



Analysis of Learning Difficulties in Class V Elementary School Science Material

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Abstract

The aim of this research is to identify problems in studying science material and the factors that contribute to these problems. This type of research is qualitative and uses a descriptive approach, involving the use of interviews, questionnaires and documentation. The results showed that six students experienced difficulties in learning science. Internal factors that influence science learning difficulties include poor health, physical disabilities, poor intelligence, students' low interest in learning, and lack of motivation to learn. External factors that contribute to difficulties in learning science include parents' less effective educational styles, parents' lack of attention to students' learning activities, poor relationships between parents and children, weak discipline, a home atmosphere that interferes with students' concentration while studying, and the negative influence of the media and friends who do not support a learning culture. The research results show that teachers must provide incentives that can increase students' interest in learning and must be able to find learning problems in the classroom. Parents must monitor their child's learning progress both at school and at home.

Keywords: Analysis, Science, Learning Difficulties

Introduction

Education is very important for the success and progress of countries and countries in producing a better generation. According to Muhibbinsyah (2010), "Education is the process of changing the attitudes and behavior of a person or group of people in an effort to mature humans through teaching and training efforts." However, Zahara Idris (in Khasanah, 2022) states that "Education is essentially a conscious effort to develop personality and abilities inside and outside school and lasts a lifetime". Planning in accordance with the country's national

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education goals must be made to achieve advanced, higher and developing education. Education is an important part of success in producing a better generation for the nation.

Integrated science learning is expected at the elementary school (SD) level to be packaged in Salingtemas (Science, Environment, Technology, Community). SCIENCE or natural sciences must be studied with scientific process skills rather than just memorizing concepts. Teachers often find obstacles in the science learning process. This obstacle usually occurs when students are involved in learning activities. As a result, students show poor learning achievement and changes in behavior that are inconsistent with their participation in class (Hasbullah, 2008).

According to an interview with Mrs. Devitriana Abdullah, class V teacher at SDN 01 Popayato Timur, Pohuwato Regency, the science material is too dense so students find it difficult to understand it. According to him, students should memorize more science concepts or material, because science learning is abstract while students' thoughts are concrete. Apart from that, many foreign terms are used in science material, so students have difficulty understanding them (Olubunmi & Kolawole, 2023). Apart from that, it can be seen that there are students who experience difficulties in learning science, as shown by learning outcomes that have not been maximized from the students' report cards and daily grades. Of the 20 students, 6 did not meet the minimum completion criteria (KKM). To improve science learning, the obstacles students face must be identified and researched. The aim of this research is to identify the problems faced by fifth grade students in studying science material, to identify the factors that contribute to these difficulties, and to determine efforts that can be made to overcome these difficulties.

Literature Review

Difficult learning is defined as "a situation that causes students to be unable to learn properly (Dalyono, 2010)". Factors that cause learning difficulties can be divided into two categories, namely: 1). Internal factors, or factors that originate from oneself, include physiological factors (physical in nature), such as illness or unfit; psychological factors (of a spiritual nature), such as students' level of intelligence, attitudes, talents, interests and desires; and psychological factors (of a spiritual nature), and 2). External factors, namely things that do not come from the student. These external factors include non-social factors such as family, economic conditions, learning tools, building conditions, curriculum, school time and work responsibilities, parents, and social factors such as mass media, social friends, neighborhood environment, and social activities (Dalyono, 2010: 230).

Research Method

Qualitative research is a type of research that aims to understand phenomena experienced by research subjects, such as behavior, perception, motivation for action, etc., thoroughly and descriptively using words and language in certain natural contexts and using various natural methods (Moleong, 2017). It is hoped to gain a thorough understanding of the problem being researched through the application of qualitative descriptive research methods

that look at the ongoing situation or problem. In this research, researchers carried out a factor analysis of difficulties in learning science material for class V at State Elementary School 01 East Popayato, Pohuwato Regency. The research subjects were teachers, students and parents of class V students at SDN 01 Popayato Timur, Pohuwato Regency.

According to Lofland and Lofland (in Moleong 2017: 157), "the main data sources in qualitative research are words and actions. Additional data, such as documents and so on, are other additional sources. In this section, the types of data are categorized in terms of -words and actions, written data sources, photos, and statistics. The qualitative data of this research consists of words obtained from questionnaires, interviews, and documentation consisting of student work regarding learning difficulties in first semester science material, as well as photographs which are converted into words or described. The data sources for this research are teachers and students of class V at SDN 01 Popayato Timur, Pohuwato Regency. Researchers used tools such as interviews, documentation, and filling out questionnaires to evaluate the factors of difficulty in learning class V science material.

