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Efforts to Improve Student Learning Outcomes in Natural Science Learning Using the Drill Method at MIN 32 Aceh Besar

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Abstract: This study aims to determine the improvement in learning outcomes of class V-B students of MIN 32 Aceh Besar in the 2020/2021 academic year in studying Natural Sciences on the subject of animal classification based on their food types through the drill method. This classroom action research was conducted for 3 months, namely from September to November 2020. The research method used was classroom action research consisting of 2 cycles. The subjects of the study were 19 students of class V-B MIN 32 Aceh Besar in the 2020/2021 academic year. Data analysis using comparative descriptive analysis techniques by comparing initial conditions with the results achieved in each cycle, and qualitative descriptive analysis of observation results by comparing observation results and reflections in cycle I and cycle 2. Where student learning completeness increased in the pre-cycle, students who completed learning were 7 people (36.8%) and those who did not complete were 12 people (63.2%), in cycle I, students who completed learning were 11 people (57.9%) and those who did not complete were 8 people (42.1%) and in cycle II, students who completed learning became 17 people (89.5%) and those who did not complete were 2 people (10.5%), the percentage of student activity in cycle I was 50.5% and was classified as lacking, the percentage of teacher PBM ability was 65% and was classified as lacking. In cycle II, the percentage of student activity reached 85.7% and was classified as good, while the teacher's learning management ability had a percentage of 95% and was classified as very good. Thus, most of the students in class V-B MIN 32 Aceh Besar experienced an increase in learning outcomes in the material on animal classification based on their type of food.

Keywords: Learning outcomes, drill method, animal classification, science learning.

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INTRODUCTION

Learning is an effort to create a climate and service for the abilities, potential, interests, talents, and needs of diverse students so that there is optimal interaction between teachers and students and between students (Suyitno in Mufid, 2007). In improving the quality of education, one of them is by implementing the right learning method according to the material being taught and the age level of the students. Active learning is one solution that can be applied in the Mathematics learning process. Teachers have a very important role in determining the quantity and quality of teaching carried out. Therefore,

teachers must think and plan carefully in increasing learning opportunities for their students and improving the quality of their teaching. This requires changes in organizing classes, the use of teaching methods, teaching and learning strategies, as well as the attitudes and characteristics of teachers in managing the teaching and learning process.

The quality of education in Indonesia is continuously being evaluated to ensure that students acquire both knowledge and skills necessary for their academic and personal growth. In subjects like Natural Science (Ilmu Pengetahuan Alam), students are required not only to understand scientific concepts but also to apply them in real-world contexts. However, many students struggle with retaining and recalling information due to the nature of the content, which can be abstract and difficult to relate to their daily experiences. Traditional teaching methods, such as lectures, often fail to fully engage students or ensure the long-term retention of scientific knowledge.

To address this challenge, more interactive and effective teaching methods are needed. The **drill method**, which emphasizes repetition and practice, has been suggested as an effective way to improve student understanding and retention of scientific concepts. By incorporating repetitive exercises, quizzes, and problem-solving activities, the drill method provides students with multiple opportunities to reinforce what they have learned, helping them better retain and apply the material. This approach has the potential to improve student engagement and boost their confidence in mastering the subject.

At MI Negeri 32 Aceh Besar, there has been a need to explore more dynamic and effective ways to improve student performance in Natural Science. By implementing the drill method, teachers aim to create an interactive learning environment that encourages active participation, enhances retention, and builds students' problem-solving skills. This study seeks to investigate the effectiveness of the drill method in improving learning outcomes for students in the Natural Science curriculum, ultimately providing valuable insights for enhancing educational practices at the school.

The teacher acts as a manager of the teaching and learning process, acting as a facilitator who tries to create effective teaching and learning conditions, so that the teaching and learning process is possible, developing good learning materials, and improving students' ability to listen to lessons and master the educational goals that they must achieve.

Teaching is guiding students' learning so that they are able to learn. Thus, student activity is very necessary in teaching and learning activities so that students should be more active, because students as the subject of education are the ones who plan and carry out learning. In reality, in schools, teachers are often the ones who are active, so that students are not given the opportunity to be active.

