicate is B (Good), with the highest score at 100 and the lowest score at 61. This condition can be seen from the percentage of students 14 individuals who fulfilled completeness and 14 individuals who did not fulfill it. The average score is 82.5 or with the predicate B (Good) in the skills aspect in the first cycle of the first meeting, with the highest score at 100 and the lowest at 67. This can be seen from the completeness of 15 individuals and 13 individuals who did not meet completeness. From the results of providing student material with aspects of knowledge and skills, it was found that the final recapitulation result was at 82.3.

Furthermore, the results of giving material to students in cycle I, the second meeting, were seen from the aspects of skills, attitudes, and knowledge. From the aspect of attitude, it was found that 4 students were dominant, namely 3 individuals who were positively dominant and 1 individual who was negatively dominant. In the second aspect, namely knowledge, the average is 86 with a Good predicate (B), where the highest value is at 100 and the lowest value is at 70. This can be seen from the completeness of 23 individuals who fulfill completeness, while 5 individuals who does not meet completeness. In terms of skills, the average is 89.3 which is classified as Good (B), with the highest score at 100 and the lowest score at 75. This can be seen from the completeness, namely as many as 24 individuals who met completeness and 4 individuals who did not meet completeness. From the results of students receiving material in terms of knowledge and skills, the final recapitulation result is at 87.9.

Reflection Stage

Research in cycle I was carried out in meetings with a total of 2 (two) times, and produced answers if there were still some students whose learning outcomes were still below the KKM. If the results of receiving student material are recapitulated in terms of knowledge and skills at the first meeting, then the number of students who fulfill completeness is 16 individuals or 57.1% and those who do not fulfill completeness are 12 individuals or 42.8%. At the second meeting, when a recapitulation was carried out, from the results of students receiving material in the aspects of knowledge and skills, the number of students who fulfilled completeness was 22 individuals or 78.5% and those who did not fulfill completeness were 6 individuals or 21.4%. So on the basis of learning outcomes by students.

Cycle II Research Results

Research in cycle II was held through just one meeting but still through 4 (four) stages, namely: a) planning, b) implementation using the Discovery Learning model, c) observation, d) reflection.

Results of Observation of Aspects of RPP Cycle II

Research implementation for cycle II on December 1, 2022 showed an increase in results on observing aspects of the lesson plans in cycle II which scored a score of 38, where the maximum score was at number 40 or with a percentage of 95%. The acquisition of these results indicates that the observations on aspects of the RPP obtained a Very Good (SB) qualification. As can be seen the details are tabled as follows:

Table 7. Observation Analysis of Aspects of RPP Cycle II

No.	Rated aspect	Qualification	Weight
1.	RPP identity	Very good	4
2.	Basic competencies	Very good	4
3.	Formulation of indicators	Very good	4
4.	Formulation of learning objectives	Very good	4
5.	Learning materials	Very good	4
6.	Selection of learning resources	Very good	4
7.	Instructional Media	Good	3
8.	Learning model	Very good	4
9.	Learning scenario	Good	3
10.	Evaluation	Very good	4

Number of Scores obtained	38
Presentation	95.0%
Qualification	SB

Results of Observations on Teacher Aspects Cycle II

When the implementation of the second cycle of research on December 1, 2022 showed a significant increase in the results of observing aspects of teacher activity. Based on the results of the observer's assessment in the process of providing material, he obtained a score of 31, where the maximum score was 32 or with a percentage of 96.8%. This condition illustrates if the teacher succeeds in carrying out the delivery of material by utilizing the discovery learning model. The percentage obtained shows Very Good qualifications (SB). For more details, observe the table as follows:

Table 8. Observation Analysis of Teacher Aspects of Cycle II Learning Process

No.	Rated aspect	Qualification	Weight
1.	Initial activity	Very good	4
2.	Core activities stimulation/Providing stimulation	Very good	4
3.	Problem statement/Identification of problems	Very good	4
4.	data collection/Data collection	Good	4
5.	processing data/Data processing	Good	3
6.	verification/Proof	Good	4
7.	Generalization/Draw a conclusion	Good	4
8.	Closing activities	Good	4
Total score			31
Percentage			96.8%
Qualification			SB

