



ANALYSIS OF STUDENT DIFFICULTIES IN IPAS LEARNING AND PRACTICUM AT SDN 001 TANJUNG PINANG TIMUR

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Abstract

Making science lesson plans in elementary school and practicum guides are needed to plan systematic learning in accordance with the material being taught so that learning objectives can be achieved and learning can be understood by students. This research is intended and intended so that we can find out what problems are behind student understanding, the difficulty of making lesson plans and also the difficulty of determining appropriate media and practicum modules that can be easily understood, especially at SD Negeri 001 Tanjung Pinang Timur. In addition, to facilitate the delivery of a series of materials This research uses descriptive qualitative research with the subject, namely the V C class teacher of SD Negeri 001 Tanjung Pinang Timur, the research was conducted using interview data collection techniques which were carried out on November 21, 2023. The interview process was assisted by question instruments, stationery and audio and visual recording devices. From the results of interviews conducted with one of the IPAS teachers in class 5 C SD Negeri 001 Tanjungpinang Timur, the main problem is that the absence of a Learning Implementation Plan (RPP) in the IPAS subject being taught raises other problems related to the learning activities carried out.

Keywords: *Student Learning Design, Practicum Guide, Teaching Skills, Learning Modules.*

INTRODUCTION

Education in Indonesia began to develop rapidly during this period, and various schools have competent teachers who are tailored to their academic fields. Education itself is a systematically programmed basic need that aims to develop competent human resources in the future (Gusdiyanto & Setya Mustafa, 2022). Elementary school is the first formal education platform that is a milestone in the progress of education in Indonesia. In elementary school, we are taught various basic things such as reading, writing and other basic skills. With good learning during elementary school, it is expected that when continuing to the formal education level above, students can already understand general things. Therefore, the role of teachers at this level is very necessary, especially in the delivery of skills and knowledge. However, at various levels of education, there are definitely some who experience learning difficulties at each level and these learning difficulties are felt by each one of them in science learning.

Making a Science Learning Plan in elementary school is needed to plan a systematic learning that is in accordance with the material being taught so that learning objectives can be achieved and the learning can be understood by students. Based on this, teachers should plan lesson plans as well as possible so that problems regarding material that is not coherent in teaching and other fundamental problems can be minimized. The influence of lesson plans is very much related to the learning process, not only to help learning to be structured for teachers but also to help students' understanding so that there is no jumping of material that makes students confused in understanding the material being taught.

Improving the quality of primary school teachers is one of the keys to improving the quality of education. To improve the quality of primary school teachers, teachers need to understand not only the theoretical concepts but also their skills and attitudes towards the subject. At the primary school level, science is one of the subjects that involves theoretical concepts, skills and attitudes (Dewi, 2019). Therefore, teachers should have the ability not only in theoretical terms but in the form of skills and attitudes as well.

Science process skills need to be trained to learners to explore and understand the natural world. Science learning should train science process skills to develop observation skills, plan investigations, interpret data, and conclude. Science process skills can be trained through laboratory activities or practicum. Practicum is the most important part of science learning because science is based on physical symptoms in everyday life. In science subjects, concepts and sub-concepts are learned through simple research, experiments, and a number of activities to develop process skills. The nature of science is a process of discovery. Every science learning topic should be taught through experiments or demonstrations conducted in the laboratory (Usmaldi & Amini, 2021).

Practical learning has many advantages, including practical learning provides experience for students to observe and understand natural phenomena (Hasruddin & Rezeqi, 2012). According to the teacher, learning with the practicum method is liked by students and is more meaningful. Teachers revealed that the weaknesses of practicum learning are limited time and availability of tools (Usmaldi & Amini, 2021). From this, a module or practicum guide is needed that is in accordance with the material practiced by analyzing media that can be easily found.

