#### Journal of Research in Islamic Education



Volume 7, Number 1, June 2025 DOI: 10.25217/jrie.v5i1.5743

https://journal.iaimnumetrolampung.ac.id/index.php/jrie

#### Learning Start With a Question (LSQ) Method to Student Learning Activity in Science Subject of Class VI A SD NU Metro

#### Mutiara Lutfi Zakia<sup>1</sup>, Muh Ngali Zainal Makmun<sup>2</sup>, Lutfi Fadilah<sup>3</sup>

123 Universitas Ma'arif Lampung, Indonesia

\*Correspondence: mutiaralutfi90@gmail.com

#### **Article Information:**

Received: 2025-04-13 Revised: 2025-05-13 Accepted: 2025-05-24

#### **Keywords:**

Implementation of the Learning Start With Method A Question, Science Material, Activeness Study Learners.

#### Abstract

Learning activity is one of the important elements in learning. Activity consists of physical and mental activities, namely doing and thinking as a series that cannot be separated. This study aims to determine the application of the learning start with a question method on the material of science, especially on the material of natural disasters and their impacts of class VI A SD NU Metro and to determine the increase in student learning activity by using the learning start with a question method. Based on the results of the pre-survey and interviews, problems were found, namely the lack of attention and concentration of students, the lack of enthusiasm of students in participating in learning and the lack of interaction between teachers and students, so that students find it difficult to focus on learning, and lack of motivation in learning. This has an impact on the learning activity of students which is not optimal. This study uses a descriptive qualitative method with data collection techniques using observation, interviews, and documentation. The results of an in-depth analysis related to the application of the learning start with a question method on student learning activity show that there are better changes so that it can be said that there is an increase indicated by the change where there are some students who are not yet able to understand the reading, therefore with the application of the learning start with a question method, these children begin to be able or even can conclude from the results they read.

#### INTRODUCTION

Education is a conscious and planned effort in the form of an activity that is carried out routinely that has a purpose and mature planning. Education is important for life because thanks to education humans can determine and change the life they live for the better (Mustadi, 2020).

Learning activity is one of the indicators of success in educational institutions. Currently, learning activity is an important thing, because learning is said to be successful and of quality if all or at least most of the students are actively involved, both physically, mentally and socially (Prasetyo & Abduh, 2021).

Education is related to learning so that learning becomes a powerful tool in organizing education. The term learning is closely related to the meaning of learning, namely learning is a process of transforming knowledge in order to obtain competence, skills, and attitudes to

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

bring about better change. While learning activities are a system and process of interaction between students and educators and learning resources in a learning environment (Amral & Asmar, 2020).

Students' efforts to develop their potential to achieve learning success, so that academic success can be defined by learning activities that will affect students' learning activity in the classroom, which is characterized by students being enthusiastic in participating in learning, the formation of effective group cooperation, participating in reviewing material by discussing in groups or with classmates. According to Ningsih, the active learning process can be seen from students who often ask questions, express ideas, and can think critically. As a faciliator, he plays an important role in student activity during learning, an active and conducive atmosphere in the implementation of learning can foster student knowledge even better (Rahmayanti et al., 2022).

The learning process is a process in which students receive new knowledge based on their experiences and combine it with old knowledge to achieve the expected goals (Ifrianti,2021). In order for learning to achieve its goals, active learning is a prerequisite for obtaining a result. Therefore, learning should be carried out not only in theory but also must involve students actively, educators need to pay attention to all student activities in the learning process so that learning objectives can be achieved. The learning process that tends to be passive will affect students so that students tend to understand their learning less, and students can only receive information given by the teacher and do not provide serious responses during the learning process, this problem will cause students to be unprepared in the learning process.