Results of Observations on Student Aspects Cycle II

Implementation of research in cycle II that applies the Discovery Learning model in the process of providing integrated thematic material in terms of aspects of student activity scores at number 31 where the maximum score is at number 32 or with a percentage of 96.8%. Then it shows the qualification result is Very Good (SB). For details, observe the table below:

Table 9. Observation Analysis of Learning Process Aspects of Students Cycle II

No.	Rated aspect	Qualification	Weight
1.	Initial activity	Very good	4
2.	Core activities stimulation/Providing stimulation	Very good	4
3.	Problem statement/Identification of problems	Very good	4

4.	data collection/Data collection	Good	3
5.	processing data/Data processing	Very good	4
6.	verification/Proof	Very good	4
7.	Generalization/Draw a conclusion	Very good	4
8.	Closing activities	Very good	4
			<hr/>
Total score			31
Percentage			96.8%
Qualification			SB

Student Learning Outcomes Cycle II

Learning in cycle II shows a significant increase in student learning outcomes. In the attitude aspect, there are 5 students' attitudes that stand out, namely, 3 people enter into a positive attitude and 2 people enter into a negative attitude. The average acceptance of student material in the knowledge aspect is 90, with the highest score at 100 and the lowest score at 75. The average result of receiving student material in the skill aspect is 94.4, with the highest score being 100 and the lowest score 83. Based on the results of receiving student material in cycle II seen from the aspect of knowledge and skills, the recapitulation of the value of cycle II is 92.3.

The description above shows that when viewed from the aspects of lesson plans, teachers, and aspects of students, they have achieved very good qualifications and all level V students at SDN 12 Tanah Sirah Padang City have achieved a material acceptance value above the KKM. Therefore, the writer, who is a practitioner and a teacher as an observer, carried out the collaboration from cycle I of the first and second meetings to cycle II with only one meeting. This research was carried out by utilizing the model of providing Discovery Learning material in terms of several results improvements, namely: 1) lesson plans; 2) teacher and student aspects; 3) learning outcomes which contain 3 aspects (attitudes, knowledge, and skills).

DISCUSSION

The aim of this research is to describe improving student learning outcomes using the Discovery Learning Model in integrated thematic learning in elementary schools. This research is a classroom action research (CAR) that uses qualitative and quantitative approaches. It was carried out in two cycles, namely cycle I consisting of 2 meetings and cycle II consisting of 1 meeting. In each cycle includes four stages, namely planning, implementation, observation and reflection. The research subjects were teachers and students, totaling 28 people consisting of 14 men and 14 women. The results of the research showed an increase in: a) RPP cycle I with an average of 85% (Good), and cycle II 95% (Very Good), b) implementation in the teacher aspect of cycle I with an average of 84.3 (Good), and cycle II 96.8% (very good), while in the student aspect of cycle I with an average of 84.3% (Good), and cycle II 96.8% (Very Good), c) Assessment of students in the knowledge and skills aspect of cycle I, meeting 1, got a score of 82.3, in cycle I, meeting 2, got a score of 87.9, while in cycle II, it got a score of 92.3. Based on these results, it can be concluded that using the Discovery Learning Model can improve students' integrated thematic learning outcomes.

This is supported by previous research, namely research by Handayani and Mayarnimar (2020) with the title "Improving Student Learning Outcomes in Integrated Thematic Learning Using the Discovery Learning Model in Elementary Schools". The results of his research showed that (1) the percentage of lesson plan observations in cycle I was 83.3%, increasing to 94.4% in cycle II. (2) Teacher activity in cycle I was 84.4%, increasing to 96.8% in cycle II. (3) Student