Questionnaires, also known as questionnaires, are an indirect method of collecting data. The questionnaire consists of a number of statements or questions that need to be answered or answered (Sukmadinata, 2016). Researchers gave questionnaires to students and parents of class V students at SDN 01 Popayato Timur, Pohuwato Regency in this research. To reach a final conclusion in the form of a qualitative description, the data sets that have been collected previously will be combined and analyzed. An interview is a conversation carried out with a specific purpose carried out by two people: the interviewer who asks questions and the interviewee who provides answers (Moleong, 2017). In this research, interviews were conducted using a structured interview approach, which means that the interviewer determines the problems and questions to be asked himself. Researchers use this type of interview to seek responses to a working hypothesis. For this reason, questions are structured carefully and thoroughly. Researchers conducted written interviews with a sample of class V students at SDN 01 Popayato Timur, Pohuwato Regency.

According to Bogdan and Biklen (in Moleong, 2017), photos have become a more common tool in qualitative research. Photos include photos made by other people and photos made by the researcher himself. Using photos to complement data sources clearly has many advantages. For data analysis, photographs are usually not used exclusively. Instead, they should be used as part of other methods and approaches (Moleong, 2017). In this research, researchers used photo documentation to record parents, class teachers, and class V students at SDN 01 Popayato Timur, Pohuwato Regency. Photos were taken during the interview and filling out the questionnaire.

First, data analysis refers to organizing data. According to Drajad Suharjo (2003) this research uses descriptive analysis. Qualitative descriptive analysis is an analysis method that more often uses words to explain the data and phenomena collected. According to Miles & Huberman, one of the actions taken when analyzing data is reducing data; in this case, this is done by summarizing, selecting the most important, focusing on what is important, and creating categories. As a result, the reduced data will provide a clear picture and will make it easier for researchers to collect additional data. Data Presentation: After the data has been reduced, the

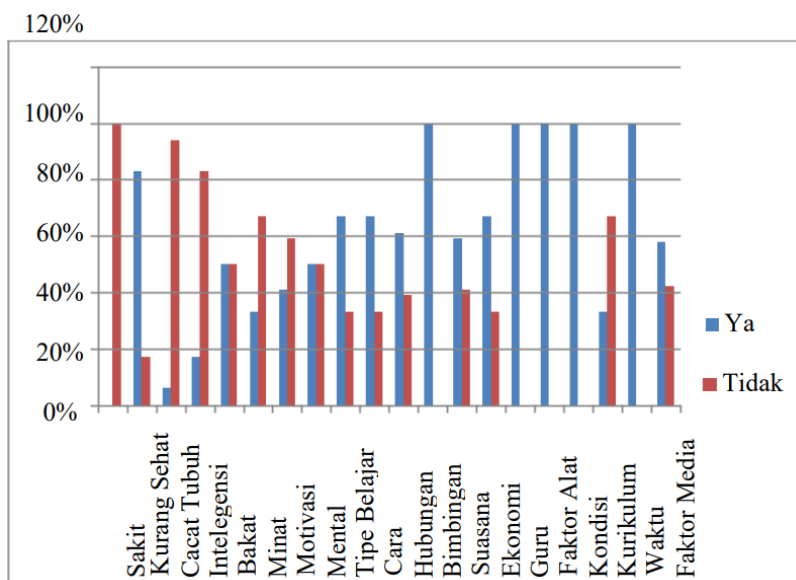
data is presented in the form of patterns such as charts, graphs, matrices, networks, charts, or short descriptions. These patterns will become standard and can be presented in the final research report. Data Verification: By carrying out this activity, conclusions can be drawn about the research results based on the data presented in the report.

Results and Discussion

Results

This study was conducted on August 15 2023, SDN 01 Popayato Timur, Pohuwato Regency. SDN 01 Popayato Timur Pohuwato Regency is close to Tahele field, village office, Tahele Friday market. Factor analysis of difficulties in learning science material for fifth grade students at SDN 01 Popayato Timur, Pohuwato Regency is the subject of this research. In addition, researchers collected field data from 13 respondents by distributing questionnaires to teachers, students and parents as well as interviews with teachers, students and parents to support the findings.

Graph 4.1 Questionnaire Results on Learning Difficulty Factors



The results of a survey completed by students and parents of class V students at SDN 01 East Popayato, Pohuwato Regency show that internal factors, body condition, intelligence, talent, interest, motivation and type of learning are the causes of students experiencing difficulties learning science. In addition, factors originating from external sources, such as children's teaching methods, the relationship between children and parents, atmosphere, curriculum, discipline time, and mass media, play a role.

