

## ANALYSIS OF SCIENCE LEARNING PROBLEMS IN CLASS V AT SDS ATTAUFIQ

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### Abstract

This study aims to analyze the learning problems of Natural Sciences (IPA) in grade V at Attufiq Private Elementary School, Medan City. The research method used is qualitative descriptive. The data was obtained through the distribution of questionnaires to 20 students in grade V. The results of the analysis showed that most of the students faced a moderate level of problems (51% - 74%) in science learning. Problems include low student interest in monotonous science learning, lack of adequate learning facilities, and mastery of material and teacher skills that are not optimal. The proposed solution is to create a learning situation that invites students to actively participate, using interesting learning media, and applying practicum or experiments in learning. In addition, it is recommended for schools to provide facilities as a science learning medium. This study presents the results of an analysis of various factors that affect the science learning process in grade V of SD Attaufiq, including teaching methods, the use of relevant learning resources, teachers' skills in delivering materials, and support from the school and students' parents. The analysis shows that most students like practicum and experiments in science learning, but the lack of learning media facilities is an obstacle in presenting interesting learning variations. In addition, teachers' mastery of the material and learning approaches also need to be improved to create effective science learning.

**Keywords:** Learning problems IPA, Class V Students, Learning Media IPA.

### 1. INTRODUCTION

The learning process plays an important role in efforts to improve education, especially at the elementary school level. This implies that a good learning process is able to improve the quality of education. Djamaluddin and Wardana (2019) explained that the learning process is a stimulus or stimulus that can challenge students to get involved and participate in learning activities. The active participation of these participants can be realized by the application of innovative and varied learning models or designs, the use of attractive media, and supported by adequate learning facilities.

Innovative and varied learning models can be truly implemented if teachers carry out the right analysis of learning objectives, student characteristics, and learning outcomes to be achieved. This effort aims to provide students' passion for learning, avoid boredom so that it has implications for students' interest and motivation to learn (Asyafah, 2019). In addition, efforts to implement innovative and varied learning can also provide space for students to actively

participate so that a student-centered learning process is realized.

In relation to science subjects, the use of media should be carried out. First, the structure and content of science are loaded with abstract concepts and principles, so that the media is able to concretize these abstractions according to the cognitive capacity of elementary school children who are still operational-concrete; Second, by looking at the cognitive capacity of elementary school children and that natural phenomena are the platform of elementary science, science materials should be simple and practical, which can only be expressed if assisted by the media. In this case, learning media can stimulate the learning process.

Science learning emphasizes on an experimental process that can connect students' initial (cognitive) knowledge with the material to be learned in class. This is because science learning can improve students' thinking processes in understanding concepts and can be applied or applied to daily life. Science learning has become an integral part of the educational curriculum in Indonesia, aiming to develop students' critical

thinking skills and science literacy from an early age. However, despite the efforts that have been made to improve the education system in Indonesia, there are still many challenges faced in the implementation of science learning, especially at the elementary level. One of the schools that experienced this challenge was SD Attaufiq. In this school, class V is in the spotlight because of several problems related to science learning.

This journal aims to conduct an in-depth analysis of the problems of science learning in SD Attaufiq, especially in grade V. This analysis is expected to provide better insight into the obstacles faced by teachers and students in dealing with science materials, as well as find potential solutions that can be applied to improve learning effectiveness and student learning outcomes.

In writing this journal, we will explore various factors that affect the science learning process in grade V of SD Attaufiq, including the teaching methods used, the use of relevant learning resources, teachers' skills in delivering materials, and support from the school and students' parents. The results of this analysis are expected to provide concrete recommendations and strategies for schools and teachers to improve the quality of learning IPA.

Thus, this journal will be a real contribution in order to improve the quality of science education and learning at the elementary level, especially at Attufiq Elementary School. In addition, this research can also be used as a reference for researchers or other parties who are interested in conducting similar studies to improve the Indonesian education system in the future.