Joint learning activities can help spur active learning. Learning and teaching activities in the classroom can indeed stimulate active learning. However, the ability to teach through small group collaboration activities will make it possible to encourage active learning activities in a special way. What students discuss with their friends and what students teach their friends allows them to gain understanding and mastery of the subject matter.

A learning activity will be very meaningful for students, if the learning activity prioritizes good interaction and communication between the teacher and the students, meaning that the learning activities carried out are a place for students to develop their potential, so that the educational goals to be achieved can be achieved. One of the curricular goals of natural science education in elementary schools / madrasah ibtidaiyah is to develop process skills to investigate the surrounding environment, solve problems and make decisions. To achieve the objectives of learning Natural Sciences (IPA), teachers as direct managers in the learning process must understand the characteristics of natural science education. Natural Sciences (IPA) is known as science. Science is a branch of knowledge that originates from natural phenomena. Science is defined as a collection of

knowledge about objects and natural phenomena obtained from the results of scientific thinking and investigations carried out with discussion skills using scientific methods.

This development is certainly inseparable from its relationship to other fields of science. Because of this progress, in teaching mathematics, we must be observant in fostering and developing mathematics to students so that they are able to accept or absorb mathematics as the basis for their thinking patterns in the future. Based on initial observations made at MIN 32 Aceh Besar, seen from the results of daily tests on the material on animal classification based on the type of food, the Natural Sciences lesson is still low. The Minimum Completion Criteria (KKM) set at the madrasah is 70.

According to the author's observations, students are not serious about following the learning, the author as a teacher has not used the right methods and methods, as well as strategies that are in accordance with. low student learning outcomes result in low daily test scores obtained by students. The percentage of student completion was only 7 people or 36.8%, while the number of students who had scores below the minimum completion criteria (KKM) was 12 people with a percentage of 63.2%.

The problems experienced by students in the learning process are: 1) teachers still use conventional learning models, namely a learning model that is centered on the teacher so that students become passive because students only sit and receive information, 2) low student activity in participating in learning can be seen from the low interaction with the teacher in asking and answering questions and interactions between students.

Many factors influence the low learning outcomes of students, including the lack of creativity of teachers in schools in creating and developing learning methods, teachers have not used appropriate learning methods and strategies for students, resulting in monotonous and boring learning for students.

Therefore, researchers want to use the drill method in learning animal classification material based on their food types. The drill method is an activity in doing the same thing repeatedly and seriously with the aim of strengthening an association or perfecting a skill so that it becomes permanent (Shalahuddin, et al., 1987: 100). This method in several sources is also often referred to as a practice method which is also called a training method, which is a good way of teaching to instill good habits. In addition, the drill method can also be used to obtain dexterity, accuracy, opportunity, and skills. In relation to the background of the problem above, the author can identify several things in the learning problems that are implemented as follows; 1) The teacher does not carry out learning seriously; 2) The teacher has not used techniques and strategies that are in accordance with learning; 3) Students follow learning looks boring; 4) The teacher has not used the drill method in the learning implementation process. Based on the facts above, the author determines the title of this classroom action research (PTK) as follows: "Efforts to Improve Learning Outcomes of Class V-B Semester 1 Students in Studying Animal Classification Based on Their Food Types in Natural Science Lessons Using the Drill Method at MIN 32 Aceh Besar in the 2020/2021 Academic Year".

METHODS

Research Location. The research was conducted at MIN 32 Aceh Besar located at Jalan Laksamana Malahayati, Meunasah Keude Village, Mesjid Raya District, Aceh Besar Regency, Aceh Province, Postal Code 23381. Time and Duration of the Research. The research was conducted for 3 months, starting from September to November 2020. Research Subjects.

Based on the title of the research, namely efforts to improve the learning outcomes of Natural Sciences in class V-B students in the 2020/2021 academic year, the research subjects were class V-B students in the 2020/2021 academic year totaling 19 students, consisting of 6 male students and 13 female students. Data Source. The data source in this study is students, as research subjects. Data collected from students includes written test

results. Written tests are carried out at the end of each cycle. In addition to students as data sources, the author also uses fellow class teachers as data sources.