Discussion

The results of the research show that fifth grade students at SDN 01 East Popayato, Pohuwato Regency face several problems in learning science. They have difficulty understanding science material because the material is too dense, memorizing science concepts, and working on science questions. Human locomotion, respiratory organs, digestive organs and circulatory organs are examples of materials that are considered difficult. These difficulties stem from students' tendency to study at home. Internal factors that cause difficulties in learning science include physical and spiritual factors. For physical reasons, namely because of illness, unwellness, or physical disability. Students at SDN 01 East Popayato, Pohuwato Regency participate in science learning while in good physical health. However, students often experience health problems such as fatigue, dizziness, lack of focus and lack of enthusiasm. Students who are very active, such as playing with friends, usually get tired easily. Apart from that, students often complain of dizziness and are not enthusiastic about studying. This is because students do not understand the science learning material, making it difficult to answer the science questions given by the class teacher.

One of the students has vision problems. Since the second grade of elementary school, Valen has had vision problems. By receiving special attention from the teacher, only one student with a physical disability that is considered mild can attend lessons. There are no physical disabilities experienced by other students. So that students can still follow the learning well in this case. Suryani's (2010) research results show that children's developmental disorders, including motor disorders, sensory disorders and other disorders, can cause learning difficulties. Students will not experience difficulties in learning if they do not experience distractions. By receiving special attention from the teacher, only one student with a physical disability that is considered mild can attend lessons.

The daily value of science learning is still below the KKM (Minimum Completeness Criteria), namely 75, indicating that the intelligence of class V students is low. Some students have below average grades, and some do not do the daily science assignments given by the teacher. One of the science projects given by the teacher is to create a composition about the respiratory system, blood circulation system, movement system and human digestive system. Students need the help of others to complete the montage. With this project, teachers hope that students will better understand the science material taught by the teacher and increase their children's understanding or knowledge. Parents must take their children to tutoring so that children want to learn and can gain the knowledge needed to solve science problems. Syifa (class V student) has been taking private tutoring since studying online. His parents said that this was due to the large number of assignments given by teachers and the conditions required to study from home. It turned out that Yuni also took private lessons, and because the location was close, the tutor was the same as Syifa (class V student). The daily value of science learning is still below the KKM (Minimum Completeness Criteria), namely 70, indicating that the intelligence of class V students is low.

In addition, each student has different talents; These talents will help students achieve academic success. They will quickly get bored if they learn something that does not match their talents. His behavior of rarely studying and not paying attention to the teacher during class is a

sign of boredom. The way students participate in class V science learning at SDN 01 East Popayato, Pohuwato Regency shows that students' desire to learn science is still low. Science learning carried out online is often not followed by some students. Students have low interest in learning, which causes them to be indifferent to science learning because it is considered unimportant. Interview results show that teachers often give assignments to students to take notes on the science material being taught, which can show student interest. However, some students do not take notes on science material because they do not join WhatsApp or Google Classroom groups, so they do not know the assignments given by the teacher. As a result, students become lazy about studying at home and underestimate the tasks given by the teacher during science learning.

Apart from that, students do not have their own motivation, as Alia (Class V student) said that she rarely studies at home, even though the teacher often provides motivation to students. However, he didn't seem to care. Apart from that, parents can make children more motivated to learn by giving gifts or appreciation. Children can be motivated to learn more with rewards or appreciation. Learning success will increase with strong motivation. This is in accordance with research by Sugihartono et al (2012) which shows that high learning motivation can make students more interested in learning. Students who do not have low learning motivation will not be enthusiastic about learning and will not pay attention to the lessons given by the teacher. As a result, students who have low learning motivation will face difficulties when learning science.

Family, community and school are external environments that cause difficulties in learning science. How to educate children, parent-child relationships, parental example or guidance, home atmosphere, and family economic conditions are some examples of family environments that can cause problems. One good way to show parents care is to accompany their children while they study at home. By getting enough attention from their parents, students will feel comfortable living at home. The closeness of parents to their children makes them brave enough to express problems or difficulties that occur in learning. According to a survey conducted among students, there is still very little parental attention. They don't seem to care about their children's education and don't seem to care. This makes the student free to play without anyone telling him to study. Students experience personal problems due to lack of parental attention. They feel that their parents do not pay attention to them. The problems they face make them not focus when studying because they think about the problem (Wahira & Hamid, 2023).