activity in cycle I was 84.4%, increased to 96.8% in cycle II. Meanwhile, from student learning outcomes, in cycle I the average score was 79.7 with a completion percentage of 60.9%, increasing to 91.3 with a completion percentage of 95.6% in cycle II. It was concluded that the Discovery Learning Model can improve integrated thematic learning outcomes for students. Furthermore, research was conducted by Arwin (2020) with the research title "Improving the Integrated Thematic Learning Process Using the Discovery Learning Model in Class IV Elementary Schools". The research results showed that (1) The learning plan assessment in cycle I was 88.88% (good) then increased to 97.22% (very good) in cycle II. (2) Observations on the teacher aspect of cycle I with a percentage of 87.5% (good) increased in cycle II to 96.87% (very good). (3) The student aspect of cycle I with a percentage of 87.5% (good) increased in cycle II to 96.87% (very good). It can be concluded that the Discovery Learning model can improve the process of integrated thematic learning in elementary schools

According to Marisya and Sukma (2020), the use of the Discovery Learning model can change the learning conditions of passive students to become active, creative and can change learning from students only receiving information from the teacher to seeking more information by involving their minds and encouraging students to think. and work. This is in line with the opinion of Lestari (2020) that the Discovery Learning (discovery) learning model is a learning activity that occurs when students are not presented with information directly, but students are required to organize their understanding of this information independently. Learners are trained to get used to being a scientist (scientist). They are not only consumers, but are also expected to play an active role, even as agents of knowledge creation.

CONCLUSION

Based on the research results obtained and discussion regarding the holding of the Discovery Learning learning model at level V SDN 12 Tanah Sirah Padang City, the authors conclude that by implementing the Discovery Learning model in the activity of providing integrated thematic material in Theme 5 "Ecosystem" Sub-theme 1 to sub-theme 3 learning 3 is proven to increase student learning outcomes. The evidence for this statement is exposed from the elaboration of data that has been processed using classroom action research data processing techniques, namely: a) RPP cycle I averaged at 85% (Good) and cycle II at 95% (Very Good); b) the teacher aspect in cycle I averaged at 84.3% (Good) and cycle II at 96.8% (Very Good) and the student aspect in cycle I averaged at 84.3% (B) and cycle II at 96.8% (SB); c) aspects of students' skills and knowledge in cycle I meeting 1 at 82.3 and in cycle I meeting 2 at 87.9, while in cycle II the score was at 92.3. From the results described above, it can be concluded that by holding the Discovery Learning model when providing learning materials to students, it will increase the level of student integrated thematic learning outcomes.

REFERENCES

- Amalia, R. R., Anggoro, S., & Eka, K. I. (2021). Identification of Teachers and Students' Readiness to E-Learning Implementation. *Journal of Teaching and Learning in Elementary Education (Jtlee)*, 4(2), 170.
- Arikunto, et al. (2015). *Penelitian Tindakan Kelas*. Jakarta: Bumi Aksara.
- Astuti, M. S. (2015). Peningkatan Keterampilan Bertanya dan Hasil Belajar Siswa Kelas 2 SDN Slungkep 03 Menggunakan Model *Discovery Learning*. *Scholaria; Jurnal Pendidikan dan Kebudayaan*. 5(1), 10.
- Arwin, Yupi Puspita sari. (2020). Peningkatan Proses Pembelajaran Tematik Terpadu Dengan