## 2. RESEARCH METHODOLOGY

**Tabel 1 Skor Skala Likert**

|                    |   |                    |   |                   |   |             |   |
|--------------------|---|--------------------|---|-------------------|---|-------------|---|
| Pernyataan Positif |   | Pertanyaan Negatif |   | Tidak Suka        | 2 | Suka        | 3 |
| Sangat Suka        | 4 | Sangat Tidak Suka  | 1 | Sangat Tidak Suka | 1 | Sangat Suka | 4 |
| Suka               | 3 | Tidak Suka         | 2 |                   |   |             |   |

There is a formula that the researcher uses in calculating the Likert scale to determine

$$\text{Nilai Persentase} = \frac{\text{SKOR PEROLEH}}{\text{SKOR MAKSIMAL}} \times 100\%$$

The data analysis technique used by the researcher is the Miles and Huberman qualitative analysis model. In qualitative research, data is obtained from various sources using various data collection

This study aims to describe the problematic state of the use of science learning in grade V at Attaufiq private elementary school in Medan Tembung District, Indra Kasih Village, as it is. Based on this objective, the researcher uses a descriptive qualitative research method. The researcher conducted a survey and distributed a questionnaire to the research subjects. The population of this study was taken from all students in grade V with a total of 20 people.

The data collection technique used is a questionnaire. In this study, the researcher observes and observes problems or problems for students in science learning. The questionnaire used in this research data collection technique, with the questionnaire (questionnaire) the researcher will distribute to the students. The questionnaire (questionnaire) that was distributed had the purpose of finding out the extent of students' problems in science learning. The last data collection technique in this study is point documentation Through this documentation technique in order to obtain accurate data on how to analyze problems in science learning class V.

Coordination is a data collection technique that is carried out by giving a set of questions or written statements to respondents to answer. Questionnaire is an efficient data collection technique, the researcher knows exactly what variables will be measured and knows what can be expected from the respondent (Sugiyono, 2019). A questionnaire (questionnaire) conducted on the Likert scale as a scoring. The determination of scoring on the Likert scale carried out includes 4 answer choices. The following is the determination of the Likert scale score in the questionnaire as follows:

the percentage of results from the questionnaire, namely:

Figure 1 Formula for Calculating Scoring Results

techniques (triangulation), and is carried out continuously until the data is saturated. Miles and Huberman (1984), stated that activities in qualitative data analysis are carried out interactively and take place

continuously until complete, so that the data is saturated. Activities in data analysis, namely data reduction, data display, and conclusion drawing/verification (Sugiyono 2019). Data reduction (data reduction) which means summarizing, choosing the main things, focusing on the things that are important to look for themes and patterns from the amount of data obtained in the field. So at this stage, the researcher summarized the data that had been obtained from the questionnaire statement sheet. In this study, the data to be reduced is the data from the questionnaire statement. In this case, the researcher used a likert scale to analyze the results of the questionnaire data, namely "very like", "like", "dislike", "very dislike".

And the research instrument of this questionnaire statement sheet is made in the form of a check. Thus it is useful to provide a clearer picture and make it easier for researchers to collect data later. Data presentation (data display) can be done in the form of brief descriptions, charts, relationships between variables and so on. In the results of the questionnaire statement data, in this study it is structured by reviewing the data that has been reduced and sorted according to the formulation of the problem made so that it can be understood. By presenting this data, it aims to make it easier to understand what is happening and plan steps for the next stage. Conclusion drawing/verification in qualitative research that can answer the formulation of the problem formulated from the beginning, but may not be or in the form of new findings that have never existed before, such as the description of an object that was previously still unclear so that after research it becomes clear.

The validity of the data in this study, Students' problems in social studies learning are very diverse, starting from the high level of interest when doing practicum in science learning so that it affects the attractiveness of students to actively participate in science learning in class. And the low interest in learning science which is very monotonous or lecture methods, and the lack of facilities when learning science. The researcher distributed this questionnaire statement sheet in class V of SDS Attaufiq Medan City. On Saturday, May 27, 2023. The distribution of this questionnaire was carried out to analyze the level of student problems in science learning in the classroom.

the researcher used triangulation. Triangulation in this credibility test is interpreted as checking data from various sources in various ways, and at various times. Thus, there is source triangulation, data collection technique triangulation, and time triangulation (Sugiyono 2019). First, source triangulation to test the credibility of the data is carried out by checking the data that has been obtained through several sources. Second, triangulation techniques to test the credibility of data are carried out by checking data to the same source. And finally, triangulation of time. Time also often affects the credibility of the data.

