

# Application of the Discussion Method to Improve Science Learning Outcomes in Grade IV Students of MIS Al-Khoiriyah Palembang

Arnianti<sup>1</sup>, Dyah Indraswati<sup>2</sup>

<sup>1</sup>PGSD, FKIP, Universitas Terbuka, <sup>2</sup>PGSD, FKIP, Universitas Mataram \*Corresponding author, <u>arnianti80@gmail.com</u>

### Abstract

Most of the students learning outcomes in learning are still low. This study aimsto improve student learning outcomes in science class IV MIS.AL-Khoiriyah Palembang. The research method used was classroom action research method used was classroom action research procedures included: planning, implementing, reflecting. The results showed that the use of the discussion method could improve student learning in class IV MIS.Al-Khoriyah Palembang. This can be seen from the percentage studentlearning outcomes, cycle 1 that 64,24% and in cycle 2 the value of student learning completeness increased KKM 70 and learning be seen from the percentage student lerning outcomes, in cycle 1 that is 64,24% and in cycle 2 the value of student learning completeness increased and increased and learning completeness increased and reached KKM 70 and learning completeness increased to 85,71%.

Keywords: discussion method; learning outcomes

This is an open access article distributed under the Creative Commons Attribution-ShareAlike 4.0 International License.

## Introduction

According to the Ministry of National Education, Natural Science is a way of systematically finding out about nature to understand knowledge, facts, concepts, principles, discovery processes, and have a scientific attitude (Yuliati, 2017). Science education in elementary schools is beneficial for students to learn about themselves and the environment, as well as further development in its application in everyday life (s & Wearden, 2006). Learning is a process of change that occurs in a person as a result of meaningful experience(Putrayasa et al., 2014). One of the methods used in learning is the discussion method. Discussion is an activity in which more than one person discusses or exchanges opinions on a particular topic or issue. The discussion method is seen as an effective way to learn to think critically, solve problems, and exchange ideas so that the learning process can be more meaningful and dynamic (Latifah, 2013).

In the learning process, a learning method is needed, one of which is the discussion method. According (Murwanti et al., 2014), the discussion method is a way of teaching in which the discussion and presentation of the material is through a problem or question that must be resolved based on a joint opinion or decision and the purpose of the discussion method. The discussion method is to motivate or stimulate students to think critically, express their opinions, and free their thoughts and take an actual answer or a series of answers based on careful consideration, as for some of the problems encountered in science learning for class IV students at MIS.Al-Khoiriyah Palembang (Kelirik, 2018). The value of science learning is still low, learning is more packed with teachers, students are less active in the learning process, the use of methods and visual aids is less effective. In the previous research by (Malik et al., 2019) stated that the discussion method could improve science learning outcomes for students. Researchers used the discussion method to improve science learning outcomes in class IV MIS.Al-Khoiriyah Palembang.

## Application of the Discussion Method to Improve Science Learning Outcomes in Grade IV Students of MIS Al-Khoiriyah Palembang

The group discussion method makes it possible to improve student learning outcomes, therefore researchers consider it essential to do classroom action research with discussion methods that can improve student learning outcomes and self-confidence and creativity in discussing problems together (Ulfah & Ulfah, 2012). The use of the discussion method can also improve student learning outcomes in elementary schools. The purpose of this study was to describe the increase in the teacher's ability to plan lessons using the group discussion method and to describe the increase in student learning outcomes in class IV Science learning at MIS Al-Khoiriyah Palembang.

## **Research Methods**

The research method used is classroom action research with the aim of improving learning in its own class, including planning, implementation, observation or observation and reflection. Data analysis techniques, analyzing teacher activities using observations made by observing teachers with qualitative analysis and analyzing learning outcomes in students with using tests conducted by the teacher as executors of the action by using quantitative analysis. The research was conducted at MIS. Al-Khoiriyah Palembang. The research subjects were fourth grade students of MIS.Al-Khoiriyah Palembang for the 2022/2023 academic year. Class IV students totaled 14 people consisting of 10 male students and 4 female students. The research object uses the discussion method in science learning with material on plant structures and their functions. This research begins with the pre-implementation cycle on November 1, 2022, cycle 1 implementation 7 November 2022 and cycle 2 will be held on November 16, 2022.

The following is a formula for knowing the percentage of classical completeness. Final Score =  $(Total score obtained by students / Maximum total score) \times 100$ 

## **Results And Discussion**

#### 1. Pracyclus

The research began with a pre-cycle which was carried out on November 1, 2022, with an allocation of 2 x 35 minutes, using the lecture method. After looking at the results of the students' completeness, it turns out that those who got the KKM standard score or above the KKM were 6 students (43%), students who got scores below the KKM standard, namely 70, there were 8 students (57%) out of a total of 14 students. The results of these students can be seen from the evaluation of the test in the form of an essay of 5 questions, the learning completeness score of class IV MIS.Al-Khoiriyah Palembang students in the pre-cycle did not meet the completeness standard (KKM) which had not reached 70%.





