Elementary School Teachers' Perceptions of Science Practicum During the Limited Face-to-Face Learning Period

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Abstract

This research aims to describe elementary school teachers' perceptions of science practicum during the limited face-to-face learning period at State Elementary School 182/I Protected Forest in understanding teachers' perceptions of science practicum during the limited face-to-face learning period. This research was conducted at State Elementary School 182/I Protected Forest. Research data was obtained by conducting interviews with class teachers who implemented science practicum (as main data) carrying out documentation (as supporting data). After conducting interviews and documentation, the data was analyzed qualitatively using Miles and Huberman data analysis. The results of this research indicate that primary school teachers' perceptions of science practicum during the face-to-face learning period are limited, first of all, absorption of stimuli or objects from outside the individual. Science practicum teachers gain knowledge or information from several sources such as teacher books, student books, practice books, the internet and YouTube. Second, for understanding science practicum, the teacher understands science practicum using existing sources, from these sources he can understand the meaning of science practicum, the science practicum tools and materials used, and the steps for science practicum. The third is assessment or evaluation of science practicum. From the teacher's responses there was a positive assessment of the science practicum. The conclusion obtained from this research is that the teacher's perception of science practicum during limited face-to-face learning can be seen from the teacher's response, from absorption of stimuli or objects from outside the individual, understanding or understanding and assessment or evaluation.

Keywords: Perception; Science Practicum; Limited Face-To-Face Learning

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INTRODUCTION

The curriculum is a set of plans and arrangements regarding objectives, content, and arrangements regarding objectives, content, and learning materials as well as methods used as guidelines for implementing learning activities to achieve educational goals. The curriculum implemented in Indonesia is the 2013 curriculum. The 2013 curriculum is an enhanced curriculum based on KTSP (Uce, 2016). The 2013 curriculum is a reference for the national education curriculum which has the characteristics of developing three domains including the attitudinal, spiritual and social (affective),
knowledge (cognitive) and skills (psychomotor) domains, not only containing comprehension and memorization subject matter but consisting of material that is more complex and requires application, analysis and evaluation processes to create something new.

The reference in Minister of Education and Culture Regulation Number 21 of 2016 at the elementary school level is regarding the 2013 curriculum in science lesson content which contains competency achievements including students being able to demonstrate a scientific attitude including a high sense of curiosity, honesty, logic, critical and discipline, asking systematic questions, observing objects, and record the results of observations, and report the results of natural observations orally and in writing.

Learning science content is expected to foster students' attitudes, knowledge and skills through a scientific process (Acesta, 2014; Umi, 2015). However, many implementations in learning are found that do not fully implement learning activities that are able to foster the three domains mentioned in the national curriculum. The teacher's role in learning activities only emphasizes cognitive achievements in the form of rote memorization using conventional lecture methods so that students are not actively involved in learning so that curriculum achievements have not been achieved optimally. However, there needs to be learning activities that contextually involve students in order to gain direct experience in the form of practicum. Understanding science concepts emphasizes integral direct experience in the form of practical material that must be understood not only through conventional methods/lecture methods.

Practicum is an activity that aims to equip students to better understand theory and practice (Santoso et al., 2016). According to Rahmawati & Haryani (2014), in practicum activities, students can carry out activities to observe, interpret data, predict, use tools and materials, plan practicum, communicate practicum results and ask questions. Practical activities carried out by students can concretely study the objects they are studying. Either using your own senses or with assistive devices. That way, students will be able to observe an object carefully, measure accurately using tools, use tools safely according to procedures, describe the results of observations or experiments, and be able to tell their friends about their learning experiences. Practicum is a process for scientific learning, the best way of scientific learning is simply to make students become scientists. This process makes it very possible that students' psychomotor domain will increase, because students are directly involved in all activities. The concept that science knowledge can be achieved optimally is one that uses practical methods (Al Fath, 2015).

Teachers are those who play a role in developing the quality of students in understanding science and technology (Kusuma, 2015). However good the facilities and infrastructure are. Tools, curriculum and so on are meaningless if teachers are unable to manage and organize all learning resources into meaningful things. No matter how well the curriculum is designed, in the end the progress of students really depends on the teacher's responsibility in carrying out their duties. The development of science in society is full of demands from various sectors which have a big influence on school life. To carry out their profession as a teacher, teachers really need a variety of knowledge and skills according to current developments (Sopian, 2016).

