

## Problematics of Science Learning With Limited Educators at Sentul Community Learning Center Kuala Lumpur

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**Article Information****ABSTRACT**

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*Background:* In the context of science learning, the readiness of teaching staff greatly influences learning because the difficulties experienced by teachers are a trigger for learning failure in students and give rise to the view that science is a difficult subject. *Aim:* The aim of this research is to analyze the problems of science learning within the limited teachers in the Sentul Community Learning Center Kuala Lumpur. The Sentul Community Learning Center is a non-formal school for Indonesian immigrant children who do not have the opportunity to attend formal school in Kuala Lumpur. *Method:* This research uses a qualitative approach, and the type of research is descriptive research. The data collection methods used were interviews, observation, and documentation. *Results and Discussion:* In implementing science learning at the Sentul Community Learning Center, there are many limitations, especially in terms of teachers. Science learning is taught to students in grades three to six at one time because the Sentul community learning center lacks teachers and there are no adequate facilities to support science learning. *Conclusion:* Even though science learning at the Sentul community learning center is not yet effective and efficient, considering all the limitations of teaching staff as well as media and infrastructure for science learning, the implementation of learning at the Sentul community learning center is one form of effort made so that students receive education equivalent to formal schools.

**Keywords:** Teacher difficulties, Natural Sciences, Science Learning

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**INTRODUCTION**

Natural Science subjects are one of the subjects that must be mastered at elementary school level. This is to develop students' scientific way of thinking to find answers to natural phenomena that occur, especially in the natural environment. Studying Natural Sciences is not just about understanding the concepts or procedures, there are many things that can emerge from the science learning process. Natural Sciences subject is related to how to find out about nature systematically so that science is not only mastery of a collection of knowledge in the form of facts, concepts or principles but also a knowledge of the process of discovery, so that students have an attitude. scientific in knowing the natural surroundings and being able to solve problems that exist in the surroundings. To form students' scientific attitudes, science learning cannot rely on explanations from the teacher alone, but students themselves must carry out learning through experimentation, observation and active experimentation. In the National Education System, Law no. 20 of 2003 concerning the National Education System states that education is a basic and planned effort to create a learning atmosphere and learning process so that students actively develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and the skills

they need, nation and state society. The aim of education itself is so that students can become human beings who believe and are devoted to God Almighty, have noble character, are healthy, knowledgeable, creative, independent and become democratic and responsible citizens. To achieve educational goals, teachers is a very important aspect in the implementation of education. Educators in the educational process play an important role because as we know, educators and students are an inseparable unit.

In the industrial era 4.0 with very rapid technological developments, teachers have to work harder because we currently live side by side with digital technology and 21st century learning skills (McGill & Bax, 2005) at (Jannah & Atmojo, 2022). Currently, the role of teachers has also changed, from being a provider of knowledge, to being a mentor, facilitator, motivator, inspirer, and also a developer of imagination and creativity (Wati & Kamila, 2019). Teachers play an important role in creating meaningful learning, so that students can build their own knowledge and understanding without any misconceptions. Therefore, the limited ability of teachers can be a big obstacle, especially in science subjects, because science content is always updated. Rapid technological advances have also brought about developments in science,

including scientific materials, so science teachers have to innovate (Maulana et al., 2019).

Based on the explanation above, educators or teachers have a very crucial role. In the context of science learning, the readiness of teaching staff greatly influences learning because the difficulties experienced by teachers are a trigger for learning failure in students and give rise to the view that science is a difficult subject. In one of the community learning center in Kuala Lumpur, precisely in Sentul Kuala Lumpur, natural science subjects are subjects that must be studied by students. The Sentul Community Learning Center is the first community learning center established for Indonesian immigrant children. Establishment Community Learning Center (CLC) or what is usually called a 'sanggar bimbingan' for Indonesian migrant children in Sabah and Sarawak is a great opportunity for Indonesian children provided by the Malaysian government. The existence of CLC is a golden opportunity for Indonesian children in Malaysia to receive education on the basis of equality as individuals and also as Indonesian citizens. This is because these children were born to parents whose marriages were not legally valid, or their parents entered Malaysia illegally and had children in Malaysia. The Malaysian Government continues to provide authority to the Indonesian Government to provide and expand access to educational services for Indonesian citizens through the Community Learning Center (CLC) in Sabah and Sarawak. Twenty three community learning center under the coordination of the Kuala Lumpur Indonesian School spread across various corners, conditions in the community learning center also vary greatly due to limited teachers and space (Utami et al., 2023).