### 3. RESULTS AND DISCUSSION

#### Questionnaire Results

**Tabel 2 Kriteria Problematika Siswa**

| Capaian Presentase | Kreteria Masalah |
|--------------------|------------------|
| 75% - 100%         | Sangat Tinggi    |
| 51% - 74%          | Sedang           |
| 25% - 50%          | Rendah           |
| 0% - 24%           | Sanga Rendah     |

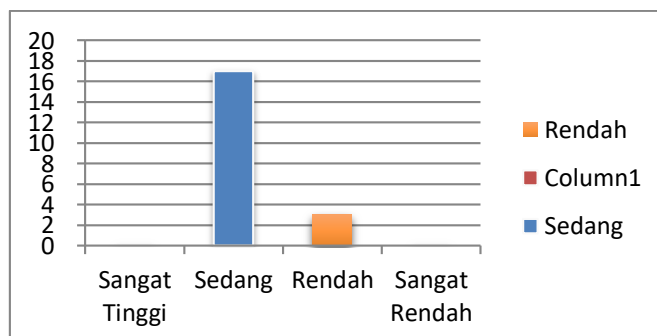


Figure 3 Recapitulation of Questionnaire Results

There are results of a questionnaire conducted by researchers. Based on the results of the questionnaire that has been obtained on the bar chart, there are two types of levels of student problems in science learning in the classroom. Namely, the data on the level of student problems in science learning class V at SDS Attaufiq Medan City is categorized as Moderate. The level of student problems was presented reaching 51% - 74% as many as 17 students. And it is categorized as low in the level of student problems, which reaches 25% - 50% as many as 3 students. This is based on the results of the questionnaire that the researcher has obtained at the time of the

researcher and is listed in the appendix. From the results of the questionnaire, the number of student problems in science learning tends to be closer to 75% with a range of 51% - 74%. Then the researcher found that there were 17 students who were members of the percentage. Which is classified as moderate to the problem of science learning. Not only that, there are 3 students who get 25% - 50% which is relatively low, facing problems in science learning.

Based on the percentage of the results of the questionnaire described above, it is stated that some students are classified as able to work on every problem in the science learning process. In the science learning process, students are very happy when doing practicum or experimenting in the science learning process, So that in the problem, namely when the school does not have science learning media facilities, so teachers only carry out a learning process that is so monotonous and also only use the lecture method.

From the results of the research Problematic in science learning, it also shows several obstacles in science learning, namely the implementation of science learning which is still not optimal due to the teacher's mastery in teaching a science learning so that it has an impact on students' mastery ability. Another obstacle is the teacher's unpreparedness in compiling the device. This is because there are many dependents and obligations that must be fulfilled as proof of the trust given by the school. So, the unpreparedness is due to ineffective time to make it.

Insani (2016) difficulties in mastering the material and then choosing in the teaching process the teacher to do the lecture method Alternative activities are through cooperative learning such as practicum.

Kisworo et al., (2017) Teachers' low understanding of the science learning approach is due to the teacher's inability to master the understanding of science material comprehensively. One of them is flexible. Flexible learning requires teachers with broad, integrated and applied knowledge. Teacher education qualifications that have not yet integrated science are an obstacle in the implementation of science learning.

According to the researcher who has been carried out at Attaufiq Private Elementary School in Medan City grade V

that in this researcher students really like a practicum or do an experiment in science learning, and also the use of interesting learning media makes students actively participate in the learning process. The solution in analyzing the problems of science learning in Class V, namely the teacher is able to create a science learning situation that invites students to participate during the learning process, Teachers can create interesting learning media, Conduct a practicum or experiment in science learning, Prepare science learning by carefully arranging it according to the target of achieving competency standards and in accordance with the topics that will be discussed in science learning, The school provides facilities as a science learning medium.

#### 4. CONCLUSION

Based on the results of the research conducted during the preliminary study, it can be concluded that the results of science learning problems in class V SDS Attaufiq are very low in science learning. Only a few problems were identified because there were factors that were less varied and efficient using a learning model or method (usually using conventional learning), learning media to support the learning process and student activity in the classroom, especially in the content of science learning.

Based on the results of science learning problems of class V students which amounted to 20 students with 12 female students and 8 male students, it was stated that the percentage of science learning problems was 51% - 74% with the information of questionnaire (questionnaire) as many as 17 students, and 25% - 50% as many as 3 students. This shows that the problem of learning science in students is moderate.

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