The problem that is the basic topic in making this article is about the difficulty of students in understanding a material because there is no lesson plan used so that the material taught is not coherent or clearly structured. The material taught also seems dense and requires various disciplines such as a combination of Social Sciences and geography, making students confused in understanding which material can be easily understood first. In addition, other problems related to practicum activities carried out and their relevance to the discussion material, especially in terms of appropriate media, seem difficult to obtain. Where today, teachers are not only required to use simple media but must also be associated with existing technology. There are also other things according to the teachers the author interviewed, namely when using simple media it is difficult to find around, the costs incurred by students or the time used in finding relevant media.

A plan that describes the procedures and structure of learning to achieve a set basic competency. In the content standards that have been elaborated in the syllabus. The scope of the lesson plan covers at most one basic competency consisting of (1) one or several indicators for 1 (one) meeting (Mulyasa, 2007).

Based on these problems, the author raises issues regarding the relationship between making appropriate lesson plans and also practicum guides in science learning in elementary schools. This is because during the observation, the author found obstacles in the science teacher of SD Negeri 011 Tanjungpinang Timur who was teaching, namely in the preparation of appropriate lesson plans before learning takes place and the use of media and modules that are relevant in the practicum material taught, making it difficult for students to understand the learning because the teaching is less structured and relevant to their daily lives.

This research is intended and intended so that we can find out what problems are behind student understanding, the difficulty of making lesson plans and also the difficulty of determining appropriate media and practicum modules that can be easily understood, especially at SD Negeri 001 Tanjungpinang Timur.

METHODS

The research was conducted at SD Negeri 001 Tanjungpinang Timur, precisely on Jalan Sultan Sulaiman Number 1, Kampung Bulang, East Tanjungpinang District, Tanjungpinang City with the research time on November 21, 2023 with the homeroom teacher V C who was the subject of this research. This research uses a qualitative approach, namely a methodology that emphasizes aspects of the processes, principles, and procedures that we use to approach problems and seek answers (Mulyana, 2008). Because this research emphasizes aspects of the principles, processes and procedures used in finding answers from interviewees. The data analysis method used is descriptive because this article describes the existing conditions. And data collection techniques using interview techniques with sources.

Supporting instruments used in the interview process are questionnaires, stationery, voice recording and also a cellphone camera that functions to document the implementation of the interview process.

FINDINGS AND DISCUSSION

Findings

In the application of this qualitative method, several questionnaires were used when interviewing sources to support the search for relevant answers in making the appropriate Learning Implementation Plan including, as follows:

"What lesson plan did you design before carrying out the lesson?"

According to him, before learning, he first finds out the material related to the lesson to be taught and the relevant media used in classroom learning.

"What obstacles do you find when teaching in class 5 for IPAS learning?"

He said that the constraints usually occur in students, especially when learning is theoretical, he sees the lack of enthusiasm of students in understanding the learning discussed. The father tries to find suitable learning media to increase student enthusiasm. For example, in IPAS learning about magnetic material, he found the appropriate media, namely using magnets that he bought himself. By telling students to come forward one by one and students are directed to connect between the media used and also the properties of magnets. For electrical circuit material, the father uses cellphone application media about electrical circuits.

"How did you design the lesson plan? And were there any difficulties in preparing it?"

Based on his confession, that there is no draft lesson plan made before learning if any, he adjusts it himself and then is revised by the Principal at the elementary school.

"Have you implemented differentiated learning for the students you teach? If not, is there a differentiated learning design plan that you might implement in the future?"

He told us that because she had just moved to the school, differentiated learning had not yet been implemented. However, in her previous school she had implemented it. According to her, when learning takes place we can see each learning style that is suitable for them. In the current school, she has not seen this difference. For future plans, she will provide different media so that each child's learning style can be fulfilled and can improve their concentration.

"In your opinion, regarding the IPAS learning materials taught in grade 5. What is the most difficult material for students to understand?"

From his statement, the material on the layers of the earth and the layers of the atmosphere is difficult for them to understand because the material has combined the understanding of science and social studies.