One of the subjects that every child must learn is Natural and Social Sciences (IPAS), IPAS has a role in realizing the profile of Pancasila students as an ideal picture of the profile of Indonesian students, IPAS begins to be taught in phase B (Grade III). IPAS helps students grow their curiosity about the phenomena that occur around them, so that this curiosity can trigger students to understand how the universe works and interacts with human life on earth (Ministry of Education and Culture, 2022)

A directed educational process can create meaningful learning activities (Sari et al., 2022). However, the current problem is that the enthusiasm of students is not optimal, students' views on the subject of science are lessons that only tend to memorize theories, so that students who do not like to memorize do not like this learning, the learning process is still centered on the teacher (Izzah et al., 2022). So that it makes students passive and less

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

appreciative of learning, and causes students' activeness in the learning process to not be optimal. the process of learning something new is more effective if the students are active. Students who are less active tend to do things that hinder their own learning, such as: when the teacher is explaining the learning material, the students are busy chatting with their deskmates, and when the teacher is asking questions, the students pretend to open a book, and put their faces on the table, it can also be caused by the condition of the classroom which tends to get hotter as the day goes on so that the students' concentration decreases over time. The low enthusiasm of students in participating in learning in class affects learning activity so that students do not appreciate and understand the material that has been delivered, so that the learning outcomes obtained are still far from expectations.

The activeness of student learning during the learning process is still relatively low. There are still students who are less aware of preparing themselves before the teaching and learning process begins (Purwati, 2020). The low level of activeness in participating in learning in class is caused by various factors, including less supportive classroom conditions, lack of interaction between educators and students, learning models that are still centered on teachers and many other factors. So that efforts for students to understand science lessons that can increase students' knowledge of the surrounding environment and as social beings, it is hoped that there will be an awareness of the importance of interaction between teachers and students. Because active learning must create an atmosphere in such a way that students actively ask questions and express their opinions. As active learning is needed in an effort to activate students in asking questions and this requires a learning method (Muchlinarwati, 2021).

Learning activity is a way for students to become active through activities that can make students think about learning materials (Rahayu & Dahlan R, 2021). The condition of students can affect students' learning activity. The factors that influence this are internal factors and external factors. Internal factors are factors that influence students from within the students themselves, internal factors that influence students' activity in the classroom are physiological factors and psychological factors (Payon et al., 2021).

The purpose of this study was to determine the application of *the learning start with q* question method in the science subject of grade VI of SD NU Metro and to determine the increase in student learning activity by using *the learning start with a question method*.

Science learning emphasizes more on the "educational " aspect than on concept transfer because in science learning students are expected to gain an understanding of a

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

number of concepts and develop and train their attitudes, values, morals and skills based on the concepts they already have. Science also discusses the relationship between humans and their environment. The community environment where students grow and develop as part of society and are faced with various problems that exist and occur in their surroundings.

The Learning Start With A Question method is active learning that begins with asking questions, then the educator explains what the students are asking, asking questions can be seen as feedback and curiosity of students (Amin & Sumendap., 2022). The Learning Start With A Question method is a method where students are directed to learn independently by creating questions based on the reading given by the teacher (Lestari et al., 2024). In order for students to actively ask questions, students are asked to study the material to be discussed first. Then if students do not understand a word, sentence, or term, they can underline it to indicate a sentence or word that is not understood, if there is something that is not understood, students will prepare questions obtained from the reading they are studying. This Learning Start With A Question (LSQ) method can stimulate students to ask questions, the use of this Learning Start With A Question (LSQ) method makes students actively analyze and ask questions and receive input from the teacher (Hafizatul & Chandra, 2022). Active learning must create an atmosphere in such a way that students are active in submitting statements and expressing their opinions. Learning delivered by the teacher must always create curiosity or in the form of problem solving so that students who do not understand the material will be motivated to ask questions about the discussion of the material.

The learning process by first asking some questions and then finding the answers will bring many benefits, one of which is to arouse students' enthusiasm to listen to explanations from educators, encourage student activities in the form of ideas, concepts, and problem solving, accustom students to exchange ideas, train students to be able to create and accept other people's opinions. Learning Starts With Method A Question (LSQ) will also practice speed in thinking, and understanding draft the material being studied. Through learning Learning Starts With A Question so system learning will more effective Because learning This No only refers to the teacher, but also refers to the participants learn. Participants educate trained For brave speaking in front of class, so that Learning Starts With A Question can increase motivation participant educate For active and creative in reach better understanding good (Waskita et al., 2024).

Based on the results of the pre-survey and interviews during the PPL (Field Experience Practice) activities carried out from July 15 to August 31, 2024 at SD NU Metro in class VI

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

A. It was found that the problem was the lack of attention and concentration of students, the lack of enthusiasm of students in participating in learning and the lack of interaction between teachers and students, so that students find it difficult to focus on learning, and lack motivation in learning. This has an impact on student learning activity which is less than optimal. With this, the reason researchers chose the *learning start with a question method* is to create an active and interactive learning atmosphere between teachers and students.