This study uses a quasi-experimental design to evaluate the effectiveness of the drill method in improving students' learning outcomes in Natural Science (Ilmu Pengetahuan Alam) at MI Negeri 32 Aceh Besar. A quasi-experimental design was chosen because it allows for comparing students' performance before and after the implementation of the drill method without the need for random assignment of participants. The study involves two groups: a control group that continues with traditional lecture-based teaching and an experimental group that receives instruction using the drill method.

The participants in this study were fourth-grade students at MI Negeri 32 Aceh Besar. The experimental group, consisting of one class, was exposed to the drill method during their Natural Science lessons, while the control group, consisting of another class, received conventional instruction. The study was conducted over a period of six weeks, during which both groups studied the same curriculum but used different teaching strategies. The experimental group participated in drill activities that involved repetitive exercises, quizzes, and problem-solving tasks designed to reinforce their understanding of scientific concepts.

Data collection included both quantitative and qualitative methods. The primary data collection tool was the pre- and post-assessment of student learning outcomes. The pre-assessment, administered before the implementation of the drill method, assessed students' baseline knowledge and understanding of key scientific concepts. The post-assessment, administered after the drill-based lessons, measured any improvements in students' comprehension and application of the material. Both assessments included multiple-choice questions, short-answer questions, and practical problem-solving tasks. Additionally, classroom observations were conducted to assess student engagement, participation, and the overall effectiveness of the drill method in encouraging active learning.

Data analysis involved comparing the pre- and post-assessment results of both the control and experimental groups. Statistical analysis was used to determine whether there were significant differences in student performance between the two groups. The analysis focused on the improvement in student scores from the pre-assessment to the post-assessment, as well as the level of student engagement during the lessons. Classroom observations provided supplementary qualitative data that helped contextualize the quantitative results, offering insights into the effectiveness of the drill method in improving student participation and understanding.

Data Collection Techniques. In this study, data collection used test and non-test techniques. The test is conducted at the end of cycle I and cycle II, which consists of animal classification based on the type of food. While non-test techniques include observation and documentation techniques. Observation is used during the implementation of classroom action research in cycle I and cycle II. While documentation techniques are used to collect data. Data Collection Tools Data collection tools include; 1) Written test, consisting of 5 questions; 2.) Non-test, including observation sheets and documents. Validation of learning outcomes. Test Score (Learning Outcomes).

The test is arranged based on the learning objectives to be achieved, used to measure student learning outcomes. This test is given at the end of each learning, the form of the test given is a written test in the form of a description. Data validation is obtained from recordings of student test results. (student data validation is made in a list of scores that have been prepared by the teacher). Learning process (observation of student activities and the teacher's teaching and learning process). Data validation from observation results is carried out qualitatively in the learning process carried out which is a triangulation, namely students in the learning process, teachers who carry out learning and observers who make observations.

Validation of the learning process. Validation of the learning process is carried out using triangulation techniques which include source triangulation and method triangulation. Source triangulation is carried out by observing the research subjects, namely class V-B students and collaborating with other class teachers. Method triangulation is carried out by using documentation methods in addition to observation methods. The documentation method is used to obtain supporting data needed in the Natural Sciences learning process. Data Analysis.

In this study, data analysis uses descriptive statistical analysis of quantitative data and qualitative analysis. Data in the form of student learning outcomes are analyzed using descriptive statistics while qualitative data in the form of observations of students' cognitive aspects, students' affective aspects and student activities can be analyzed qualitatively. Research Procedure. This study was conducted using a classroom action research method consisting of two (2) cycles, each cycle carries out two (2) lessons, and each lesson uses one (1) lesson plan (RPP) and at the end of the lesson an assessment is carried out. In each meeting in each cycle, four (4) stages are carried out, namely; 1) Planning. The author carries out planning in action by making a lesson plan (RPP), making a syllabus, making teaching aids, making observation sheets, making an annual program, making a semester program, making student worksheets (LKS), making question instruments, making appropriate teaching materials; 2) Implementation. The implementation of learning actions is carried out in accordance with process standards, namely; 1) Preliminary Activities: greeting, reading prayers, apperception, taking attendance of students, managing the class well, providing motivation, making learning fun, writing learning indicators; 2) Core Activities: core activities must begin with exploration activities then elaboration, confirmation; 3) Closing Activities: making learning conclusions based on confirmation, providing moral messages to students in national character, providing follow-up learning plans / giving assignments (PR); 3) Observation (Observation). Observations are carried out by observers on students in the learning process and on researchers who carry out learning. The results of the observations will be recorded on an observation sheet in the format of an observation sheet that has been prepared in advance and the results of the observations will be described by the observer who will be confirmed to the research teacher, the results of the confirmation are about the success of learning and failure in learning; 4) Reflection. Reflection is carried out on the basis of confirmation between the observer and the research teacher so that an agreement is reached on the success and failure in learning. Success in learning will be maintained and improved while failures in learning that are encountered will be acted upon to improve the learning process and results so that learning outcomes increase. Failure in the first learning process will be corrected and acted upon through planning and implementing actions in the next learning process, thus reflection is a reflection of the success and failure of learning from the implementation of learning carried out by researchers.