- Menggunakan Model Discovery Learning Di Kelas IV Sekolah Dasar. *Journal on Teacher Education* 1(1):12–23. doi: 10.31004/jote.v1i1.501.
- Handayani, F., & Mayarnimar. (2020). Peningkatan Hasil Belajar Siswa Pada Pembelajaran Tematik Terpadu Menggunakan Model Discovery Learning Di SD. *E-Jurnal Inovasi Pembelajaran SD* 8(2):124–40.
- Efrina, R., & Lena, M. S. (2020). *Peningkatan Hasil Belajar Tematik Menggunakan Model Discovery Learning di Kelas SD Improving Thematic Learning Outcomes Using Discovery Learning Model in Class IV.* 8(1), 30-41.
- Fajri, Z. (2019). Model Pembelajaran Discovery Learning Dalam Meningkatkan Prestasi Belajar Siswa Sd. *Jurnal IKA PGSD (Ikatan Alumni PGSD) UNARS*, 7(2), 1.
- Faradilla, N., Putra, Z. H., & Noviana, E. (2022). The Relationship between Self-Efficiency and Mathematical Knowledge of 3-D Shapes of Fifth Grade of Elementary School. *Journal of Teaching and Learning in Elementary Education*, 5(1), 34-47.
- Gusmarini, A. (2020). *Peningkatan Hasil Belajar pada Pembelajaran Tematik Terpadu Menggunakan Model Kooperatif Tipe Team Assisted Individualization di Sekolah Dasar.* 4(C), 2560-2567.
- Hermita, N., Putra, Z. H., Alim, J. A., Fitriani, M., Nasien, D., & Mahbubah, K. (2022). Analysis of the Among System-Based Discovery and Inquiry Learning Models. *Journal of Teaching and Learning in Elementary Education*, 5(2), 216-224.
- Ikhsan, M. H., & Giwangsa, S. F. (2019). The Importance of Multicultural Education in Indonesia. *Journal of Teaching and Learning in Elementary Education*, 2(1), 60-63.
- Iranti, A. D., Asih, S. R., Putra, Z. H., & Alim, J. A. (2023). Peningkatan pengetahuan tentang garis bilangan melalui permainan loncat garis. *Indonesian Journal of Science, Technology, Engineering, Art, and Mathematics Education*, 2(1), 25 - 33.
- Juada, A. (2016). *Penelitian Tindakan Kelas (Classroom Action Research)*. Yogyakarta: Deepublish.
- Kadir, A., & Asrohah, H. (2015). *Pembelajaran Tematik*. Jakarta : RajaGrafindo Persada.
- Khasanah, L., & Suprihartini, G. (2019). Peningkatan Hasil Belajar Tema 7 Melalui *Discovery Learning* Berbantu Permainan Orang-Orangan pada Peserta Didik Kelas IV SDN Gajahmungkur 04 Semarang. *Media Penelitian Pendidikan: Jurnal Penelitian Dalam Bidang Pendidikan dan Pengajaran*. 13(1), 42.
- Komara, F. H. T., Putra, Z. H., & Hermita, N. (2020). Penerapan model pembelajaran kooperatif tipe picture and picture untuk meningkatkan hasil belajar matematika siswa kelas IVB SDN 136 Pekanbaru. *Tunjuk Ajar: Jurnal Penelitian Ilmu Pendidikan*, 3(2), 146 – 162. <http://dx.doi.org/10.31258/jta.v3i2.146-162>
- Kunandar. (2016). *Langkah Mudah Penelitian Tindakan Kelas Sebagai Pengembangan Profesi Guru*. Jakarta : Rajawali Pers.
- Kurniaman, O., Yuliani, T., & Mansur, M. (2018). Investigating Think Talk Write (TTW) Learning Model to Enhance Primary Students' Writing Skill. *Journal of Teaching and Learning in Elementary Education*, 1(1), 52-59.
- Lena, M. S., Puspita Sari, I., Dwi, Dayanur, I., Azizah, K. U., & Sari, M. I. (2021). Hubungan Motivasi dan Hasil Belajar Terhadap Pembelajaran Matematika di Sekolah Dasar 02 Taeh Bukik. *Wahana Sekolah Dasar*, 29(2), 93.
- Lestari, E. T. (2020). *Model Pembelajaran Discovery Learning di Sekolah Dasar*. Yogyakarta: CV BUDI UTAMA.
- Lestari, S., Syahrilfuddin, S., Hermita, N., & Putra, Z. H. (2019). The Effect of Realistic