In addition, the authors also made questionnaires related to the implementation of practicum and obstacles related to the implementation of practicum including:

"During the practicum, are there any obstacles from the students in the implementation?"

He revealed that there are no obstacles related to the implementation of the current practicum because the practicum is still simple and does not require more complex knowledge.

"Before implementing the practicum, what design did you design beforehand?"

Regarding this, he said that before the practicum was held he explained in advance about the material to be practiced and how the steps worked and introduced the tools that would be used to support practicum activities on the material.

"Are the practicum activities carried out already assessment in nature? And is this

practicum activity good when it is associated with assessment?"

From this question, he answered that this practicum activity is only an activity that supports student understanding and has not been linked to assessment. According to him, one day this practicum activity has the potential to be included in the practical assessment per individual student.

"Are there any materials that are difficult to practice?"

Regarding this question, he explained that the material of the earth's layers is difficult to hold a practicum because it is only based on pictures. In addition, he also explained that there was no practicum media on the respiratory system.

Discussion

From the instrument, information was obtained about the main problem, namely that the teacher did not make a Learning Implementation Plan (RPP) in the IPAS subject taught, making it difficult to implement learning to students and the material was not sequential, making understanding confusion. According to the interviewees, it can be concluded that some of the problems why there are no lesson plans used are due to time constraints, difficulties in adjusting to the curriculum used, lack of policy from the school, the teacher has just moved to the school.

In addition, learning decisions are closely related to lesson planning that should be prepared by teachers. This is in accordance with the opinion of (Mahmudah, 2020) learning activities will not run well without lesson planning. Lesson planning is an important part of implementing education in schools. Planning plays an important role in every activity, including learning. In relation to learning, what is meant by learning planning is the process of preparing various learning decisions that will be implemented in the process of learning activities to achieve learning competencies that will be implemented in the process of learning activities to achieve predetermined learning competencies.

Lesson plans are by definition an important aspect of the learning process. Many education experts emphasize that lesson plans must be owned by every teacher before he teaches. This lesson plan contains what the teacher will do before he teaches in the learning process with a systematic plan so that it is expected to make the learning process effective. This understanding is in accordance with the opinion of David Johnson in Suryasubrata, he said: "teachers are expected to plan teaching and delivering teaching, because it can all make it easier for students to learn (Gustiansyah et al., 2021).

According to (Wahyuni & Ibrahim, 2012) making lesson plans is the first step that teachers must take in carrying out learning activities. Teachers as teaching staff must have good skills and abilities as learning planners/designers. The teacher as a learning designer is tasked with making a learning program plan that is his responsibility in accordance with predetermined competencies.

Based on the fact that the duties and roles of teachers are so heavy and complex, it is necessary to supervise or coach teachers continuously to improve their performance. Teacher performance needs to be improved so that efforts to guide students to learn can develop (Arsyad, 2021). This statement, of course, does not only address elementary school teachers. It means that teachers as facilitators who drive the learning process in the classroom also determine the quality of teaching. As a result, teachers must prepare (plan) everything so that the learning process in the classroom becomes effective. Lesson planning is a very important step in implementing learning. Careful planning is necessary for effective learning implementation. Learning planning is outlined in the lesson plan (RPP) or by other terms learning design, learning scenarios. The lesson plan includes KD, indicators to be achieved, material to be studied, learning methods, learning steps, learning media, learning resources and assessment.

From these problems, the author seeks an alternative solution by making a Learning Implementation Plan in accordance with the material taught during observation activities in class V C SD Negeri 001 Tanjungpinang Timur regarding the material "Layers of the Earth and the Movement of the Earth's Plate". It is hoped that the Learning Implementation Plan can help in planning learning on this material in the future. In addition, other solutions such as making more interesting learning media using earth-shaped pop up books in which there are layers that are distinguished by color and also using song media that makes it easier for children to understand

the material.