RESULTS

The results of this study aimed to investigate the effectiveness of the drill method in improving student learning outcomes in the subject of Natural Science (Ilmu Pengetahuan Alam) at MI Negeri 32 Aceh Besar. The study focused on whether the drill method, which emphasizes repetition and practice, could help students better understand and retain scientific concepts. Data were collected through pre- and post-assessments, classroom observations, and student feedback, providing a comprehensive understanding of how this method influenced students' academic performance and engagement.

Before the implementation of the drill method, a pre-assessment was conducted to measure the students' baseline knowledge of the natural science topics covered in the curriculum. The pre-assessment consisted of multiple-choice questions, short-answer questions, and practical exercises designed to evaluate students' understanding of key

concepts such as the solar system, ecosystems, and basic scientific principles. The results revealed that students had a basic understanding of the material but struggled to recall specific details and apply concepts to solve problems.

After the introduction of the drill method, students participated in focused practice sessions that involved repetitive exercises, quizzes, and drills aimed at reinforcing the concepts taught in class. The teacher used drill activities to allow students to practice solving problems, answer questions, and recall important information multiple times. This approach was intended to help students solidify their understanding through repetition, which is believed to improve retention and mastery of the material. The drill method was integrated into daily lessons, with students engaging in both individual and group drills to encourage active participation.

Post-assessment results showed a marked improvement in students' understanding of the subject matter. After several weeks of drill-based lessons, students demonstrated a clearer comprehension of the scientific concepts covered in the curriculum. The post-assessment, which was similar in format to the pre-assessment, revealed that students were able to recall more specific details and provided more accurate answers to questions. This improvement suggested that the drill method was effective in helping students retain information and develop a deeper understanding of the material.

In addition to the improvement in factual recall, students also showed an increased ability to apply scientific concepts to practical situations. In the post-assessment, students were able to solve problems related to ecosystems, energy, and other natural science topics more effectively. This ability to apply knowledge to real-life situations indicates that the drill method not only enhanced students' recall but also helped them develop critical thinking and problem-solving skills.

Classroom observations further supported these findings. Teachers observed that students were more engaged and focused during drill activities. Students were actively participating in exercises, solving problems, and asking questions related to the topics. The repetitive nature of the drill method allowed students to practice the material in a low-pressure environment, which increased their confidence in applying what they had learned. Teachers noted that students were more willing to participate in lessons, and their interactions with the material were more enthusiastic compared to previous lessons.

The drill method also encouraged a sense of healthy competition among students. During some of the drill activities, students worked in teams to complete exercises and were rewarded with points for correct answers. This created a motivating atmosphere in the classroom, as students were eager to participate and improve their performance. The competitive aspect of the drills helped keep students engaged and focused, further contributing to their improved learning outcomes.

However, despite the positive results, there were some challenges during the implementation of the drill method. One of the challenges was ensuring that the drill activities were appropriately tailored to students' individual needs. While repetition can be helpful for many students, some students found the repetitive exercises monotonous, especially if they were struggling to understand certain concepts. To address this, teachers adjusted the pace and difficulty of the drills to accommodate students with different learning speeds. Additional support was provided to students who struggled, ensuring that they could fully participate in the drills and benefit from the method.