Based on observations made by researchers, science subjects at the Sentul community learning center are implemented in grades three to six. This is because class one and class two are focused on calistung, namely Indonesian and mathematics. Furthermore, science subjects are implemented in grades three to six because students in these classes are considered to understand the material more easily. However, the implementation of science learning has many problems, especially for teachers. Educators or teachers have limited science knowledge because teachers have mathematics degrees. Apart from that, there are no learning media and learning resources that support learning. With these problems, the aim of this research is to analyze the problems of science learning in the limited teaching staff in Sentul Community Learning Center.

Based on previous research regarding the analysis of the problems of the science learning process in elementary schools, the difference with research on the problems of science learning in the limited teachers in Sentul Community Learning Center Previous research aimed to describe four parts of the learning process, namely: learning model, learning media, laboratory learning design, and learning facilities. In the research, the problems found were a lack of innovation and variety in the learning process, low student interest and motivation, and student learning support. In the latest research entitled the problems of science learning in the limited teaching staff in Sentul Community Learning Center . This aims to describe the implementation of science learning in Sentul Community Learning Center, and describes the difficulties of teaching staff in implementing science learning in Sentul Community Learning Center.

## METHOD

This research uses a qualitative approach with the type of research being descriptive research. Researchers use this approach and type of research because researchers want to describe the phenomena, social activities, attitudes and thoughts of individuals and groups that researchers find in the field. This research was carried out in Sentul Community Learning Center precisely in Kuala Lumpur. This research was carried out on 26 August – 23 September 2022. The research target or target is an inhibiting factor in the implementation of science learning in Sentul Community Learning Center especially in terms of teaching staff. The subjects of this research were CLC managers, teachers, and students. The research procedure used in this research uses seven qualitative research steps, namely: problem identification, problem definition, determining problem focus, conducting research, processing and interpreting data, generating theory, and reporting research results. The data collection techniques used in this research are observation, interviews and documentation. Furthermore, the data analysis techniques used in this research are data presentation, data reduction, data verification/data interpretation, and drawing conclusions. To collect research data, researchers need research instruments. The research instrument in this study was used to make it easier for researchers to collect data as well as as a research guide. The instruments used are as follows:

### 1. Interview Instrument

Table 1. Interview instrument outline

No.	Indicators	Aspects
1.	Science learning	<ol style="list-style-type: none"> <li>1. Method</li> <li>2. Media</li> <li>3. Resources</li> <li>4. Facilities</li> </ol>
2.	Teacher	<ol style="list-style-type: none"> <li>1. Number of educators</li> </ol>

2. Learning Strategic
3. Teacher difficulties

## 2. Observation instrument

Table 2. Observation instrument outline

No.	Indicators	Aspects
1.	Science learning	<ol style="list-style-type: none"> <li>1. Method</li> <li>2. Media</li> <li>3. Resources</li> <li>4. Facilities</li> </ol>
2.	Teacher	<ol style="list-style-type: none"> <li>1. Number of educators</li> <li>2. Learning Strategic</li> <li>3. Teacher difficulties</li> </ol>
3.	Students	<ol style="list-style-type: none"> <li>1. Number of students</li> <li>2. Students understanding</li> </ol>

## 3. Document instrument

In the documentation instrument, the researcher takes documentation data to complete the observation and

interview instruments. Documentation sheets in the form of photos, videos and sound recordings.

## RESULTS AND DISCUSSION

### Results

Based on the results of interviews with Sentul community learning center managers, the Sentul community learning center has one teacher who teaches 47 students. Of the 47 students, 6 of them are no longer active. 47 students is the total number of students from class I to class 6 who study in one room. The ages of the children range from 6-17 years old.

CLC Sentul teachers teach all subjects alone. The subjects in the community learning center are reading, writing, counting, mathematics, Indonesian, social studies, science, civics and arts. Natural science subjects are implemented in grades three to grade six. The following is the lesson schedule from third to sixth grade.

Table 3. Lesson Schedule

No.	Class	Implementation	Subjects
1.	3	Monday, Tuesday, wednesday Monday, Wednesday, thursday Monday, thursday Friday	Bahasa Indonesia mathematics Natural sciences Art
2.	4,5, 6	Monday, thursday Monday, tuesday Friday	Bahasa Indonesia Mathematics Art

From table 1 it can be seen that the schedule for science subjects in grades three to six is held simultaneously, namely on Tuesdays and Thursdays. Based on interviews with teachers, the science schedule is carried out on the same day due to limited teaching staff. The limitations of the teaching

staff itself are in terms of the shortage of teaching staff, the teaching staff's mastery of science material, facilities and infrastructure in the implementation of science subjects, and the lack of use of technology in the implementation of the subjects.