Students don't concentrate so they don't pay attention to the teacher when explaining the material. As a result, students do not understand the material well and are still confused when asked to work on science questions. This is in accordance with research conducted by Wahyuni (2018), a person who has difficulty concentrating because of his environmental conditions. Students experience problems that disrupt their learning environment. If someone faces concentration problems, studying will be in vain and a waste of time and energy. Students will experience difficulties in learning if they do not have sufficient concentration. However, as stated by Afiatin Nisa (2015), the family plays a major role in providing education and protection to children. Parents are the first people who must lay the foundation of education for

their children. As a parent, you have the obligation and responsibility to educate your children, teach them, guide them, and give them attention.

Children will have difficulty concentrating when studying in a crowded and noisy home environment. So that children can study well at home, a calm and comfortable home atmosphere is needed. Apart from that, students need a comfortable home learning environment. The available school requirements encourage students to try hard. This is in accordance with research conducted by M Dalyono (2009), which states that a home or family atmosphere that is too busy or noisy does not allow children to learn well. In addition, teachers are also responsible for learning difficulties. However, the class V teacher has carried out the learning very well and delivered the material correctly. Teachers use learning media such as learning videos sent via WhatsApp groups and Google Classroom. Apart from that, the teacher has prepared practice questions for quizizz. In accordance with Henny's (2016) research findings, the use of learning media also helps teachers convey material, so that it can increase students' understanding of what the teacher teaches. Children will have difficulty concentrating when studying in a crowded and noisy home environment.

The use of mass media such as television, cellphones, and playing online games also influences the difficulty of learning science. If children spend too much time on these things, it will hinder their learning. Everyone can download a lot of online games in the application. Students become dependent on online games and end up forgetting to study. Students cannot solve science questions because they do not study. According to Arianto, the presence of online games has an impact on students. Due to its addictive nature, this game can interfere with learning. According to Tri Rizky Arianto (2016), time should be used for studying or resting, but is more often spent playing online games. Negative behavior such as being lazy about studying and being restless when you can't play games can be caused by this addiction. Everyone can download a lot of online games in the application. Students become dependent on online games and end up forgetting to study.

One step that can be taken to overcome difficulties in learning science material is 1). Teachers provide students with additional education offline. According to Widiyanti (2016), teachers try to improve students' understanding or critical thinking skills by offering additional lessons or tutoring outside of class and repeating lesson material so that students really understand it. 2) Teachers increase students' interest in learning with praise and punishment. Suprihatin (2015) must give praise to students who successfully complete assignments. This will make learning more fun, increasing motivation. On the other hand, punishment given in an appropriate and wise manner can help students become better. 3). Teachers try to deal with bored students during class. According to Tambak (2016), the storytelling method has advantages in the classroom learning process compared to other approaches because it incorporates interesting stories into science learning. The storytelling method has many advantages, such as activating and arousing students' enthusiasm, attracting attention, influencing emotions, and leaving a deep impact on their minds, and attracting attention. 4). Teachers try to establish good relationships with students' parents to find out what causes problems and how to overcome these problems. According to Hidayat (2013), schools and parents must communicate actively and help each other to find out students' involvement in the

teaching and learning process, interaction patterns while at school, and problems that arise at school. On the other hand, the school can find out about children's play activities outside the home, learning activities at home, and problems that arise at home by communicating with parents. 5. The teacher arranges all the science material that students will study first. In addition, to increase students' knowledge, material is added to the file that is not in the thematic book. Hurit (2019) stated that teachers' understanding of the K13 curriculum is very important before implementing it in learning. Teachers can prepare by creating lesson plans and understanding the K13 curriculum requirements, where not all subjects must be combined. Therefore, teachers must sort the material so that it is easy for students to understand.

Conclusion

The results of research and discussions show that fifth grade students have difficulty learning science. Students have difficulty understanding science material because it is too dense, memorizing science concepts, and working on science questions. Factors that influence the difficulty of learning science at SDN 01 Popayato Timur, Pohuwato Regency include internal and external factors. 1). Factors within students (internal) that influence science learning difficulties include poor health, physical disabilities, poor intelligence, students' low interest in learning, and lack of motivation to learn. 2). Factors originating from outside the student (external) that influence the difficulty of learning science are as follows: the way parents educate their children is less than optimal; lack of parental attention to student learning activities; poor parent-child relationships; a disharmonious home or family atmosphere that interferes with students' concentration while studying; school hours that are not conducive and undisciplined; and the influence of mass media and social friends.

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