Students in the learning process of knowing themselves and using their abilities well cannot be separated from the directions given by the teacher. A class teacher must know that his role is not only as a teacher, but also to help students. The teacher also plays a determining role in using methods in learning. One method that a teacher can apply is the practical learning method. Through practicum, students can learn directly about science and directly observe the symptoms and processes of science, can form scientific thinking skills, can grow and develop a scientific attitude, can solve various new problems through scientific methods and so on, these abilities can developed through practical activities.

Based on the results of the researcher's observations and pre-research interviews conducted by the researcher at State Elementary School 182/I Protected Forest regarding perceptions of science practicum during a time when face-to-face learning was limited. This of course creates a way of looking at science practicum during a time of limited face-to-face learning which will later give rise to a perception from the teacher. Therefore, as explained previously from this background, researchers conducted research with the aim of describing elementary school teachers' perceptions of science
practicum during the limited face-to-face learning period at the 182/I Forest Protection Elementary School in understanding teachers’ perceptions of science practicum during limited face-to-face learning period.

RESEARCH METHODS

Research Design

The research approach used in this research is a qualitative research approach. A qualitative approach is research that aims to understand the phenomena that occur in the research object as a whole, by describing it in the form of language and words in a specific context using various natural methods (Lexy, 2010). The type of research used in this research is descriptive research. This research will describe elementary school teachers' perceptions of science practicum during a time when face-to-face learning is limited.

Research Target/Subject

State Elementary School 182/I Protected Forest, Muara Bulian subdistrict, Batang Hari Regency, Jambi Province is the place where researchers conduct research. Researchers chose this school because it had implemented science practicums during a time when face-to-face learning was limited. The subject of this research is information, namely people who provide information regarding the data needed regarding elementary school teachers' perceptions of science practicum during a time when face-to-face learning is limited. The informants in this research were high school teachers.

Research Procedure

The research procedure that the researcher carried out was by following the steps carried out by the researcher following the stages to achieve success in the research. Research procedures were carried out to obtain valid data. This section explains the process of conducting research from the preparation stage, research implementation, and completion stage.

Instruments, and Data Collection Techniques

Data collection techniques are the main step in conducting research, with the main aim of obtaining data (Sugiyono, 2014). To make it easier for researchers to obtain data, researchers used data collection instruments with 2 (two) techniques, namely interviews and documentation.

1. Interview

An interview is a conversation with a specific purpose. This form of interview includes: emphasizing the interviewer's definition of the situation, encouraging the respondent to introduce as many views as he or she considers relevant, rather than relying on the answer structure of the situation; give respondents the opportunity to introduce as many views as they consider relevant, rather than relying on the investigator's understanding of relevance. In another way, structured interviews are a form of data collection technique, if the researcher already knows the information to be obtained then the researcher prepares research instruments such as written questions.

In conducting interviews, researchers used general and open questions designed to elicit answers or opinions from the interviewees to find out more about elementary school teachers' perceptions of science practicum during the limited face-to-face period.

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2. Understanding or comprehension

3. Assessment or evaluation

Data analysis technique

In analyzing the data obtained by researchers, researchers used the Miles and Huberman model (1984) in Sugiyono (2014) which states that qualitative data analysis uses words arranged in expanded or described text. To process data analysis in Sugiyono, you can go through three processes, namely:

1. Reduction Process
   - Data Reducing data means that the researcher summarizes it to determine what is important and focuses on the topic to get an accurate picture of the research. In this way, the reduced data will be used as an illustration for researchers and as the next step in collecting data.

2. Data Presentation Process
   - Presenting data in qualitative research can be in the form of brief descriptions and relationships between categories. By presenting the data the researcher can understand what happened and what will be required next based on the understanding the researcher gets from the presentation.

3. Process of Drawing Conclusions (verification)
   - The final step in analyzing data is the data verification process to provide conclusions based on the data obtained and obtain credible data conclusions.