Figure 1. Science learning process

In figure 1 is a picture of the science learning process. Based on the results of observations, learning from grade one to grade six was carried out in one room. The learning resources

## Discussion

In elementary schools, science education is a learning program that aims to add and develop students' knowledge, attitude skills and scientific values (Sulistriani et al., 2021). Therefore, learning science is very important for students to learn because students are very close to nature. One of the important factors in science learning is the teaching staff or teachers. This is because teachers are facilitators who have the task of teaching, training and guiding. Therefore, teachers must always be prepared before giving instruction to students.

Based on the results of research at the Sentul Community Learning Center Regarding the problems of science in the limited teachers, science learning is carried out every Tuesday and Thursday. The science subject itself is studied by grades three to six, this is because grades one and two focus on studying reading, writing, and counting. Therefore, because grades three to six are considered capable of understanding the material, the community learning center decided to provide subjects in grades three to six. In the implementation of science learning itself, several students in grades three to six still had great difficulty understanding the material. The reason this happened was that some of the students were not yet fluent in reading because most of the students at the Sentul community learning center had never been to school before. So, their class division is adjusted to their age. For example, if one of the students who cannot read is 9 years old, it means they have to enter third grade, but if there is no one semester progress or a sign that the student is fluent in reading, then the student can stay in class. This is what makes the implementation of science subjects more difficult.

Apart from that, the reason science subjects from grades three to six are held on the same day is to make it easier for teachers to teach because only one teacher teaches all students. Sometimes there are special teachers who teach first grade students and students who cannot or cannot read fluently. The

for science subjects are from the old curriculum science package book and sometimes teachers use the internet.

teacher's method of teaching science takes turns, for example the teacher writes the material on the third grade blackboard first, while waiting for the third grade students to finish writing the material on the blackboard, the teacher moves to another class, when one class has finished writing the material on the blackboard, the teacher will explain the material. Thus, there are many misconceptions about science learning because learning is very ineffective and inefficient. One effort to achieve success in the learning process is to apply effective and efficient learning strategies or approaches. Looking at the facts in the field, it is not possible to apply science learning with an effective and efficient strategy. This is due to the lack of hours in science subjects, the lack of teachers who teach, and the absence of supporting learning media.

Seeing the condition of the Sentul community learning center, of course this is a challenge for teachers. Based on the results of interviews and observations with teachers, the limitation of teaching staff, especially in implementing science learning, is the lack of learning resources. Teachers only rely on old editions of science textbooks. In fact, it is possible for teachers to get learning resources from the internet because in the 21st century learning resources can be obtained from anywhere, but the teachers from the Sentul community learning center themselves are not very skilled at using technology. In line with (Muhklis et al., 2023) that science learning needs to connect the concepts studied with technology, teachers as facilitators must be able to innovate, especially by utilizing technology because it not only provides learning resources but can become a learning medium so that students receive learning, which is meaningful so that later there will be no misconceptions.

Based on the results of interviews with teachers, another difficulty that teachers found in teaching science subjects was the lack of facilities and infrastructure, especially interactive learning media in the Sentul community learning center.

Learning media is one of the keys to the success of the learning process. By using learning media, students will build their own knowledge through media created and utilized by teachers in the learning process (Diana et al., 2022). The use of learning media can support the smooth process of science learning at the elementary school level, especially using the help of concrete objects so that students have a good understanding of concepts. The lack of educators or teachers in the Sentul community learning center means that teachers are overwhelmed and do not have time to provide media for science learning. There are no props for trials or experiments. So, there is no learning media that supports the learning process. The teacher at the Sentul community learning center is a mathematics graduate. Therefore, from the start, teachers did not have a foundation in Natural Sciences subjects. Therefore, teachers could only teach using the lecture method without other innovations because the conditions were also very impossible.

## CONCLUSION

Limited teachers is a very crucial thing in a school. Ideally, one teacher teaches at least 20 students and a maximum of 32 students so that the learning objectives can be conveyed well. But in this Sentul community learning center, teachers have to teach 47 students at one time.

Even though science learning at the Sentul community learning center is not yet effective and efficient, considering all the limitations of teaching staff as well as media and infrastructure for science learning, the implementation of learning at the Sentul community learning center is one form of effort made so that students receive education equivalent to formal schools. Based on this, the researcher hopes that future researchers will innovate in science learning, especially in schools that have many limitations.

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