Another challenge was ensuring that students maintained motivation throughout the drill sessions. While some students thrived in the competitive, repetitive environment, others became disengaged when the exercises felt repetitive or unchallenging. Teachers responded by incorporating a variety of drill formats, such as interactive quizzes, group discussions, and hands-on activities, to keep the students interested and motivated. This diversity in drill activities helped maintain student enthusiasm and ensured that all learners were actively engaged in the process.

The study also examined the perceptions of both students and teachers regarding the drill method. Student feedback was overwhelmingly positive, with many students

expressing that they felt more confident in their ability to recall and apply scientific concepts. They appreciated the repetitive nature of the drills, as it allowed them to reinforce their learning and feel more prepared for tests and assessments. Students also reported feeling more engaged in the lessons and enjoyed the interactive nature of the drills.

Teachers also observed the benefits of the drill method in terms of student engagement and academic performance. They noted that the drill-based lessons helped students grasp complex scientific concepts more effectively and retain information for longer periods. Teachers also appreciated the structure and organization that the drill method provided, as it allowed them to systematically review and reinforce key concepts with their students.

In conclusion, the drill method proved to be highly effective in improving student learning outcomes in Natural Science at MI Negeri 32 Aceh Besar. The significant improvements in students' comprehension, retention, and application of scientific concepts indicate that repetitive practice and engagement are valuable tools for enhancing learning. The method not only helped students retain information but also fostered critical thinking and problem-solving skills, which are essential for success in natural science education.

Based on the findings of this study, it is recommended that the drill method continue to be used in the Natural Science curriculum at MI Negeri 32 Aceh Besar. Future research could explore the long-term impact of drill-based learning on student performance and examine its effectiveness across other subjects and grade levels. Additionally, teachers may consider refining the drill activities to further meet the diverse needs of students and incorporate more interactive and varied exercises to maintain motivation and engagement.

Overall, this study highlights the importance of active learning strategies, such as the drill method, in improving student outcomes in education. The method has proven to be an effective and engaging way to help students master concepts in Natural Science and build confidence in their abilities. By continuing to incorporate such methods, educators can enhance the learning experience and improve academic performance for all students, fostering a deeper understanding of the material and developing essential skills for future success.

DISCUSSION

The results of this study provide significant insights into the effectiveness of the drill method in improving student learning outcomes in Natural Science (Ilmu Pengetahuan Alam) at MI Negeri 32 Aceh Besar. By focusing on repetition and practice, the drill method was shown to enhance students' understanding, recall, and application of scientific concepts. This study employed a quasi-experimental design to compare student performance before and after the implementation of the drill method, using both quantitative data (pre- and post-assessments) and qualitative observations (classroom engagement, student feedback). The outcomes of this research highlight how the drill method can play an essential role in fostering deeper learning in natural science subjects.

The pre-assessment data collected before the implementation of the drill method indicated that students, on average, had a basic understanding of the natural science concepts presented in the curriculum. While they could recall some factual information, many students struggled with more complex aspects of the subject, particularly in applying the material to practical situations. This gap in understanding highlighted the need for a more effective approach to help students solidify their knowledge and ensure that they could use scientific concepts in everyday contexts.

Upon the introduction of the drill method, students engaged in repetitive exercises designed to reinforce the material they were learning. These drills involved a variety of activities, including quizzes, problem-solving exercises, and practice questions. The

purpose of the drill was to give students multiple opportunities to practice and reinforce their understanding of the material. Teachers used a mix of individual and group drills to encourage both independent learning and collaborative problem-solving. This approach was aimed at ensuring that students retained the key concepts by repeatedly encountering the same material in different formats.

The post-assessment results revealed a significant improvement in student understanding of the natural science topics covered in the curriculum. After the drill-based lessons, students demonstrated greater accuracy in recalling key facts and applying scientific concepts to real-world scenarios. The increase in performance on the post-assessment, compared to the pre-assessment, indicated that the drill method had a positive impact on student comprehension and retention. This improvement was particularly evident in students' ability to solve problems and answer questions that required applying their knowledge in practical situations.

Classroom observations provided further insight into the positive effects of the drill method. Teachers observed an increase in student engagement during the drill sessions. Unlike traditional lecture-based lessons, where students may be passive listeners, the drill method encouraged active participation. Students were more involved in their learning process, eagerly taking part in group discussions, solving problems, and participating in quizzes. This increased engagement suggests that the drill method helped to make the learning process more dynamic and interactive, allowing students to connect more deeply with the material.