- Mathematic Approach on Students' Learning Motivation. *Journal of Teaching and Learning in Elementary Education*, 2(2), 145-156.
- Margolang, N., Hermita, N., & Antosa, Z. (2019). The Correlations between Reward and Elementary School Students' Learning Motivation. *Journal of Teaching and Learning in Elementary Education*, 2(1), 64.
- Marisyah, A., & Sukma, E. (2020). Konsep Model Discovery Learning pada Pembelajaran Tematik Terpadu di Sekolah Dasar Menurut Pandangan Para Ahli. *Jurnal Pendidikan Tambusa*, 4(3), 2191.
- Mulyani, E. A., Alpusari, M., & Putra, E. D. (2021). The Effect of Learning Facilities and Family Environment on Motivation to Learn of Prospective Elementary Teacher Education on Online Learning. *Journal of Teaching and Learning in Elementary Education (Jtlee)*, 4(1), 89.
- Naila Nur Anisa, Ika Septiana, E. D. P. (2020). Jurnal Paedagogy : Jurnal Paedagogy : *IkanJurnal Paedagogy: Jurnal Penelitian Dan Pengembangan Pendidid*, 7(4), 281–288.
- Nopridayanti, N. (2018). Penerapan Pembelajaran Kooperatif Tipe Two Stay Two Stray Untuk Meningkatkan Hasil Belajar Ips Peserta Didik Kelas Iv Sd Negeri 003 Beringin Taluk Kecamatan Kuatan Tengah Kabupaten Kuatan Singingi. *JURNAL PAJAR (Pendidikan Dan Pengajaran)*, 2(5), 761.
- Novianti, R., & Garzia, M. (2020). Parental Engagement in Children's Online Learning During COVID-19 Pandemic. *Journal of Teaching and Learning in Elementary Education (Jtlee)*, 3(2), 117.
- Nurzayyana, A., Putra, Z. H., & Hermita, N. (2021). Designing a Math Picture Book to Stimulate Primary School Students' Understanding of Properties of 2-D Shapes. *Journal of Teaching and Learning in Elementary Education (Jtlee)*, 4(2), 164-179.
- Patri, N. K. (2019). Penerapan Model Pembelajaran Kooperatif Team Assisted Individualization untuk Meningkatkan Prestasi Belajar IPS. *Journal of Education Action Research*, 3(3), 307. <https://doi.org/10.23887/jear.v3i3.21100>
- Prasetyo, A. D., & Abduh, M. (2021). Peningkatan Keaktifan Belajar Siswa Melalui Model Discovery Learning Di Sekolah Dasar. *Jurnal Basicedu*, 5(4), 1717–1724.
- Putra, Z. H. (2019). Elementary Teachers' Knowledge on Fraction Multiplication: An Anthropological Theory of the Didactic Approach. *Journal of Teaching and Learning in Elementary Education*, 2(1), 47-52.
- Putri, S. D. P., & Fitria, Y. (2022). The Effect of Cooperative Model Type Team Assisted Individualization (TAI) on Student Learning Outcomes in Integrated Thematic Learning. *Journal of Teaching and Learning in Elementary Education*, 5(2), 124-135.
- Reinita, & Eci. (2018). *Pedagogi : Jurnal Ilmu Pendidikan Pengaruh Penggunaan Model Kooperatif Tipe Team Assisted*. 18(1), 75–81.
- Setiani, R., Koeswanti, H. D., & Radia, E. H. (2019). Upaya Meningkatkan Hasil Belajar Tema 6 Dengan Model Discoevery Learning Pada Siswa Kelas IV SD Negeri Cebongan 02 Salatiga. *Jurnal Tematik*, 9(1), 46–53.
- Shuo, Z., Tang, J., & Pereira, J. (2022). Integrating Hawgent Dynamic Mathematics Software into Cone Volume Geometry Learning in Elementary School. *Journal of Teaching and Learning in Elementary Education*, 5(1), 1.
- Syamsuddin, A., Babo, R., Sulfasyah, & Rahman, S. (2021). Mathematics learning interest of students based on the difference in the implementation of model of thematic learning and character-integrated thematic learning. *European Journal of Educational Research*, 10(2),

581–591.

Wahyuni, N., & Ananda, L. J. (2021). Development of Thematic Teaching Materials Based on Discovery Learning in Elemen School. *Journal of Teaching and Learning in Elementary Education*, 4(2), 122-130.