This has also been studied by Lestari Wiji Astuti, in 2013 entitled "Implementation of the Learning Start With A Question Method to Improve Understanding of Integer Multiplication in Mathematics Learning for fourth grade students of SDN Dukutalit 02. The results of this study indicate an increase in understanding of integer multiplication in mathematics learning. The similarity of this study lies in the independent variable, namely the learning start with a question method. While the differences are the dependent variables, research location, research subjects and learning materials.

Research conducted by Hayatun Mutmainah (2023) entitled "Implementation of Learning Start With A Question (LSQ) Strategy in Indonesian Language Subjects to Increase Student Activity in Class IV MIN 26 Aceh Besar" Data collection techniques using teacher activity observation sheets, student activity observation sheets, and test results. The results of this study indicate an increase in teacher activity, student activity and learning outcomes through the application of the LSQ (Learning Start with a Question) learning strategy. The similarity of this study lies in the dependent variable, namely student activity. While the differences are the independent variables, research location, research subjects and learning materials.

Therefore, from the problems found by researchers during field experience practice activities, researchers are interested in *the learning start with a question method* to increase student learning activity in science learning, especially in the material of natural disasters and their impacts. In creating student activity in learning, several methods can be used, namely active learning methods such as group discussions, cooperative learning, project-based learning and one of them can also use *the learning start with a question (lsq) method*.

#### **METHOD**

Research methods used in study This is study qualitative with approach descriptive. Approach descriptive chosen Because study This aiming For dig understanding deep about implementation method *learning start with a question* in Science learning in class VI A. Subject

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

study This consists of from head school, class VI A teachers, and participants educate class VI A SD NU Metro. Data collected through observation, interview, documentation. Observation done For observing the ongoing learning process. Interview intended to head school and related class VI A teachers implementation method *learning starts with a question* in the subject of science, especially in the material disaster nature and its impacts. In addition, documentation used For analyzing records of past events, which can be in the form of writing, images, voice recordings and others. In ensuring the validity of the data, this study uses triangulation techniques, namely comparing data obtained from various sources and data collection techniques to ensure the consistency and accuracy of the information collected.

The data analysis technique in this study was carried out in three stages, namely data reduction, data presentation, and conclusions. At the data reduction stage, data collected through observation, interviews, and documentation were filtered and selected to focus on the research problem. Furthermore, relevant data were presented in narrative or table form to facilitate analysis at the data presentation stage. At the last stage, conclusions were made to test the truth of the existing findings and draw conclusions that can answer the research questions. This approach allows researchers to deeply understand the dynamics that occur in science learning with *the learning start with a question method*, as well as how this method can increase student learning activity.

#### FINDINGS AND DISCUSSION

Before presenting the results of this study, it is necessary to provide an understanding of the background and objectives of the research conducted. The research entitled Implementation Learning Start With A Question Method Towards Student Learning Activeness In Science Subjects Class VI A SD NU Metro aims to determine the increase in student learning activity in science lessons using the Learning Start With A Question method for class VI of NU Metro Elementary School. The learning start with a question method, which is known as one of the active learning that can provide opportunities for students to be active in learning by asking questions at the beginning of learning.

The data collection techniques for this study are observation, interviews, and documentation. Observations are made to observe the ongoing learning process. In this study, the researcher conducted observations on November 13, 2024.

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

Nahdlatul Ulama Elementary School (SD NU) Metro is a formal education that is established under the auspices of LP. Ma'arif Metro City which is general in nature like elementary schools in general, plus specifically SD NU has several excellent religious and intellectual programs that characterize one of the formal educational institutions that adheres to Ahlussunnah wal Jama'ah Annahdliyah. SD NU Metro is conducive both institutionally and individually directly under the supervision of the ranks of PCNU Metro City and the Management of LP. Ma'arif Metro City, so that in terms of scientific sanad, especially religious knowledge, it is very clear and its authenticity is guaranteed.