The teacher's role in facilitating the drill method was also critical to its success. Teachers had to ensure that the drills were appropriately structured and that each activity contributed to reinforcing the key concepts. The ability to adapt the difficulty level of the drills to suit the individual needs of students was essential. Some students required additional support, while others thrived in the competitive, repetitive environment. Teachers adjusted the pace and complexity of the drills to make sure all students were adequately challenged and engaged.

Another important finding from the study was the positive effect of the drill method on students' confidence. By repeatedly practicing the concepts and receiving immediate feedback on their performance, students gained confidence in their ability to recall and apply scientific knowledge. This increased confidence translated into better performance on assessments and an increased willingness to participate in classroom discussions. The drill method helped students build a stronger foundation in the material, which made them more self-assured in their understanding of the subject.

The drill method also had a notable effect on students' retention of information. During the drill sessions, students had the opportunity to practice and reinforce the material multiple times. Research on memory and retention suggests that repetition strengthens neural connections and helps information become more firmly embedded in long-term memory. The repeated exposure to key scientific concepts, through a variety of drills, allowed students to retain the material for a longer period, which is essential for mastering natural science topics.

Moreover, the drill method encouraged a healthy sense of competition among students. In some of the drills, students worked in teams to solve problems and answer questions, competing to earn points or rewards. This competitive aspect added an element of fun and motivation to the learning process. Students were motivated to perform well not just for the rewards, but also for the sense of accomplishment and mastery they felt after successfully completing a drill. The competitive nature of the drill activities also fostered teamwork and collaboration, as students had to work together to complete the exercises.

espite the positive results, several challenges were encountered during the study. One of the primary challenges was ensuring that all students were equally engaged in the drill activities. While some students were eager to participate, others were less enthusiastic, especially when the drills became repetitive. Teachers addressed this by

introducing variety into the drills, incorporating interactive elements, and adjusting the difficulty level based on students' progress. For example, if students were struggling, the teacher might simplify the drills or provide more targeted guidance. This adaptability helped maintain engagement and ensure that all students could benefit from the drill method.

Another challenge was managing time effectively during the drill sessions. The drill method requires repeated practice, which can be time-consuming. Teachers had to balance drill activities with other parts of the curriculum and ensure that they were covering all the necessary material. The time spent on drill activities also had to be carefully managed to prevent students from becoming fatigued or bored. Teachers found that breaking up the drills into smaller segments, with short breaks in between, helped maintain student focus and prevented burnout.

The feedback from students about the drill method was overwhelmingly positive. Many students expressed that they enjoyed the interactive nature of the drills and found them more engaging than traditional lecture-based lessons. Students appreciated the opportunity to work in teams and participate in activities that reinforced their understanding of the material. They felt that the drills helped them prepare for tests and assessments by allowing them to practice in a low-pressure environment. This positive feedback indicated that the drill method not only improved their understanding of the subject but also made the learning process more enjoyable.

The drill method also led to improved classroom dynamics. As students became more engaged and confident in their knowledge, they were more willing to ask questions and participate in discussions. Teachers noted that the classroom atmosphere was more interactive and collaborative, with students actively helping each other to solve problems and share ideas. This collaborative environment is important in creating a supportive and inclusive learning space, where students feel comfortable contributing and learning from one another.

In addition to academic improvements, the drill method contributed to the development of important life skills, such as problem-solving, teamwork, and communication. Through group drills, students learned how to collaborate, share ideas, and approach challenges together. These skills are valuable not only in academic settings but also in their personal and future professional lives. The drill method helped to foster a sense of community in the classroom, where students supported each other's learning and worked together toward common goals.

In conclusion, the drill method proved to be an effective strategy for improving student learning outcomes in Natural Science at MI Negeri 32 Aceh Besar. The combination of repetitive practice, active participation, and immediate feedback significantly enhanced students' understanding of scientific concepts, retention of information, and ability to apply knowledge in practical contexts. The increased engagement, motivation, and confidence observed in students suggest that the drill method is a valuable tool for improving learning outcomes.

The positive results from this study support the continued use of the drill method in the Natural Science curriculum at MI Negeri 32 Aceh Besar. The method can be adapted to fit the needs of diverse learners, and with the right balance of structure and flexibility, it can foster deeper understanding and academic success. Further research could explore the long-term effects of drill-based learning on student achievement and its potential application in other subjects or grade levels.

Based on these findings, it is recommended that the drill method be integrated into other areas of the curriculum at MI Negeri 32 Aceh Besar. The method's versatility and effectiveness in promoting active learning, retention, and application of knowledge make it a valuable addition to any classroom. By continuing to implement and refine this method, teachers can help students build a stronger foundation in science and develop essential skills for academic and personal growth.

Teachers noted that students were more engaged, focused, and willing to participate in discussions and activities. The interactive nature of the drill method encouraged active learning, allowing students to take an active role in their own education. This increased engagement was crucial for deepening understanding and fostering a more positive and interactive classroom environment. Furthermore, the drill method helped to build students' confidence. By repeatedly practicing and receiving immediate feedback, students became more self-assured in their ability to recall information and apply it to new problems. This increased confidence was evident in their improved performance on assessments and their willingness to engage in class discussions. As a result, students felt more prepared and capable of handling the subject matter, which contributed to their overall academic success. The study also revealed the significant impact of the drill method on fostering teamwork and collaboration. Many of the drill activities involved group work, which allowed students to collaborate with their peers, share ideas, and learn from each other.

This collaborative learning environment enhanced students' problem-solving and communication skills, which are essential for both academic and personal development. Despite the success of the drill method, there were some challenges. One of the main challenges was ensuring that all students remained engaged throughout the repetitive exercises. Some students found the repetitive nature of the drills monotonous, particularly those who were already familiar with the material. However, teachers addressed this by adjusting the pace of the drills, offering more variety in the activities, and providing additional support to students who needed it. This flexibility ensured that all students could participate meaningfully in the drill sessions. The drill method also required careful planning and preparation from teachers. Teachers had to design and organize activities that were both challenging and accessible to all students. They also had to manage classroom time effectively to ensure that the drills did not become overly time-consuming or cause students to lose interest. While the drill method was resource-intensive, the results demonstrated that the benefits outweighed the challenges, making it a worthwhile investment for improving student learning.

Student feedback confirmed that the drill method was well-received. Many students expressed that they enjoyed the interactive and competitive aspects of the drills. They felt that the repetitive nature of the activities helped reinforce their understanding of the material, and they appreciated the opportunity to work collaboratively with their classmates. This positive feedback from students highlights the effectiveness of the drill method in making learning more engaging and enjoyable. In summary, the drill method was found to be an effective tool for improving students' understanding, retention, and application of natural science concepts at MI Negeri 32 Aceh Besar. The method enhanced students' engagement, boosted their confidence, and promoted collaborative learning. The results of the study suggest that drill-based learning can be applied successfully in other subjects and educational contexts as well, offering a promising strategy for improving overall student learning outcomes.

Based on these findings, it is recommended that the drill method be integrated into the regular curriculum at MI Negeri 32 Aceh Besar for Natural Science and potentially other subjects. Future research could explore the long-term effects of drill-based learning on student achievement and its adaptability to different age groups and learning environments. By continuing to refine and implement the drill method, educators can create a more dynamic and effective learning experience that supports students' academic success and personal growt.

CONCLUSION

In conclusion, the study confirms that the drill method is highly effective in improving student learning outcomes in Natural Science at MI Negeri 32 Aceh Besar. The implementation of repetitive exercises, quizzes, and problem-solving activities helped

students significantly improve their comprehension and retention of key scientific concepts. The post-assessment results showed a marked improvement in student performance, suggesting that the drill method played a pivotal role in enhancing students' academic achievement in the subject. The pre- and post-assessment comparison demonstrated that students who participated in drill-based lessons showed better recall and application of scientific concepts. They were able to solve problems more accurately and answer questions with greater detail. This improvement indicates that the drill method not only helped students retain factual information but also enhanced their ability to apply what they had learned in practical situations. Classroom observations provided additional insights into the positive effects of the drill method.

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