Student learning outcomes in class IV Science class MIS.Al-Khoiriyah Palembang. Score  $\leq 60$  there are 8 students (57%), grades 61-70 there are 2 students (14.28%), grades 71-80, there are 2 students (14.28%), grades 81-90 there are 2 students (14.28%). Based on the proportion of learning, it can be interpreted that learning

## Application of the Discussion Method to Improve Science Learning Outcomes in Grade IV Students of MIS AI-Khoiriyah Palembang

outcomes have not been successful because they have not reached KKM 70 and learning outcomes are still low, so it is necessary to improve learning in the next learning cycle.

#### 2. Description of Cycle 1 Learning Recovery Results

The research in cycle 1 was carried out on November 7, 2022, 07.00 – 08.30 WIB at MIS. Al-Khoiriyah Palembang, the lesson taught is science subjects with material on plant structures and their functions on dates, the method used is the discussion method. The learning process was followed by 14 grade IV students of MIS. Al-Khoiriyah Palembang, consisting of 10 boys and 4 girls. The activities carried out in cycle 1 learning improvement planning are (1) The teacher prepares the Lesson Improvement Plan (RPP), (2) the teacher prepares learning media such as pictures of various leaves, (3) the teacher provides information about learning using the discussion method, (4) the teacher prepares evaluation questions as a result of individual student assessments (5) the teacher prepares APKG 1 and APKG 2 to be filled in by observers or assessors (supervisor 2).

At the implementation stage of the improvement cycle 1 helping colleagues in charge of documenting or recording the cycle 1 improvement simulation process from the beginning of learning to the end of learning besides that the researcher is assessed by the observer as an assessor. From the results of observations by the assessor (supervisor 2) of the teacher through observation, during the core activities taking place in cycle 1, the teacher has motivated students, the teacher has used language that is easily understood by students, the teacher uses the discussion method in learning, the teacher gives reinforcement of conclusions of the material that has been studied, and the teacher carries out an evaluation in the form of a test.



Figure 2. Percentage of Learning Outcomes in Cycle 1

From the evaluation that was tested on students, the learning outcomes of class IV MIS students were obtained. Al-Khoiriyah Palembang, in cycle 1 increased by 64.27% with a KKM of 70. The range of scores  $\leq$ 50 was 1 student (7.14%), grades 51-60 there are 2 students (14.28%), grades 61-70 there are 2 students (14.28%), grades 71-80 there are 5 students (35.71%), grades 81-90 there are 2 students (14.28%), grades 91-100 there are 2 students (14.28%). Based on the proportion of student learning outcomes that have not been successful because they have not fulfilled KKM 70, the implementation of learning needs to be continued in the next cycle, namely cycle 2

#### 3. Description of Cycle 2 Learning Recovery Research Results

In cycle 2 the researchers held discussions with observers or supervisors regarding the learning simulation cycle 1, the researchers continued to use the discussion method, the implementation of cycle 2 researchers was carried out on November 16, 2022 at 08.30-09.30 WIB at MIS Al-Khoiriyah Palembang, in implementing cycle 2 it aims improve learning cycle 1 science lessons with material on plant structure and function on flowers. In the initial activities the researcher designed a learning implementation plan using the discussion method, namely the teacher prepared a Learning Improvement Plan (RPP), observation sheets, learning outcomes evaluation sheets in the form of tests, tools for recording or recording on the ongoing learning

## Application of the Discussion Method to Improve Science Learning Outcomes in Grade IV Students of MIS Al-Khoiriyah Palembang

simulation in the form of cellphones, and prepared APKG 1 and APKG 2 to be filled in by the observer or assessor (supervisor 2). Activities carried out in cycle 2 learning improvement plans, (1) learning begins with prayer (2) the teacher motivates students, (3) repeats yesterday's lesson, (4) the teacher explains the purpose of the lesson to be studied, (5) the teacher divides the discussion group, (6) the presenter group presents the results of their group in front of the class, (7) other groups are given the opportunity to ask the presenter group, (8) the teacher and students conclude the results of the discussion (9) the teacher conducts an evaluation in the form of a test , (10) the teacher closes the lesson by reading a prayer.