Figure 1. Interview with the principal of SD NU Metro

Results of the interview with Mr. Nur Hidayatulloh S.Pd M.Ag as the principal of SD NU Metro:

The principal stated that " in improving the quality of learning at SD NU Metro, namely by optimizing learning strategies, learning methods, and learning facilities. Learning facilities include extracurricular activities, talent interest development, and places of worship. By using the right learning strategy, it can increase student involvement in the learning process and be more active in achieving learning goals, and ensure that the learning methods used are in accordance with the needs and abilities of students. In improving optimizing strategies, methods, and facilities, it is necessary to involve all parties, including teachers, students, and parents. With good cooperation and communication, it can improve the quality of learning and make schools better and develop."



Figure 2. Interview with class VI A teacher at NU Metro Elementary School

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

Results of an interview with Mrs. Putri Nur Indah Cahya S.Pd as the class teacher regarding the implementation of *the learning start with a question method*:

"In my opinion, the activeness of student learning is students who, during learning, listen to the teacher's explanation, ask questions, and discuss. Classroom learning really requires interaction between teachers and students so that student learning activity needs to be improved. Therefore, it is necessary to apply learning methods that are appropriate to needs. The advantage of the learning start with a question method is that students are more prepared to follow the learning and when asked at least students already know the answer and where the page is even though they are looking at the book. The disadvantage of the learning start with a question method is the time constraints where sometimes students when reading time is over they often ask for additional time on the grounds that they have not read or are disturbed by other friends. To manage the class in implementing the learning start with a question method, namely by understanding all the characters of students because sometimes students who dare to ask questions are because they are often called or whose seats are in front while those who are shy are more often silent, so teacher creativity is needed in managing the class such as seating arrangements and after implementing it, it is very clear that students tend to be more active and more ready to follow the learning".

The application of *the learning start with a question method* at SD NU Metro in the subject of science for class VI A is very effective. Teachers use this method to increase the activeness and readiness of students in participating in learning.

The steps in using the learning start with a question method are:

- 1. The teacher distributes the selected teaching materials with readings that are appropriate to the material (can use one page in a textbook), the purpose of selecting materials is the need to stimulate questions that will be read by students, by choosing a particular topic or chapter from the textbook, which provides broad information but does not have details, try to make the reading contain general information or reading that provides opportunities for different interpretations, because the main goal is to trigger students' curiosity (Supriadi, 2023).
- 2. The teacher asks students to study the textbook or reading independently or with their deskmate. Then, as much as possible, students try to understand the textbook and recognize anything they do not understand, students can mark the reading by underlining unknown words or sentences (Lestari, 2023).
- 3. Then, students are advised to prepare as many marks as possible on the parts of the reading that are not understood, if time permits, combine their desk mates with other friends (into groups) and give time for each group pair to help each other and discuss

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

the unknown points that have been marked, education will be simpler so that ideal results can be achieved.

- 4. In small groups, students can write questions either independently or in groups.
- 5. The teacher collects the questions that students have written.
- 6. Students sit back in their starting positions, and the teacher begins to answer the questions that have been marked by students. The teacher can teach through answers to students' questions as a whole and then teach today's subject, by making a special effort to answer questions asked by students.

In essence, by asking questions, we will know and get information about anything we want to know. When associated with the learning process, question and answer activities between teachers and students show that there is dynamic and multi-directional interaction in the classroom. The importance of students asking questions is that students can play an active role in class, encourage curiosity in students, stimulate students' thinking functions, develop students' thinking skills, students can focus their attention on the learning process (Andriani et al., 2019)

The teacher begins the lesson by explaining the purpose of the learning start with a question method, which is to increase the activeness of students' learning through asking questions at the beginning of the lesson. The material chosen by the teacher is natural disasters and their impact on the subject of science and science. In implementing learning start with a question, the teacher gives exercises to students, both individually and in groups. For example, individually the teacher asks students to ask questions, then after being answered and explained by the teacher, the teacher throws questions to students about what has been explained. This helps to increase activeness, courage and strengthens their understanding.

Indicators of learning activity in the learning process are:

- 1. Be enthusiastic in participating in learning, such as doing assignments given by the teacher during the teaching and learning process in class.
- 2. Participate in reviewing material or discussing material that is considered difficult with friends and study groups according to teacher instructions.
- 3. Students dare to ask questions during learning.
- 4. Students dare to answer questions given by the teacher .
- 5. The formation of effective group cooperation.
- 6. Student activity in expressing new ideas.
- 7. The courage of students in trying to practice the material being studied.