RESULTS AND DISCUSSION

Perception is a process of a person's response to an object or event directly through the senses and interpreting or concluding information on the stimulus received by the individual. A person's perception of looking at something is not always the same. This also happened to teachers at Elementary School 38 Negeri 182/I Protected Forest who were interviewed regarding teachers' perceptions of science practicum during a time when face-to-face learning was limited. Based on the results of interviews conducted by researchers regarding science practicum during a period of limited face-to-face learning. State Elementary School 182/I Protected Forest uses a limited face-to-face learning system. Based on the results of interviews conducted regarding teachers' perceptions of science practicum during limited face-to-face learning, it can be concluded that:

1. Absorption of stimuli or objects from outside the individual
   - Based on research conducted, it shows that all teachers have heard and can see information or knowledge about science practicum. According to Sastrawan (2016) learning resources are an important component and have a very important role in improving the quality of learning. The sources of information for high class teachers are student books, teacher books, websites, YouTube and library books. Teachers who implement science practicum during limited face-to-face learning more often receive information or knowledge about science practicum. This is also supported by the results of researchers' observations that high class teachers, namely class IV teachers, class V teachers and class VI teachers have implemented science practicum during times when face-to-face learning is limited. All informants were able to explain what science practicum was. The informant learned about science practicum from teacher books and student
books. The informant explained that there was science practicum material in the book. It cannot be denied that one of the learning activities that is always carried out is using teacher’s books and student’s books.

Apart from teacher books and student books, informants also often get knowledge and information about science practicum through practice books in YouTube libraries and sources on the internet. Only one informant used a practice book, the others did not use a practice book. The amount of information or knowledge about science practicum that is absorbed or received through the five senses will provide a picture or impression in the brain of each informant. In this case, the five senses used to receive information about science practicum are the senses of sight and hearing. All informants used their sense of sight to capture information from teacher books, student books, practice books and sources on the internet. All informants use their senses of sight and hearing to capture information through YouTube videos.

Based on the research results, it can be seen that all informants received or absorbed information about science practicum using the senses of sight and hearing, thereby giving rise to images or impressions in the brain. This is in accordance with Bimo’s (2010) theory that the first indicator in the perception process is the absorption of external stimuli or objects using the five senses.

2. Understanding or understanding.

Based on the results of research regarding the meaning and understanding of science practicum, data was obtained that after information regarding science practicum was captured by the teacher, the next process was the stage of understanding or giving meaning to the information received. Based on the research results, it was found that teachers’ understanding of science practicum varies. From the meaning of practicum, practicum tools and materials, and being able to understand the steps of science practicum. Some teachers provide the definition of science practicum, namely that students carry out experiments directly. Furthermore, the teacher's understanding of the science practicum tools and materials and science practicum steps. Here the teacher has understood what practicum tools and materials will be used and the science practicum steps according to the sources, namely the teacher's book and student's book.

Teachers can also understand the steps of science practicum by seeing and listening to guides from several sources. In this way, teachers can better understand science practicum. The understanding or understanding of science practicum conveyed by the informant is the second stage of perception. all informants have understood science practicum. Understanding of informants in the same form. This is in accordance with what was stated by Bimo (2010) that the second indicator of the perception process is comprehension or understanding.

3. Assessment or evaluation

Based on the results of assessment or evaluation research, teachers give positive and negative assessments of science practicum. The teacher gave a positive assessment of the science practicum in the form that the science practicum could enable students to experience it directly, collaborate with friends or discuss with friends, and better understand the science learning practices and theories presented. For negative assessments from teachers, there are some students who are less active in carrying out science practicals.

According to Robinns (2014), there are two forms of perception, namely positive perception and negative perception. Positive perception is an individual's assessment of an object or information with a positive view or in accordance with what is expected from the object being perceived or from the existing implementation. Meanwhile, negative perception is an individual's assessment of certain objects or information with a negative view, contrary to what is expected from the object being perceived or from the existing implementation. So it can be concluded that there are negative and positive assessments. This is in line with what Bimo stated that the third indicator or final stage in the process is assessment or evaluation.

CONCLUSION

Based on the results of the research findings and discussion, data can be obtained on elementary school teachers' perceptions of science practicum during the limited face-to-face learning period, and it can
be concluded that: there are three perceptions of elementary school teachers, namely absorption of stimuli or objects from outside the individual, understanding or comprehension and assessment, or evaluation of science practicum during a time when face-to-face learning is limited. Elementary school teachers' perception of science practicum during the limited face-to-face learning period at State Elementary School 182/I Protected Forest is in absorbing stimuli or objects from outside the individual science practicum, here teachers get knowledge or information from several sources such as teacher books, student books, practice books, internet and YouTube. Teacher perceptions regarding understanding or understanding of science practicum. Teachers can understand science practicum by using existing sources, from these sources they can understand the meaning of science practicum, the science practicum tools and materials used and the science practicum steps. Assessment or evaluation of science practicum. The response from the teacher was that science practicum is important, with science practicum students can experience it directly, understand science learning better and can discuss it with their friends.

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REFERENCES