To assist in the implementation of the practicum, the author also made a practicum module that has been harmonized with the practicum material so that before starting the practicum students already understand what will be practiced and how the work procedures are carried out. It is also hoped that the practicum module can help or be used as an example and can be modified in learning on other materials.

CONCLUSION

From the results of interviews conducted with one of the IPAS teachers in class 5 C SD Negeri 001 Tanjungpinang Timur, the main problem is that the absence of a Learning Implementation Plan (RPP) in the IPAS subject being taught raises other problems related to the learning activities carried out. So that the learning objectives are also less directed. Whereas in essence the Learning Implementation Plan aims to contain what the teacher will do before he teaches in the learning process with a systematic plan so that it is expected to make the learning process effective. It is hoped that the Learning Implementation Plan can help in planning learning on this material in the future.

In addition, to assist in the implementation of the practicum, the author also made a practicum module that has been harmonized with the practicum material so that students already understand what will be practiced and how the work procedures are carried out and the tools to be used during the practicum.

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REFERENCES

- Arsyad. (2021). Menyusun Rencana Pelaksanaan Pembelajaran Melalui BimbinganBerkelanjutan Untuk Meningkatkan Kompetensi GuruSD Inpres 10/73 Welado Kabupaten Bone. *Jurnal Pendidikan & Pembelajaran Sekolah Dasar*, 1(2), 2021. <https://ojs.unm.ac.id/jppsd/index>
- Dewi, T. M. (2019). Pengembangan Buku Penuntun Praktikum Ipa Sd Berbasis Keterampilan Proses Sains Pada Mata Kuliah Praktikum Ipa Sd Untuk Mahasiswa Pendidikan Guru Sekolah Dasar (Pgsd). *Simbiosis*, 8(1), 28. <https://doi.org/10.33373/sim-bio.v8i1.1803>
- Gusdiyanto, H., & Setya Mustafa, P. (2022). Evaluasi Rancangan Pembelajaran Pendidikan Jasmani Dan Kesehatan Di Sekolah Dasar Negeri Bunulrejo 1 Kota Malang. *Jurnal Lentera Pendidikan Pusat Penelitian Lppm Um Metro*, 7(1), 115. <https://doi.org/10.24127/jlpp.v7i1.2116>
- Gustiansyah, K., Sholihah, N. M., & Sobri, W. (2021). Pentingnya Penyusunan RPP untuk Meningkatkan Keaktifan Siswa dalam Belajar Mengajar di Kelas. *Idarotuna: Journal of Administrative Science*, 1(2), 81–94. <https://doi.org/10.54471/idarotuna.v1i2.10>
- Hasruddin, H., & Rezeqi, S. (2012). Analisis Pelaksanaan praktikum biologi dan permasalahannya di SMA Negeri Sekabupaten Karo. *Jurnal Tabularasa PPS Unimed*, 9(1), 17–32.
- Mahmudah, T. (2020). Penyusunan Rencana Pelaksanaan Pembelajaran (RPP) Guru Bahasa Indonesia di SMP Negeri 2 Bantul. *Universitas Negeri Yogyakarta*, 1–23.
- Mulyana, D. (2008). *Metodologi Penelitian Kualitatif*. PT Remaja Rosda Karya.
- Mulyasa, E. (2007). *Kurikulum Tingkat Satuan Pendidikan*. PT.Remaja Rosdakarya.

Usmeldi, & Amini, R. (2021). Pelatihan Penggunaan KIT IPA dan Pengembangan LKPD Berbasis Praktikum untuk Guru IPA. *Jurnal Abdimas Prakasa Dakara*, 1(2), 56–65.
<https://doi.org/10.37640/japd.v1i2.1010>

Wahyuni, S., & Ibrahim, S. A. (2012). *Perencanaan Pembelajaran Bahasa Berkarakter*. Refika Aditama.