



## Teachers' Challenges in Improving Students' Collaboration Abilities

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### Abstract

*This study identifies the challenges faced by teachers in the learning process at school, which have an impact on the low ability of student cooperation. The research data were obtained using interview techniques, observation and document studies. The collected data were analyzed by reducing data, presenting data, and drawing conclusions. The subjects in this study were elementary school teachers in East Kluet. The results showed that teachers had limited access to information, monotonous learning models, and lack of student involvement were the main factors in the low ability of student cooperation. In addition, the dominance of high-ability students and minimal opportunities for collaboration reduced important social interactions. The lack of integration of local wisdom and supporting facilities also contributed to this problem. These findings emphasize the need for innovation in learning models.*

**Keywords:** Collaboration Abilities, Teachers' Challenges, Sustainable Development Goals

### Abstrak

*Penelitian ini mengidentifikasi tantangan yang dihadapi guru dalam proses pembelajaran di sekolah, yang berdampak pada rendahnya kemampuan kerja sama siswa. Data penelitian diperoleh dengan menggunakan teknik wawancara, observasi dan studi dokumen. Data yang terkumpul dianalisis dengan cara mereduksi data, menyajikan data, dan menarik kesimpulan. Subjek dalam penelitian ini adalah guru sekolah dasar Kluet Timur. Hasil penelitian menunjukkan bahwa guru memiliki akses informasi yang terbatas, model pembelajaran yang monoton, dan kurangnya keterlibatan siswa menjadi faktor utama rendahnya kemampuan kerja sama siswa. Selain itu, dominasi siswa berkemampuan tinggi dan minimnya kesempatan kolaborasi mengurangi interaksi sosial yang penting. Kurangnya integrasi kearifan lokal dan fasilitas yang mendukung juga berkontribusi terhadap masalah ini. Temuan ini menekankan perlunya inovasi model pembelajaran.*

**Kata Kunci:** Kemampuan Kerja Sama, Tantangan Guru, Pembangunan Berkelanjutan

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## Introduction

In 2030, the global population is estimated to reach 8.5 billion people, while Indonesia's population is predicted to reach 297 million people (United Nations, 2019). During this period, Indonesia will experience a demographic bonus, with the proportion of the productive age population reaching 64%. In this context, Indonesia will face the challenge of global competition, which requires a superior generation that is able to compete among the international community and face various challenges of the 21st century. One strategy to increase the competitiveness of the Indonesian nation is through the

development of human resource quality. Education is one of the key efforts that can be taken to achieve this goal (Ministry of Manpower of the Republic of Indonesia, 2019).

The government is committed to implementing various strategies to improve the quality of education in Indonesia. One of the steps taken is the development of the 2013 Curriculum (Untari, 2017) into the Merdeka Curriculum, which emphasizes learning outcomes, achievement of the Pancasila student profile, and the addition of local wisdom that is adjusted to the characteristics of each region. In addition to curriculum development, the quality of education is also greatly influenced by the learning model applied by teachers. Improving students' ability to work together is a positive consequence of implementing the right learning model.

Facing the challenges in the 21st century, society is required to master the development of science and technology, and have various life skills, both soft skills and *hard skills* (Handayani, 2019). One of the most crucial *soft skills* is the ability to collaborate. Sardadevi emphasized that collaboration is an important element in developing social emotional skills (Novi, 2017). Without collaboration, individuals will not be able to meet their needs properly. The more opportunities given to students to work together to complete tasks, the faster they can complete them. Collaborative skills for elementary school students include the ability to interact, help each other, and be responsible in groups (Fauziddin, 2016).

Cooperation has several aspects, such as involving two or more people with an agreement to carry out agreed tasks, having activities carried out together, having goals that are the focus of cooperation, there are time limits (Olfah, 2024), having goals to be achieved, establishing communication when carrying out tasks, having leadership in cooperation management (Hasibuan, 2008), dependence between all parties involved in solving problems, mutual respect and appreciation, avoiding individualistic attitudes in achieving goals (Kusuma, 2018).

The learning process that emphasizes cooperation will make it easier to complete tasks, lighten the burden, speed up results, and foster a spirit of mutual cooperation and an attitude of helping each other among students (Pramudiyanti, 2020). The benefits of cooperation for students include the creation of interaction skills between students and ease in exchanging ideas (Nurhayati, 2019; Pramudiyanti, 2020). With cooperation, students will learn to respect and appreciate the views and abilities of others (Hamdani, 2019).