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

- 8. Students dare to present the results of their understanding in front of the class.
- 9. Students have the opportunity to use or apply what they have learned in completing the tasks or problems they face (Rikawati & Sitinjak, 2020).



Figure 3. Student activities reading texts on natural disasters and their impacts.

In reading activities, teachers use a *timer system*, which is given 10 minutes to see the effectiveness of the application of *the learning start with a question method*. Reading activities are one effective way to increase students' understanding and readiness to participate in learning. By reading relevant reading materials, students can gain broader and deeper knowledge and information about the material to be studied. Reading activities can also help students improve their ability to express opinions and discuss. In reading text activities, there are several indicators of student learning activity, namely: Enthusiastic in participating in learning, such as doing assignments given by the teacher in the teaching and learning process in class, Participating in reviewing material or discussing material that is considered difficult with friends and study groups according to teacher instructions. Of the nine indicators, two are covered in the reading activity of the text of natural disasters and their impacts.



Figure 4. Discussion activities after reading the text

Discussion activities can foster student activity and participation in the learning process related to curiosity and the ability to answer or find answers so that students can gain a better understanding. This activity can also foster self-confidence because they can express

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

opinions and discuss. In discussion activities after reading the text, there are several indicators that are covered, namely: students dare to ask questions during learning, students dare to answer questions given by the teacher, the formation of effective group cooperation, student activity in expressing new ideas, student courage in trying to practice the material being studied, students dare to present the results of their understanding in front of the class, students have the opportunity to use or apply what they have obtained in completing tasks or problems they face.

In the activity of reading texts and discussing, there are seven of the nine indicators of student learning activity that are covered. The increase in student activity can be shown by various learning activities starting from reading texts, concluding, and discussing, so in this activity the nine indicators of student learning activity are achieved well.

In improving student learning activity, teachers need to optimize learning management. Learning management can be optimal if teachers are able to position themselves as facilitators and mediators in the learning process. (Mahmudah et al., 2021).

#### **CONCLUSION**

Based on research conducted by researchers entitled "Implementation of the Learning Start With A Question Method on Student Learning Activity in Science Subjects in Class VI A of SD NU Metro". The activeness of asking questions at the beginning of learning aims to motivate students to delve deeper into the material being read and train students' courage in asking questions so that the learning start with a question method is effective in supporting students in mastering the material. The learning method starts with questions can increase student learning activity in Science material by actively asking questions that begin with reading reading materials as preparation for participating in learning. Data collection techniques use observation, interviews, and documentation. Increased student activity can be shown by various learning activities starting from reading texts, concluding, and discussing which nine indicators of student learning activity are achieved well. The results of an in-depth analysis related to the application of the learning start with a question method to student learning activity show that there are better changes so that it can be said that there is an increase indicated by the change where there are some students who are not yet able to understand the reading, therefore with the application of the learning start with a question method these children begin to be able or even can conclude from the results they read.

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

#### REFERENCES

- Amin and Linda Yurike Susan Sumendap . Learning Model Contemporary . LPPM Publishing Center , 2022
- Amral, and Asmar. The essence Learning & Teaching. Jakarta: Guepedia, 2020.
- Feni Farida Payon, Dyka Andrian, and Sasi Mardikarini, "Factors Influencing the Learning Activity of Grade III Elementary School Students," Contextual Scientific Journal 2, no. 02 (2021).
- Ministry of Education and Culture, "Natural and Social Sciences (IPAS) Elementary-High School ", *Independent Teaching*, 2022<a href="https://guru.kemdikbud.go.id/kurikulum/referensipenerapan/capaian-pembelajaran/sd-sma/ilmu-pengetahuanalam-dan-sosial-ipas/">https://guru.kemdikbud.go.id/kurikulum/referensipenerapan/capaian-pembelajaran/sd-sma/ilmu-pengetahuanalam-dan-sosial-ipas/</a>
- Ministry of Education and Culture, "Natural and Social Sciences (IPAS) Elementary-High School ", Independent Teaching , 2022<a href="https://guru.kemdikbud.go.id/kurikulum/referensipenerapan/capaian-pembelajaran/sd-sma/ilmu-pengetahuanalam-dan-sosial-ipas/">https://guru.kemdikbud.go.id/kurikulum/referensipenerapan/capaian-pembelajaran/sd-sma/ilmu-pengetahuanalam-dan-sosial-ipas/</a>
- Lestari, Puji, Jamilah Jamilah, Maharani Syarif, Rini Shafira Ginting, and Indayana Febriani Tanjung, "Implementation of Learning Start With A Question Strategy to Increase the Courage to Ask Questions in Grade XI IPA-1 Students of Baitul Aziz Private High School, Medan", *Biodik*, 9.1 (2023), 52–57 <a href="https://doi.org/10.22437/bio.v9i1.19168">https://doi.org/10.22437/bio.v9i1.19168</a>>
- Mahmudah, Masrurotul. et al. 2021. Integrated and Thematic Learning Strategies in Elementary Schools/Islamic Elementary Schools. Pustaka Learning Center.
- Mustadi Ali.2020. the foundation of school education in elementary schools (Uni Press).
- Ni Wayan Suarjani, "Student Center Learning (SCL) in Elementary School Learning," Adi Widya: Elementary Education Journal 4, no. 1 (2019), https://doi.org/10.25078/awv4i1.928
- Prasetyo, Apri Dwi, and Muhammad Abduh, "Increasing Activity Study Student Through the Discovery Learning Model in Elementary Schools", *Journal Basicedu*, 5.4 (2021),1717–24 <a href="https://jbasic.org/index.php/basicedu/article/view/991">https://jbasic.org/index.php/basicedu/article/view/991</a>
- Purwati, Retno Puji, "Efforts to Increase Student Learning Activity with the Discovery Learning Approach Using Google Classroom", *Habitus: Journal of Education, Sociology, & Anthropology*, 4.1 (2020), 202 <a href="https://doi.org/10.20961/habitus.v4i1.45725">https://doi.org/10.20961/habitus.v4i1.45725</a>
- Rahmayanti, Dita, Djoko Hari Supriyanto, and Tri Wardati Khusniyah, "The Influence of Students' Active Questioning on Elementary School Students' Learning Outcomes ", *Jurnal Holistika*, 6.1 (2022), 34 <a href="https://doi.org/10.24853/holistika.6.1.34-40">https://doi.org/10.24853/holistika.6.1.34-40</a>
- Rikawati, Kezia, and Debora Sitinjak, "Improvement Activity Study Student With Use of Lecture Method Interactive", *Journal of Educational Chemistry (JEC)*, 2.2 (2020), 40 <a href="https://doi.org/10.21580/jec.2020.2.2.6059">https://doi.org/10.21580/jec.2020.2.2.6059</a>
- Rizcka Fatya Rahayu and M. Dahlan R, "Efforts of Islamic Religious Education Educators in Developing Student Learning Activeness in Distance Learning," Al-Thariqah Journal of Islamic Religious Education 6, no. 1 (2021).
- Supriadi, Zulfinar, "The Effect of Implementing the Start With a Questions (LSQ) Learning Model on the Reading Comprehension Ability of Grade IV Students of SD 434 Kalimbubu, Bajo District, Luwu Regency", 2023, 1–11

Mutiara Lutfi Zakia, Muh Ngali Zainal Makmun, Lutfi Fadilah

- Syofnida Ifrianti, "Implementation of Play Methods in Improving Social Studies Learning Outcomes in Elementary Madrasahs", *Angewandte Chemie International Edition*, 6(11), 951–952., 2 (2021), 2013–15
- Waskita, Prakasa Ibnu, and Dona Dinda Pratiwi, "Analysis Ability Understanding Concept And Thinking Critical Through Implementation of the Pogil Model With LSQ Strategy", 08.2022 (2024), 1073–80
- Yovita Sari, Santi. Fitri Sholichah, Ima. Setiawan Wicaksono , Awang, "JPDK: Volume 4 Number 2 Year 2022 Research & Learning in Primary Education and Majors in Students", 4 (2022), 63–67 <a href="https://www.mendeley.com/catalogu/c509c641-8367-3d9b-8584-027a009db617/">https://www.mendeley.com/catalogu/c509c641-8367-3d9b-8584-027a009db617/</a>