From the results of observations by the assessor (supervisor2) of the affected teacher during the 2nd learning cycle, namely the teacher is already good at preparing the facilities, learning, the teacher has mastered the material, the teacher gives students opportunities to ask questions, students are active in participating in discussions, using language that is easy to understand, using learning media such as various flowers, as well as carrying out evaluations in the form of tests, teacher performance assessments in cycle 2 given by observers (supervisors) are very high.



Figure 3. Percentage of Learning Outcomes in Cycle 2

From the tests, the results obtained from the evaluation of students and student learning outcomes using the discussion method in cycle 2 increased, this can be seen from the learning completeness scores of class IV MIS.Al-Khoiriyah Palembang increased by 85.71%. With a score of 61-70, there were 2 students (14, 28%), score 71-80 there are 7 students (50%), grades 81-90 there are 3 students (21.43%), grades 90-100 there are 2 students (14.28%). Based on the proportion of student learning, the proportion of student learning that completes cycle 1 and achieves the Minimum Completeness Criteria (KKM), that is, at least 70% of students have completed the learning process.

Based on the results of data analysis, it can be seen that there is an increase in student learning outcomes in the natural science subject material for plant structure for fourth-grade students at SD MIS. Al-Khoiriyah. Improvement of students in learning, among others, can be seen from:

- 1. Students are more active in paying attention to the teacher's explanation.
- 2. The discussion method makes students more creative in understanding plant structure material.
- 3. Students are more active in answering teacher questions.
- 4. Students' curiosity and courage to ask questions are increasing.
- 5. Students are more active in doing assignments given by the teacher.

## **Conclusions And Recommendations**

#### A. Conclusion

Based on the results of the research, it was found that learning by applying the discussion method could improve learning outcomes in Science Class IV MIS.Al-Khoiriyah Palembang. The results of the proportion

of student learning in cycle 1 are 64.27% and in cycle 2 the value of student learning mastery increases 85.71 % and achieve the specified minimum completeness criteria (KKM) 70.

#### B. Recommendations

The results from the study are suggested for teachers tt is hoped that using the discussion method in learning can improve student achievement. For schools provision of infrastructure in the learning process in schools in order to improve student learning outcomes. For the department of education so holding training for teachers in schools in order to increase the knowledge, skills and quality of teachers in the teaching process in schools.

## References

- Brocki, J. M., & Wearden, A. J. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. Psychology & Health, 21(1), 87–108. https://doi.org/10.1080/14768320500230185
- Kelirik, N. (2018). Penerapan Metode Diskusi Kelompok Untuk Meningkatkan Hasil Belajar Ipa Di Sekolah Dasar Negeri 1 Sukadana. Jurnal IKA, 16(1), 1–11. https://doi.org/10.23887/IKA.V16I1.19821
- Latifah, L. (2013). Metode Diskusi Kelompok Berbasis Inquiriuntuk Meningkatkan Hasil Belajar Fisika Di Sma. Jurnal Ilmiah Guru Caraka Olah Pikir Edukatif, 0(1). https://doi.org/10.21831/JIG
- Malik, J., Kudus, S. K., & Artikel, I. (2019). Penerapan Metode Diskusi Kelompok Untuk Meningkatkan Hasil Belajar Ipa Dan Aktivitas Siswa Kelas Iv Sd I Sidorekso Pada Materi Menggolongkan Hewan Berdasarkan Jenis Makanannya. Refleksi Edukatika: Jurnal Ilmiah Kependidikan, 9(2). https://doi.org/10.24176/RE.V9I2.3054
- Murwanti, K., Uliyanti, E., & Sabri, T. (2014). Penggunaan Metode Diskusi Kelompok Untuk Meningkatkan Hasil Belajar Siswa Dalam Pembelajaran Ipa Di Sd. Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK), 3(9). https://doi.org/10.26418/JPPK.V3I9.7150
- Putrayasa, I. M., Drs. Syahruddin, S.Pd, M. P. ., & I Gede Margunayasa, S.Pd., M. P. . (2014). Pengaruh Model Pembelajaran Discovery Learning Dan Minat Belajar Terhadap Hasil Belajar Ipa Siswa. MIMBAR PGSD Undiksha, 2(1). https://doi.org/10.23887/JJPGSD.V2I1.3087
- Ulfah, M., & Ulfah, M. (2012). Optimalisasi Hasil Belajar Ipa Tentang Sistem Gerak Pada Manusia Melalui Metode Diskusi Dengan Tehnik Pembelajaran Tutor Sebaya. Dinamika Pendidikan, 3(1). http://www.i-rpp.com/index.php/dinamika/article/view/5
- Yuliati, Y. (2017). Literasi Sains Dalam Pembelajaran Ipa. Jurnal Cakrawala Pendas, 3(2). https://doi.org/10.31949/JCP.V3I2.592