



Implementation of the Demonstration Method in Science Learning at SDN Srikaton

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Abstract

The effectiveness or failure of the findings is dictated by the learning approaches that are used. The demonstration approach is an effective strategy that students often adopt. The purpose of this study is to document and evaluate how SDN 02 Srikaton's sixth grade science learning use the demonstrative technique. Findings are based on a descriptive qualitative research strategy. Conversations, observations, and records are the mainstays of the data gathering process. This research shows that SDN 02 Srikaton has not followed current theory when implementing the demonstration method. At step three according to Heriyanto 2012 theory, the teacher should carry out the demonstration if the teaching material is new and never used. Just as before, the instructor may choose a pupil to show off to his peers. This first stage, however, is carried out by the instructor. During this stage, the teacher greets hello, inquires about students' news, verifies attendance, and allows pupils to review what they have learned before. Heriyanto (2012) posits that, before executing the demonstration process, the fourth stage is to establish an environment that is favorable to learning. Here again, the actions taken by the educator in using the demonstrative approach do not conform to the idea put out by Hariyanto (2012). Because the first step in making a classroom a good place to learn is to make sure everyone is comfortable there. Challenges in executing the demonstration approach include insufficient time and infrastructure.

Keywords: Demonstration Method, Science Learning

Abstrak

Efektivitas atau kegagalan temuan ditentukan oleh pendekatan pembelajaran yang digunakan. Pendekatan demonstrasi merupakan strategi efektif yang sering dilakukan siswa. Tujuan dari penelitian ini adalah untuk mendokumentasikan dan mengevaluasi bagaimana pembelajaran IPA kelas VI SDN 02 Srikaton menggunakan teknik demonstratif. Temuan didasarkan pada strategi penelitian kualitatif deskriptif. Percakapan, observasi, dan catatan merupakan andalan dalam proses pengumpulan data. Penelitian ini menunjukkan bahwa SDN 02 Srikaton belum mengikuti teori yang ada saat menerapkan metode demonstrasi. Pada langkah ketiga menurut teori Heriyanto 2012, guru hendaknya melakukan demonstrasi jika bahan ajar masih baru dan belum pernah digunakan. Sama seperti sebelumnya, instruktur dapat memilih seorang murid untuk dipamerkan kepada teman-temannya. Namun tahap pertama ini dilakukan oleh instruktur. Selama tahap ini, guru menyapa, menanyakan kabar siswa, memverifikasi kehadiran, dan mengizinkan siswa meninjau kembali apa yang telah mereka pelajari sebelumnya. Heriyanto (2012) mengemukakan bahwa sebelum melaksanakan proses demonstrasi, tahap keempat adalah menciptakan lingkungan yang mendukung pembelajaran. Di sini sekali lagi tindakan yang dilakukan pendidik dalam menggunakan pendekatan demonstratif tidak sesuai dengan gagasan yang dikemukakan Hariyanto (2012). Karena langkah pertama dalam menjadikan ruang kelas sebagai tempat belajar yang baik adalah memastikan semua orang merasa nyaman di sana. Tantangan dalam melaksanakan pendekatan demonstrasi mencakup kurangnya waktu dan infrastruktur.

Kata kunci: Metode Demonstrasi, Pembelajaran IPA

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INTRODUCTION

Education is a long-term investment that everyone must have (Suprihatin 2015). When schools perform their duties well, they produce good citizens for a peaceful society who can interact with others. Every civilization, from the most primitive to the most technologically advanced, acknowledges that educators play a crucial role in shaping the future of their communities. A highly educated society is a contributing society, making it essential for schools to produce competent graduates with marketable skills. Schools are part of the educational effort as they facilitate learning and the development of relationships between teachers and their students.

Learning is essentially a two-way process where educators and learners work together, both explicitly in face-to-face learning and implicitly through learning media (Munir and Mahmudi 2018:148). Learning, according to different schools of thought, is the most crucial factor in students' academic achievement as it teaches them to apply educational theories and concepts (Hendar 2019).

If there is alignment between the teaching and learning processes, learning will be effective. There cannot be a one-way flow of information in the classroom; it must be multi-directional so that students can utilize various resources (Sagala 2013).

Experts share their thoughts on learning due to its importance. Learning is an interaction process between stimuli, which can be thoughts, emotions, measurements, or movements, and reactions, which can also be thoughts, feelings, or movements, as stated by Thorndike as cited by Hamzah in his book (2016:11). Face-to-face meetings are not necessary for learning; in fact, learning can occur anywhere, and the best way to learn is by doing. Educators need to use effective learning strategies if they want their classrooms to function smoothly. According to Gagne, learning is a comprehensive process that results from behavioral maturation (Tarihoran et al. 2021). Learning is a deliberate effort by someone to change attitudes and characteristics through practice or experience, as defined by Abdillah (Palittin et al. 2019).

As a teacher, you may know that there is a specific cycle in how you teach new content to your students. Diani Ayu Pratiwi et al. (2021:64) state that learning strategies can facilitate effective teaching and learning interactions. A teacher needs effective teaching and assessment methods to create an engaging classroom environment.

Whether students learn or not depends on how confident the instructor is in the chosen teaching techniques. Students often use demonstrative techniques.

Especially in scientific subjects, the demonstrative technique is seen as a useful tool to achieve learning objectives. To help students better understand a concept or to show the entire class how to accomplish something, Aqib (2018:48) states that one way to educate is through the use of demonstrations. Instructions are given through the direct use of various items or processes.

One way to illustrate a process or the operation of an item related to the subject matter is through the demonstrative technique, as stated by Djamarah (2015:102). From the above explanation, it is clear that the author considers the demonstrative technique a means of delivering lessons through the use of teaching aids accompanied by verbal explanations. According to Moedjiono in (Ulfah 2019), the demonstration method is a great way to make students think for themselves. This happens when someone, either a teacher or a student, shows the class something or how to do something to illustrate a point.

According to Elizar (2016:45), "Using the demonstrative approach has several benefits, such as reducing the likelihood of students making mistakes (because they learn from their observations and gain firsthand experience), allowing them to concentrate on the lesson, and most importantly, being able to ask the teacher directly about anything they do not understand, and so on."

The demonstrative approach is not without its weaknesses, besides its advantages. According to Suprihatiningrum (2014), there are several weaknesses in using demonstrations

in the classroom. First, the participation of students with disabilities can be challenging because it often involves the use of hands and other body parts. Second, the cost can be high, especially if modern equipment is needed. Finally, it requires adequate supporting facilities, thorough preparation, and overall high costs.

The elementary school curriculum often includes science as a means of preparing children for future global challenges and data developments. Students are encouraged to explore themselves, their environment, and the practical applications of what they learn in science classes, which are intended to help them reach their full potential (Musyadad 2019). Another perspective argues that "Everything related to nature, whether inanimate or living, is the domain of natural science (IPA). Physiology, astronomy, chemistry, geology, meteorology, and numerous other branches of science provide explanations about nature" (Ismala Dewi 2016:176). Students must actively participate in the learning process for the system to work. Science does not arise from human reasoning but from the process of investigating and documenting the world around us through observation and experimentation.

According to BSNP: 2006, studying nature methodically is fundamental in natural science (IPA), meaning that science is a collection of knowledge and a continuous process of discovery. No discipline can function independently from society due to the interrelated and interdependent nature of all natural processes. Understanding the fundamentals of science helps clarify the differences between science and other disciplines, which in turn allows for more targeted and appropriate teaching, especially at the elementary school level.

In Pringsewu Regency, SDN 02 Srikaton is located on Srikaton-Adiluwih Street in Srikaton Village, Adiluwih Subdistrict. SDN 02 Srikaton covers an area of 4,700 square meters. The staff at SDN 02 Srikaton consists of eleven educators. Starting from undergraduate degrees, all instructors act as classroom teachers and provide material according to established educational principles. The total number of students enrolled in the 2023/2024 academic year at SDN 02 Srikaton is 98, consisting of 42 boys and 56 girls.

"In grade VI at SDN 02 Srikaton, if science learning focuses only on lecture techniques and assignments, students will quickly get bored and lose interest in studying science," concluded the interview with the class guardian. Therefore, the author is interested in conducting this research, which aims to detail how sixth-grade students at SDN 02 Srikaton use the demonstrative technique in science learning.

RESEARCH METHODS

To uncover mysteries or solve puzzles, scientists conduct research. To understand a phenomenon and seek solutions to problems, they must first obtain knowledge that consists of ideas, theories, and facts (Rita Kumala Sari Nurhadi Kusuma et al. 2023:12).

Research was conducted at SDN 02 Srikaton on Srikaton-Adiluwih Street, Srikaton Village, Adiluwih Subdistrict, Pringsewu Regency. The research was conducted from January 3 to February 4, 2024. Scientists used a qualitative approach for their research. In qualitative research, "The purpose of conducting open interviews is to gain a better understanding of people's perspectives, emotions, and actions" (Anis Fuad 2014:25). This type of study refers to the scientific foundation for interpreting real-world phenomena using various existing methods.

This research is descriptive: "descriptive is a research method that seeks to describe and interpret objects according to the reality in the field" (Muthmainnah 2020:32).

Researchers used methods such as documentation, interviews, and observation to collect data and create instruments. According to Arikunto (2010), one data collection technique is observation, which involves carefully recording any symptoms or events that occur in the research target. Scientists conducted their observations directly from January to February 2024, after which they compiled notes on their findings.

To gain a better understanding of a subject, interviewers often bring together two or more people to talk to each other and ask questions. According to Berg Esterberg (2002), researchers acted as interviewers and talked to classroom instructors and students to collect a lot of data related to the issues being investigated; the interviewers then documented their notes. Data and information collection through searching and finding evidence is known as the documentation method or procedure. The collected documents help interpret data and enhance researchers' understanding of the processes occurring at the research site (Afifuddin and Saebani, 2009: 141). Taking photos or data during observations is part of the documentation process in this research.

Researchers used three types of data analysis: data reduction, data presentation, and data verification. Sugiyono (2017:338) emphasizes the need for careful data reduction recording due to the large amount of data collected from the field. The next stage after data reduction is data presentation. Data presentation in qualitative research can take several forms, including brief explanations, infographics, correlations between categories, flowcharts, and more (Sugiyono, 2017:341). Conclusion drawing and verification involve confirming and drawing conclusions from findings, as Miles and Huberman state in Sugiyono (2017: 345). The current findings are provisional; the data will be revised after further examination if no more convincing evidence is found. Here, the researcher develops conclusions based on various field data.

At SDN 02 Srikaton, the author collected information and data that would form the basis for writing this paper. Several steps during its preparation included visiting the school to understand the potential of the research site, submitting a research permit letter from the campus to the school, and documenting, interviewing, and observing various aspects to collect data and information. Photos, related data from instructors and students, and all tools or equipment supporting this research were part of the documentation process. At the end of each phase, researchers synthesized all the collected data and information into this essay.

RESULTS AND DISCUSSION

Implementation of the Demonstration Method

"The demonstration technique means the instructor illustrates a process, event, or how a tool works to students," says Suyono. In his book on teaching and learning, Suyono echoes this idea, stating that demonstrative learning can be successful. Furthermore, you should do the following (Hariyanto, 2012): Before starting the lesson or completing the syllabus, carefully consider your SK (Standard Competence) and KD (Basic Competence) options and create learning indicators. Prepare all demonstration materials and equipment. Teachers should conduct demonstrations if the material is new and has never been used before. However, if the material is familiar or related to previous lessons and students have learned the basics, the teacher can choose a student to demonstrate to their peers. Before executing the demonstration procedure, ensure the classroom atmosphere is conducive to learning. Encourage students to actively participate by observing, asking questions, discussing with peers, drawing interim conclusions, and so on. Reflect on the lesson with your students after the lesson is over..

Based on several indicators and dimensions, the implementation of the demonstration approach at SDN 02 Srikaton involves many stages. Below is a discussion of the findings of this study:

According to Hariyanto (2012), the first step in using the e-Demonstration approach is to develop a comprehensive strategy by selecting SK and KD and establishing learning indicators in the curriculum and lesson plans.

After reviewing data collected from January 3 to February 4, 2024, researchers decided that sixth-grade science teachers should start using the demonstration approach by selecting SK and KD and creating learning indicators for the curriculum and projects.

The researchers' interview with the science teacher, Mrs. Sri Wahyuningsih, S.Pd., SD, reinforced these findings. "Steps taken by educators before actually teaching a lesson include making lesson plans (RPP), communicating the desired learning outcomes to students, and gathering presentation materials."

Instructors began using the demonstration technique according to Hariyanto's theory (2012), based on data collected from interviews and observations. Teachers should carefully plan lessons, select SK and KD, and create learning indicators in the syllabus before students start learning.

The second step in implementing the demonstration method, according to Hariyanto 2012, is to prepare the tools and materials to be demonstrated.

Both sixth-grade science teachers prepared the tools or teaching materials to be demonstrated according to the material to be delivered, based on researchers' observations from January 3 to February 4, 2024.

These findings align with what researchers learned from their interview with science teacher Mrs. Sri Wahyuningsih, S.Pd., SD. "Learning media should be prepared before demonstration-based teaching and learning activities take place. This will facilitate the teacher's ability to communicate the material and ensure that students fully understand the concepts presented."

This observation is consistent with the findings from an interview with a student named Alya Purnomo Putri. "To ensure students consistently capture information, instructors regularly use various media relevant to the issues at hand."

Another student, Nada, expressed a similar sentiment. "When teaching scientific concepts, instructors often incorporate visual and auditory aids into their lessons to help students understand the concepts."

The second step of the teacher's demonstration method implementation aligns with Hariyanto's theory (2012), based on data collected from interviews and observations. If instructors follow the second step and gather all the necessary resources for the demonstration before class begins, the demonstration can start.

Third, if the teaching materials to be demonstrated are new and have never been used before, the demonstration approach, according to Hariyanto, can be applied. Instructors should conduct the demonstration; however, if it has been done before or relates to previous lessons where students have learned the basics, they can select a student to demonstrate to their peers.

Based on researchers' observations conducted between January 3 and February 4, 2024, sixth-grade science instructors would begin class by greeting students, asking about their well-being, taking attendance, and reviewing the previous meeting's material. Then, before delving into the content, they would condition the class.

These findings align with what researchers learned from their interview with science teacher Mrs. Sri Wahyuningsih, S.Pd., SD. "After introductions, prayers, and greetings to start the activity, students should be asked about current news, attendance should be checked to determine how many are present, and the last lesson discussed should be reviewed. This is the first step in implementing the demonstrative teaching method."

These findings are consistent with what was discovered in an interview with a student named Alya Purnomo Putri. "Teachers often start class with a prayer and small talk, then check attendance and give students a chance to recall what they have learned."

Another student, Nada, mentioned something similar. "After a brief opening exercise where students greet and the instructor encourages them to pray, the class takes attendance and reviews what was discussed in the previous session."

Data from interviews and observations show that the implementation of the third stage of the demonstration method by instructors does not align with Hariyanto's hypothesis (2012). This is the initial stage of the learning process where instructors greet, check

attendance, ask about students' news, and then encourage them to review what they have learned.

Creating a supportive learning environment is the fourth stage in using the demonstrative approach (Hariyanto, 2012).

Fourth, sixth-grade science teachers discuss the material by demonstrating it with teaching aids or materials arranged according to the theme of the material, based on researchers' observations from January 3 to February 4, 2024.

This is consistent with what researchers found when interviewing science teacher Mrs. Sri Wahyuningsih, S.Pd., SD. "When it's time to discuss content, most professors choose the lecture method by explaining before presenting the prepared material or media. Additionally, they ask the class to try to recreate the learning using the media just shown."

These findings are consistent with what was discovered in an interview with a student named Alya Purnomo Putri. "The class uses prepared media to illustrate the subject. The next step is to select a student to present the topic in front of their peers."

An interview with another student, Nada, confirmed similar results. "It is standard practice for teachers to ask students to describe what they have learned after presenting the topic. This allows the instructor to gauge whether students have understood the concept and, if not, provide a refresher."

Data from interviews and observations indicate that the fourth stage of the demonstration method implementation by instructors does not align with Hariyanto's theory (2012). Instructors must create a suitable classroom environment before carrying out the demonstration process. Nonetheless, educators setting the right mindset in the classroom is the first step to successful learning.

The fifth stage of Hariyanto's demonstration approach involves students actively participating by observing the presentation, asking questions, collaborating with peers, drawing brief conclusions, and more.

From January 3 to February 4, 2024, researchers observed sixth-grade science classes. During the lessons, the teacher used the demonstration method by actively watching the demonstration, encouraging student participation through Q&A and class discussions, drawing brief conclusions, and so on.

This is consistent with what researchers found when interviewing science teacher Mrs. Sri Wahyuningsih, S.Pd., SD. "This encourages students to revisit the content discussed earlier with their peers for further discussion."

These findings align with what was discovered in an interview with a student named Alya Purnomo Putri. "Instructors often hold Q&A sessions based on previously discussed topics after completing the lesson."

A student named Nada expressed a similar sentiment. "After explaining the content, the instructor always asks questions and then encourages students to debate the information with their peers to draw conclusions."

The fifth stage of the teacher's explanation of the demonstration technique aligns with Hariyanto's hypothesis (2012), based on evidence from interviews and observations. Students are encouraged to participate actively by asking questions, discussing with peers, drawing brief conclusions, and so on while the instructor demonstrates that the fifth stage or step is observing what is being demonstrated.

Challenges Faced by Teachers in Implementing the Demonstration Method in Science Lessons

Teachers face several challenges when trying to integrate the demonstration method into science lessons, based on what researchers found in the sixth-grade classroom at SDN 02 Srikaton, making the application of this approach less than ideal.

One major challenge is the lack of facilities in schools. In the classroom environment, education is a beneficial endeavor. At the same time, learning is a teaching system that

describes a group of interdependent parts working together to complete a task. Therefore, having facilities that aid in learning is crucial for the success of any educational effort. Teachers face significant challenges when they lack the necessary facilities to implement their programs optimally.

Another significant challenge is the limited abilities of students. Every student has unique strengths. Therefore, while some students easily grasp the concepts presented by the teacher, others struggle and waste time throughout the class. Lessons typically last about an hour, leaving little time for instructors to cover all the necessary material.

These findings reinforce the results of interviews with SDN 02 Srikaton science teacher Mrs. Sri Wahyuningsih. "One reason why the demonstration teaching method is not always effective is that teachers often lack the resources they need to prepare lessons well and explain each step of the process. Another reason is that not all content can be demonstrated, so teachers often have to use images or emergency solutions."

Based on the interview findings, it is clear that the teaching materials used in the demonstration technique must be carefully selected to enhance their meaning and function in facilitating effective learning.

CONCLUSIONS AND SUGGESTION

Conclusions

Research conducted at SDN 02 Srikaton and the previous discussion on "Implementation of the Demonstration Method in Science Lessons at SDN 02 Srikaton" led the author to conclude that the demonstration method has not been applied theoretically at SDN 02 Srikaton. According to the current accepted theory, Hariyanto's theory (2012), the demonstration method at SDN 02 Srikaton does not follow the theory. For instance, according to Heriyanto's theory (2012), if the teaching material is new and has never been used before, the teacher should demonstrate it. Instructors can select students to demonstrate to their peers if it has been done before. However, this first stage is conducted by the instructor. During this stage, the teacher greets, asks about students' well-being, verifies attendance, and allows students to review what they have learned before. Heriyanto (2012) suggests that before conducting the demonstration process, the fourth stage is to create a supportive learning environment. The subsequent actions taken by educators using the demonstrative approach also contradict Hariyanto's (2012) ideas. The simple reason is that establishing a positive learning environment should be done early, before the class begins.

Sixth-grade science teachers at SDN 02 Srikaton face several challenges when trying to use the demonstration method to teach science to their students. Among them are the limitations of students' abilities and inadequate school infrastructure, making it difficult for students to receive detailed explanations. Instructors only have about an hour to cover each lesson, so students do not utilize the time maximally, and they only receive one step of content demonstration..

Suggestions

Research findings indicate that several aspects need improvement. To get the best results from using the demonstrative teaching style, thorough preparation is required. This will allow educators to choose topics that can be effectively taught using this approach. For the demonstration method to be used effectively in sixth-grade science lessons, teachers need to have a better understanding of the procedures involved in following expert theories (e.g., Heriyanto, 2012). The application of the demonstration method in sixth-grade science lessons can improve student learning outcomes, but only if teachers are skilled in selecting and creating engaging teaching media. One reason why demonstrations do not go as well as they could is the lack of resources.

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REFERENSI

- Afifuddin ., Beni AS (2009). *Metodologi Penelitian Kualitatif*. Perpustakaan Setia. Bandung.
- Arikunto, S. (2010). *Prosedur Penelitian Pendekatan Praktis*. Jakarta: 133.
- Aqib, Zainal, DKK. (2018). *Metode pembelajaran* . Yrama Widya . Bandung.
- BSNP. (2006). *Peraturan Menteri Pendidikan Nasional RI No. 22 Tahun 2006 tentang Standar Isi Satuan Pendidikan Dasar dan Menengah*. Jakarta.
- Diani, A. P, MP, MP Yosefina Uge Lawe, MP Muhammad Munir, MS Dr. Abdul Wahab, MP Gingga Prananda , MP Dr. Intan Safiah, MP Didik Efendi, dkk. (2021). *Perencanaan pembelajaran SD/MI*. Yayasan Penerbitan Muhammad Zaini. https://books.google.co.id/books?id=-%5C_A3EAAAQBAJ .
- Djamarah , S.B. (2015). *Strategi Pengajaran dan Pembelajaran* . Rinka Cipta . Jakarta.
- Elizar. (2016). *Manajemen Kelas di TK, Kementerian Pendidikan Nasional*. Jakarta.
- Esterberg, Kristin G. (2002). *Metode Kualitatif Dalam Penelitian Sosial*. Bukit McGraw. New York.
- Fuad, A. (2014). *Panduan praktis untuk penelitian kualitatif*. Rumah Sains. Yogyakarta:25.
- Hamzah, A. (2020). *Metode Penelitian Kualitatif: Rekonstruksi Pemikiran Dasar Penelitian Alam*. Literasi Nusantara. Miskin.
- Hariyanto , S.&. (2012) . *Belajar dan Belajar*. PT Remaja Rosdakarya Offset.
- Hendar . (2019). *Meningkatkan Hasil Belajar Siswa Kelas Iv Mi Tarbiyah Islamiyah Pada Pelajaran Seni, Budaya Dan Karya Dengan Menggunakan Menyanyikan Lagu Nasional Melalui Metode Vokalisasi*. *Jurnal Tahsinia* , 1(1), 63-72.
- Kumala, SR, Kusuma, N., dkk. (2023). *Metodologi Penelitian Pendidikan*. Sada Kurnia Pustaka. Serang Banten.
- Munir, M. , Ali , M. (2018) . “*Pengembangan perangkat pembelajaran geometri SMP dengan pembelajaran berbasis masalah* . *Jurnal Penelitian Pendidikan Matematika* 5 2. <https://doi.org/10.21831/jrpm.v5i2.10036> .
- Musyadad, VF (2019). *Penerapan model problem based learning dalam meningkatkan hasil belajar siswa pada pembelajaran IPA pada konsep perubahan lingkungan fisik dan pengaruhnya terhadap tanah*. *Tahsinia Jurnal* . 1(1), 1–13.
- Palittin , ID, Wolo , W., & Purwanty , R. (2019). *Hubungan Motivasi Belajar dengan Hasil Belajar Siswa*.
- Sagala, S. (2013). *Konsep dan Makna Pembelajaran*. Alfabet.
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan Kombinasi (Mixed Methods)*. Bandung. Alfabet.
- Suprihatin, S. (2015). *Upaya Guru Meningkatkan Motivasi Belajar Siswa*. Promosi (Jurnal Pendidikan).

- Suprihatiningrum . (2014). *Strategi Pembelajaran*. Yogyakarta: Ar -Ruzz Media.
- Tarihoran , D., Nau Ritonga, M., & Lubis, R. (2021). *Teori Pembelajaran Robert Mills Gagne dan Penerapannya dalam Pembelajaran Matematika*. Jurnal Mathedu (Jurnal Pendidikan Matematika), 4(3), 32–38.
- Ulfah. (2019). *Peran Konselor Dalam Mengembangkan Potensi Siswa*. Jurnal Tahsinia , 1(1), 92–100.