Collaboration skills in the context of the Sustainable Development Goals (SDGs) support the achievement of SDG 4 (quality education), namely through increasing

interaction and collaboration in the classroom, SDG 10 (reducing inequality), namely through respecting the views and abilities of others and SDG 17 (partnerships for goals), namely effective partnerships require strong collaboration skills.

Based on the previous explanation, research on the challenges of teachers in improving students' cooperation skills in elementary schools is very important to be carried out, especially in remote areas, namely in elementary schools in Klut Timur District. Elementary schools in the area, access to quality education is still limited and teachers face various obstacles in improving students' cooperation skills. This study can identify the challenges faced by teachers in improving student cooperation and offer solutions to improve students' cooperation skills.

This research also contributes to reducing inequality in education, by identifying the challenges faced by teachers and providing recommendations so that every student has the ability to work together. This is certainly very relevant to the SDGs, namely SDG 4 (quality education, SDG 10 (reduced inequalities) and SDG 17 (partnerships for the goals).

There are differences between this study and previous studies, such as the study conducted by Zhang (2024), which is related to the development of an SDGs education model for high school students by combining design thinking and nudge methods to encourage behavioral change. The purpose of Zhang's (2024) study to improve understanding of SDGs among students, of course there are differences with the purpose of this study. Meanwhile, another study conducted by Etikariena (2020) explored the relationship between student empowerment and creative self-efficacy on students' innovative work behavior to support SDGs. The findings show the importance of student empowerment in higher education to increase innovation, while this study highlights the challenges in building student collaboration in elementary schools.

Meanwhile, Alm's (2022) research explores students' awareness and understanding of SDGs in higher education. Meanwhile, Yuan's (2022) research highlights the attention of high school students and the global public to SDGs, as well as the importance of education for sustainable development (ESD). Both studies provide important insights, but with different contexts and objectives, one in primary education and the other in upper secondary education related to SDGs.

Research on teachers' challenges in improving students' collaboration skills in elementary schools is very important because the context and objectives of education at the elementary level are different from those in senior secondary education that have been

studied previously. Elementary school students are at a crucial stage of cognitive and social development, where collaboration and social interaction skills begin to form. This study focuses on identifying and analyzing teachers' challenges in improving students' collaboration skills. Understanding and overcoming these challenges is expected to improve the effectiveness of learning and build a strong foundation for students in collaborating, which is an important skill to support the SDGs in the future.

## **Method**

This study uses a qualitative model with a case study approach to describe the challenges of teachers in improving students' cooperation skills. The subjects of the study consisted of 5 Elementary School teachers in East Kludet, with sampling using a purposive technique. Data were obtained through in-depth interviews with teachers regarding the challenges in improving students' cooperation skills. In addition, data collection techniques also include interviews, direct observation and document studies related to the learning process.

In-depth interviews were conducted with experienced teachers in teaching aimed at exploring the challenges faced by teachers in improving students' collaboration skills. While direct observation in class to see real student interactions and the models used by teachers in facilitating students' collaboration skills. Then document studies were conducted to find out the learning plan and evaluation.

After the data is collected, analysis is carried out using interactive data analysis techniques. This process includes a) data reduction, to filter out irrelevant information; b) data presentation, to organize data in an easy-to-understand format; and c) drawing conclusions, to understand patterns and themes that emerge from the data. The selection of teachers in remote areas takes into account academic qualifications, teaching experience, communication skills, commitment, and the ability to implement learning innovations.

## **Result and Discussion**

This study shows that teachers in East Kludet face difficulties in accessing relevant educational information and because the location of East Kludet Elementary School is far from the center of government access. The teaching model used so far tends to be rigid, only referring to textbooks without considering the needs of students, where many teachers are trapped in monotonous learning routines, following the steps from one book. The learning applied is not in accordance with the characteristics of students, so it is less

effective, and local wisdom and the potential of the local environment are ignored in the education process and hinder the relevance of teaching materials. As a result, students have difficulty linking the knowledge they gain to real problems in everyday life.

Findings from observations at SD Kluet Timur show that teachers pay little attention to student involvement in solving problems, so that students do not have enough opportunities to practice finding new knowledge. Most of the time, teachers focus more on memorizing materials without providing space for students to give meaning to lessons through the integration of learning with the environment, technology, society, and daily habits.

Other observation results show that teachers do not provide opportunities for students to collaborate in solving problems. Activities that encourage students to work together are still very limited. This ability to work together is important as part of problem solving that is carried out collectively to achieve common goals (Jaenudin, 2018). In the context of learning, collaboration can involve two or more students who interact with each other, combining ideas, energy, and opinions to achieve the desired goals (Yulianti, 2016). Thus, the lack of facilities for collaboration can hinder the development of students' social and problem-solving skills. Therefore, it is important for teachers to create more opportunities for students to collaborate in the learning process.

Teachers pay little attention to the involvement of all students in group activities, and assessment of students' cooperative skills has not been carried out. The group learning process is dominated by students with high abilities, while students with low abilities are not much involved in problem solving. In addition, some students show resistance to diverse groups and prefer to work with friends they like. Interaction between students has also not developed well, where not all students are interested in participating in completing group assignments, tending to complete assignments individually without discussion. During group presentations, students refuse each other to appear.

Further observations indicated that students did not respect each other's differences of opinion, which made them less interested in engaging and contributing to the group. Students who were more knowledgeable also did not show initiative to help friends who were having difficulties. Therefore, a more inclusive approach is needed to increase collaboration and interaction among students.

During the problem-solving process in groups, it was seen that not all students showed responsibility and helped each other in completing the tasks given. The lack of

concern and mutual respect between students became clear. Low participation between students is one of the obstacles in building effective cooperation. In fact, learning that emphasizes cooperation can have a positive impact on student learning outcomes (Prasetyo, 2019; Farizky, 2018).

Kluet Timur Elementary School teachers have tried to improve students' cooperation skills through the implementation of *the Science Environment Technology and Society* (SETS) learning model, but it has not provided significant changes and improvements are still needed. SETS learning is learning that integrates components of knowledge, environment, technology, and society (Son, 2017; Farda, 2016). The learning process still focuses on the final results and the SETS learning stages are not implemented specifically and the SETS components are delivered separately.

The SETS learning model has steps, namely a) observing phenomena that exist in everyday life; b) discussing together the phenomena that have been identified; c) proposing solutions to solve problems; d) formulating conclusions; and e) taking action based on agreed solutions. The application of the SETS learning model allows students to learn independently, prepare themselves in obtaining new materials to solve problems, reduce students' dependence on teachers, and make it easier for students to master the required competencies (Aprilia, 2018).

The application of the SETS learning model is very relevant to the SDGs, especially SDG 4 which emphasizes quality education. With steps that encourage students to observe, discuss, and formulate solutions to real phenomena, this model develops critical and creative thinking skills that are essential in facing global challenges. In addition, this approach increases students' independence in learning, reduces dependence on teachers, and prepares them to actively contribute to society. Thus, the SETS model not only improves academic understanding but also builds the competencies needed to achieve sustainable development goals.

The application of the SETS learning model also contributes to the development of student character and helps overcome social problems faced by students in everyday life (Kumar, 2017). In addition, the application of the SETS learning model is able to improve science process skills, science literacy, and is very relevant for use in developing student character (Yıldırım, 2016) and is very necessary for the development of teaching materials in the 21st century (Takebayashi, 2018). The SETS model is also known as a model that is able to improve students' cooperation skills.

Then the learning steps that are applied have not been adjusted to the characteristics of students in remote areas. Teachers improve cooperation skills so far only by verbal invitations, motivating at the end of learning, watching videos, asking questions and showing some pictures on the board. This is due to the low ability teachers in managing the class (Helsa, 2017) and have not been able to manage the time available (Mislinawati, 2018).

Teachers have not mastered the SETS learning stages, so they have difficulty in conveying the basic concepts of the material optimally. This has an impact on students' difficulty in understanding the material being taught. The teaching materials prepared by teachers also do not show any integration of aspects of science, environment, technology, society, and local wisdom. Teachers said that so far they have never linked the SETS learning process with local wisdom, so that learning takes place separately between the material and the students' daily lives.

The local wisdom in question is the condition or atmosphere of the environment where students live and are raised in a community group (Anggraeni, 2018). Therefore, it is important for teachers to integrate local wisdom in learning so that students can better understand the relevance of the material to everyday life. From several of these findings, they are explained in detail in the following table:

**Table 1. Challenges in the Teaching and Learning Process in Schools**

Challenge	Description
Access to Information	Teachers have difficulty accessing relevant educational information due to the location being far from the center of government.
Teaching Model	Teaching tends to only refer to textbooks without considering student needs, so that learning is monotonous.
Lack of Student Engagement	Teachers pay less attention to student involvement in solving problems and focus more on memorizing material.
Lack of Collaboration Opportunities	Activities that encourage students to work together are very limited, hindering the development of social skills.
Dominance of High Ability Students	The group learning process is dominated by more capable students, while students with lower abilities are neglected.
Rejection of Diverse Groups	Students tend to choose group mates, reducing interaction and collaboration between students.
Lack of Integration of Local Wisdom	Learning has not yet linked local wisdom, so students find it difficult to understand the relevance of the material to everyday life.
Limited Facilities for Collaboration	Facilities that do not support collaboration hinder the development of social skills and problem solving.

Challenge	Description
Teacher Ability in Managing Class	Teachers have not mastered the SETS learning stages, resulting in difficulties in delivering material effectively.

Based on the facts that have been presented, it can be concluded that a learning model is needed that is appropriate to student characteristics and local wisdom as an effort to improve students' collaboration skills. As an effort to fulfill the required learning model is to develop a SETS learning model based on local wisdom. Learning based on local wisdom can increase students' enthusiasm in learning (Ekowati, 2018) and is proven to be more effective than the expository learning model (Wijyanthi, 2014; Armini, 2013), and is superior to the *Problem Based Learning model* (Rahayuni, 2016).

The SETS learning model based on local wisdom has stages that are in accordance with the characteristics of elementary school students, so that learning objectives can be achieved properly. Character (Martini, 2018), critical thinking skills (Sari, 2018), and student understanding can be strengthened through the application of the SETS learning model (Akcaay, 2015). The developed model needs to be adjusted to the characteristics of students at SD Kluet Timur, who live far from the use of technology, and the learning process rarely integrates science, environment, technology, and society. In addition, the family background of students who mostly work as farmers and earn below the provincial minimum wage is also a consideration in developing the learning model.

SETS learning based on local wisdom is a new innovation for elementary school students, so that students can be facilitated to work together in taking appropriate actions and problem solving. The SETS learning model based on local wisdom can be an effective alternative to improve cooperation skills. The findings of this study have significant relevance to the achievement of SDGs, especially SDG 4 which emphasizes quality education. Challenges such as limited access to information, monotonous learning models, and lack of student engagement can hinder effective learning processes, impacting the quality of education received by students. By understanding and addressing these challenges, teachers can create a more inclusive and responsive learning environment to students' needs and can be an important step in achieving quality education.

In addition, collaboration skills are the foundation for innovation and problem solving, which are essential to achieving the broader SDGs. By increasing student interaction and encouraging collaboration, students will be better prepared to face future global challenges. Integrating local wisdom into learning also contributes to education, helping students

understand the relationship between subject matter and their daily lives. This not only enhances students' understanding of local issues but also builds awareness of their responsibilities to the environment and society.

Furthermore, improving teachers' ability to manage classes and implement effective learning models will strengthen the quality of education provided to students. By addressing these challenges, teachers can create a generation that is not only knowledgeable, but also able to collaborate and innovate, thus supporting the achievement of the SDGs as a whole.

The practical implications of this research for education policy and SDGs are significant, namely the development of learning models that are relevant to local contexts, such as the integration of science, environment, technology, and society, must be a priority to ensure applicable learning for Kluet Timur Elementary School students.

## Conclusion

The challenges of teachers in the learning process to improve students' collaboration skills are related to the difficulty of teachers in accessing information, monotonous learning models, and lack of student involvement. Limited opportunities for collaboration and the dominance of high-ability students also hinder interaction. In addition, minimal integration of local wisdom makes it difficult for students to understand the relevance of the material. Inadequate facilities and low teacher ability in managing classes. