

SCAFFOLDING: LEARNING STRATEGIES IN ESTABLISHING STUDENT'S INDEPENDENT LEARNING SUBJECTS OF STYLE, MOTION, AND ENERGY MATERIALS IN CLASS V IN MI SABILIL MUTTAQIN KAPURAN

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Abstrak: Proses pembelajaran kelas V di MI Sabilil Muttaqin Kapuran masih berpusat pada fasilitator/guru. Peserta didik hanya diam mendengarkan apa yang disampaikan oleh guru, membaca buku materi kemudian menghafal materi-materi yang tertulis dalam buku pelajaran. Menghafalkan materi pembelajaran tanpa mengajaknya mengalami secara langsung, mempelajari bayang-bayang tanpa mengetahui wujud asli yang dipelajari hal ini sering kali membuat peserta didik merasa bosan di sekolah. Memilih strategi pembelajaran perlu dilakukan berdasarkan pada kesesuaian materi yang akan disampaikan. Hal ini dapat membantu meningkatkan keaktifan dan kreativitas belajar siswa selama proses belajar mengajar berlangsung dan mencapai tujuan yang telah dirancang. metode penelitian yang digunakan adalah metode kualitatif. Jenis penelitian yang digunakan adalah deskriptif kualitatif. Hasil dari penelitian menunjukkan bahwa: (1) Proses pembelajaran IPA kelas V di MI Sabilil Muttaqin Kapuran lebih dominan menggunakan metode ceramah, demonstrasi, dan belajar di luar kelas. (2) Proses penerapan strategi pembelajaran scaffolding ini dengan mengorganisasi isi materi, mengorganisasi cara penyampaian materi dan mengorganisasi peserta didik. (3) Bentuk kemandirian belajar siswa kelas V mata pelajaran IPA materi gaya, gerak dan energi ini adalah mereka diberikan otonomi dan tanggung jawab untuk berinisiatif dan berperan aktif dalam mengatur sendiri berbagai aspek kegiatan belajar sesuai dengan kebutuhan dan kemampuannya tanpa selalu bergantung kepada orang lain.

Kata Kunci: Strategi pembelajaran, Scaffolding, Kemandirian Belajar, IPA

Abstract: The learning process for class V at MI Sabilil Muttaqin Kapuran is still centered on the facilitator/teacher. Students silently listen to what is said by the teacher, read the material book and then memorize the material written in the textbook. Remembering learning material without inviting him to experience it directly, studying shadows without knowing the original form, often makes students feel bored at school. Choosing a learning strategy needs to be done based on the suitability of the material to be delivered. This can help increase the activeness and creativity of student learning during the teaching and learning process and achieve the goals that have been designed. The research method used is qualitative. The type of research used is descriptive qualitative. The study results show that: (1) The learning process for science class V at MI Sabilil Muttaqin Kapuran is more dominant using the lecture, demonstration, and learning methods outside the classroom. (2) The process of applying this scaffolding learning strategy by organizing the material's content, organizing the delivery of the material, and organizing the students. (3) The form of learning independence for fifth-grade students in the science subject matter of force, motion, and energy is that they are given the autonomy and responsibility to take the initiative and play an active role in various self-regulating aspects of learning activities according to their needs and abilities without always depending on others.

Keywords: Learning Strategies, Scaffolding, Independent Learning, Science

INTRODUCTION

Education has a goal so that the nation's generation has the knowledge and skills so that the nation's generation has dignity in the eyes of the world. According to Wine Sanjaya; The command is not given but is built by the students through the learning process (Wina Sanjaya, 2009). So education is the only focus of students in learning.

One of the good learning outcomes is supported by appropriate methods. Proper learning methods can increase student activity in classroom learning to stimulate students to be active

in the learning process (Nurhayati, 2016). Developing students' potential, of course, requires active learning, where learning is no longer teacher-centered but student-centered. The teacher only acts as a companion and facilitates the needs of students. Still, teachers are highly required to be as creative as possible in designing and developing the learning process so that students easily understand learning materials, think, work actively, creatively, and innovatively in developing the essential abilities that exist in each of them. Each is based on past experiences.

But, from the researchers' observations in class V at MI Sabilil Muttaqin Kapuran, the learning process was still centered on the facilitator/teacher. Students silently listen to what is conveyed by the teacher, read the material book and then memorize the material written in the textbook—learning materials without inviting them to experience it directly, studying shadows without knowing the original form being studied. This often makes students feel bored and bored at school.

In this madrasa, the lecture method is still dominant, but one of the teachers stated that if you continue to use the lecture method, it will be very inefficient if you continue to apply it. According to the text, the memorization model and answering questions according to the material book only makes students passive and turn off their creativity (Nila Candra Novita, Interview, 01 March 2021).

Choosing a learning strategy needs to be done based on the suitability of the material to be delivered. This can help increase student learning activity and creativity during the teaching and learning process and achieve the goals that have been designed (Mohamad Syarif Sumantri, 2015) as well as learning strategies that need to be applied in elementary schools. Scaffolding learning strategies need to be involved in problem-solving because when students have difficulty in solving problems, the teacher will assist students in the form of instructions, encouragement, giving examples, or steps in working on issues or other assistance, so that students can connect the aid that has been given—provided by the teacher to solve the problem.

This scaffolding learning strategy can explore students' freedom to reason about a learning problem that remains under the teacher's guidance. The hallmark of scaffolding learning lies in the learning process that aims to form student learning independence (Rusdiana Agustini, 2018). Independent learning does not mean self-study or self-study. Independent learning is a form of learning that gives autonomy and responsibility to students to take the initiative and play an active role in various self-regulating aspects of learning activities according to their needs and abilities without always depending on others.

Learning independence refers to students' ability, with or without the help of other relevant people, and the ability to determine when to need help and when not to need it from other people (Majid, 2013).

One of the subjects that all students at MI Sabilil Muttaqin must follow is science. Science lessons are given to students so that they are sensitive and care about environmental conditions in their surroundings and are expected to help provide solutions to various problems, especially regarding conditions. Natural. Natural science learning in fifth grade still tends to focus on the teacher. Students are given the material, then explained, and do the task.

RESEARCH METHODS

The type of research used is descriptive qualitative, a combination of descriptive and qualitative research, using a research approach by utilizing qualitative data and described descriptively. This research interprets and describes data related to the current situation and produces an accurate picture. This research activity includes data collection, data analysis, data interpretation, and a conclusion that refers to the data analysis (Muhammad Nazir, 1998).

RESULTS AND DISCUSSION

1. The Learning Process for Class V Science Subjects at MI Sabilil Muttaqin Kapuran

Learning method as a way to present subject matter or knowledge material to students. Who can use all reasonable procedures to deliver lessons, so no plan is the best, most appropriate, and suitable for a particular subject? The learning process for class V at MI Sabilil Muttaqin has been carried out well. The implementation of learning, especially class V at MI Sabilil Muttaqin Kapuran, has referred to the rules and regulations that have been set in every activity or learning process in an educational institution, including the learning process by referring to the curriculum and syllabus of each subject matter that the government has set. In the learning process, especially science, the teacher applies several methods such as the lecture method, demonstrations, and outdoor activities. The learning process at MI Sabilil Muttaqin is still dominantly using the lecture method. The lecture method is the initial method used in learning. The teacher uses this method because students need an explanation, there are no available learning resources, or they face many students, which is considered essential. This will help students who have less grasping power while at the same time clarifying it for other students. Another way that can be used is to describe the content of the teacher's lecture by providing illustrations or concrete examples from around the lives of students.

In this context, the teacher actively speaks, and students listen or pay attention to the teacher. The teacher's mastery of learning materials, language skills, voice intonation, use of media, and variations in teaching styles will determine the success of this method. In addition to learning in the classroom, the teacher also invites students to observe outside the school. This can help students so that they do not get bored during the

learning process. In addition, outdoor learning also adds new knowledge obtained by students. Learning outside the classroom has its charm for students because they participate in the real world of education and not just wishful thinking. In a comfortable situation, it can make it easier for students to accept any material given by the teacher.

One of the subjects that must be followed by all fifth-grade students at MI Sabilil Muttaqin Kapuran is science. Science lessons are given to students so that they are sensitive and care about the environmental conditions around them and are expected to help solve various problems, especially regarding natural conditions – science subjects. Science subjects are more directed to the daily living conditions of students or the requirements of the surrounding environment so that in conveying the material, it must emphasize realistic aspects, not abstract ones.

2. The process of applying the scaffolding learning strategy in shaping the learning independence of fifth-grade students in science subjects for force, motion, and energy at MI Sabilil Muttaqin Kapuran

To form student learning independence, selecting and organizing learning becomes an essential factor that the teacher must do before the learning process. Implementing the scaffolding learning strategy at MI Sabilil Muttaqin Kapuran has been carried out well. The thing that the teacher does before carrying out learning activities is to organize the content of the material to be delivered, arrange the method of providing the material and organize the students.

This organization is essential for teachers to pay attention to achieving learning objectives. This is the teacher's initial capital to achieve success later in the learning process. This organization is an initial description that the teacher must neatly and well organize before the learning process.

The data obtained from research results from observations and interviews about implementing this scaffolding learning strategy carried out by the teacher is the first to organize the content of the subject matter as a whole. The second is to arrange the delivery of subject matter, and the third is to organize students. These steps are carried out to achieve the planned goals. The teacher has a very organized system in implementing the scaffolding learning strategy in class V, especially science subjects. It can be seen from everything that has been prepared to start from attendance, textbooks, and material to be delivered.

In this matter of force, motion, and energy, apart from explaining using worksheets, other media are also used in the form of pictures and examples and illustrations that are realistic, simple, and close to students' lives. This can increase knowledge of the material so that students more easily understand and remember the content of the material

presented. In organizing the material's content, the teacher first analyzes the objectives and characteristics of the material.

They are organizing the process of delivering scaffolding learning that refers to the design that has been made by the teacher, namely the selection of learning media, student interaction with the media. This delivery process begins with a greeting, followed by apperception and globally conveying the learning materials' contents. The delivery method for implementing this scaffolding learning strategy also uses group discussions, questions and answers, and demonstrations. In delivering learning, students are expected to understand and determine the meaning of each material being taught. In addition, the teacher makes simplifications by limiting the use of foreign words and terms. And use language that is easily understood by students. The question-and-answer method, either between students or between students and the teacher, begins when students start to feel difficult about the task they are doing.

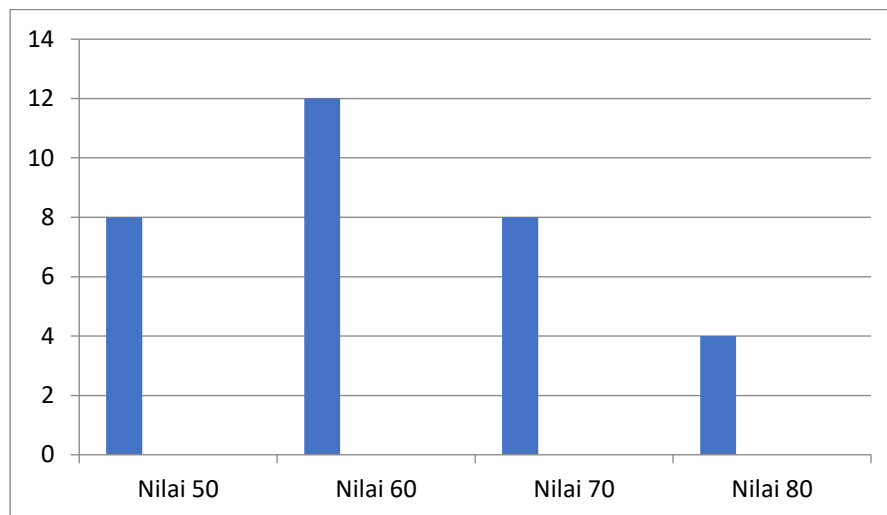
After that, the teacher organizes the students or forms a discussion group. In determining the grouping of students, it is determined by the Zone of Proximal Development (ZPD) or the level of student development based on their cognitive level by looking at the value of previous learning outcomes. Students who have a high mental level are made into one group and those who have a low cognitive level. Questions or descriptions of problems are distributed to each group to be discussed together.

In groups with low cognitive levels, the teacher always accompanies providing complete assistance, and the aid is gradually reduced. After students who have high cognitive levels are able to work on and understand the material that has been discussed with their groups, the teacher asks for help to accompany his friends who still do not understand, so that an independent learning process will begin to form, not only relying on the teacher. After being given the materials and questions, each group demonstrates their work in front of their friends. In this case, the teacher is only a facilitator or study partner. Students will be more independent in learning because their peers can also be teachers.

Applying the scaffolding learning strategy method of discussion and question and answer becomes an effective method because students are required to play an active role in learning activities. Not only listening to the material presented by the teacher but the teacher as if only as a learning partner to guide independent learning. The implementation of the scaffolding learning delivery strategy refers to the design that has been made by the teacher, namely the selection of learning media, student interaction with the media.

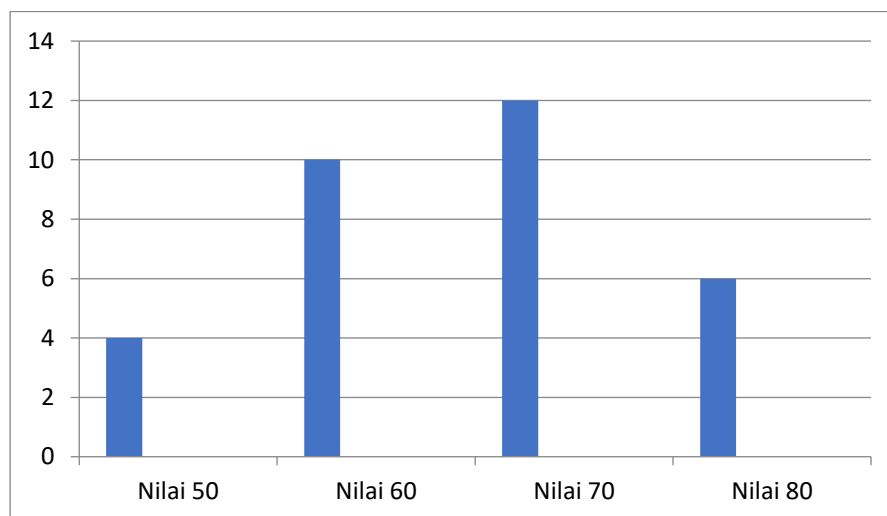
In applying this scaffolding learning strategy, the teacher explains the science material, namely force, motion, and energy. They listen to what is conveyed and defined

by the teacher. They are also given the freedom to ask questions if they do not understand. The purpose of implementing this scaffolding learning strategy is to explore students' freedom of thought to reason about a learning problem that remains under the teacher's guidance. Independent learning in education gives students autonomy and responsibility to take the initiative and play an active role in various self-regulating aspects of learning activities according to their needs and abilities without always depending on others.



Picture 1. Score first test for Science Learning for V class

From a total of 32 fifth-grade students at MI Sabilil Muttaqin Kapuran, these are some of the values in science subjects. These scores were before using the scaffolding learning strategy.



Picture 2. Score Second Test for Science Learning for V Class

After implementing the scaffolding learning strategy, of course, there will be changes in student learning outcomes. Although it has not yet fully received a significant increase in value, implementing this scaffolding learning strategy can be compared. In applying this scaffolding learning strategy, of course, its performance needs to be done repeatedly to get learning outcomes. Maximum. Scaffolding is an interaction between

educators and students who have difficulty in the learning process to improve students' understanding and skills.

Scaffolding can be defined as a great help to a child during the early stages of learning and then reducing the assistance and providing opportunities for children to do their work and take over the responsibility of the work – good and in knowledge.

One of the advantages of this scaffolding learning strategy is that it encourages students to work and learn to solve problems independently in groups, and this is very helpful for students who have low cognitive abilities to study and ask their peers to make it easier for them to understand the material presented by the teacher.

3. The form of learning independence for fifth-grade students in science subjects for force, motion, and energy at MI Sabilil Muttaqin Kapuran

This scaffolding learning strategy explores students' freedom of thought to reason about a learning problem that remains under the teacher's guidance. The purpose of this scaffolding learning strategy is to form student learning independence. Independent learning does not mean self-study or self-study. Independent learning is a form of learning that gives autonomy and responsibility to students to take the initiative and play an active role in various self-regulating aspects of learning activities according to their needs and abilities without always depending on others. Learning independence refers to the power of students, with or without the help of other relevant people, and the ability to determine when to need help and when not to need it from other people.

Meanwhile, according to Masrun, independent learning is an attitude that allows a person to act freely, do something on his own for his needs without help from others, as well as think and act creatively, and be full of initiative, able to influence the environment, have self-confidence and gain self-satisfaction. of his business (Masrun et al., 1986).

Independence in learning can be interpreted as learning activities, and the ongoing process is more driven by their own will, their own choices, and their responsibilities from the learner. Students are said to have been able to learn independently if they have been able to take the initiative, can overcome obstacles or problems, have self-confidence, and can do things without the help of others. Independent learning is an increase in knowledge, ability, or individual development where individuals choose and determine their own goals in learning and try to use methods that support their activities.

Who will realize learning independence if students actively control everything they do, evaluate and then plan something more profound in the learning they are going through. Students are also willing to be active in the learning process. From the independent learning process, it is hoped that who can change the role of the teacher or instructor to become a facilitator or designer of the learning process. As a facilitator, a

teacher or instructor helps students overcome learning difficulties or as a learning partner. The teacher or educator acts as a guide in carrying out the teaching and learning process, preparing conditions that allow students to feel comfortable and confident that the skills and achievements to be achieved will get appreciation and attention to increase their learning motivation.

The teacher's efforts in fostering student learning independence aim to master the expected competencies so that learning objectives are achieved in knowledge and skills. -days as a comparison between success and failure. With the implementation of this scaffolding learning strategy, the method of group discussion, question, and answer, demonstration, etc., can be used. This can make students become teachers for their peers.

They are giving students individual assignments, providing stimulus to want to learn, and explaining the material as clearly as possible if it can be connected to real-life so that it is easy to understand what is being informed. For students who are not able to learn, the teacher does this by providing individual guidance. In the learning process, students with low and medium abilities do not get pressure from students with high abilities, so students with low and medium abilities do not feel ashamed to ask questions. Students with low and moderate abilities are freer to ask questions and discuss with their friends or teachers and learn at a pace that suits them.

High-ability students will be more motivated to learn because they must build knowledge with their abilities. To form student learning independence by implementing this scaffolding learning strategy, there will be a match between students' skills and their way of learning.

The suitability between students' abilities and learning results in increased student activity during the learning process, affecting their motivation and learning achievement. The application of scaffolding learning strategies can train students to communicate and socialize with teachers and their peers so that the learning process will be fun.

Thus, applying this scaffolding learning strategy can eliminate boredom in students during the learning process. Besides, students master and understand the material, and students can participate actively in learning. Thus, students are expected to have good knowledge or understanding of force, motion, and energy science subjects.

CONCLUSION

Based on the focus of the research, exposure to data, and discussion, the authors conclude that: The process of learning science for class V at MI Sabilil Muttaqin Kapuran, the teacher applies several methods such as lectures, demonstrations, and outdoor activities. The process of using scaffolding learning strategies in science subjects for the subject of motion and energy is to organize the content of the material to be delivered, schedule the delivery of the material, and manage the students. The form of independent learning for fifth-grade

students in science subjects for force, motion, and energy at MI Sabilil Muttaqin Kapuran, students can master and understand the material and actively participate in the learning process without always depending on others.

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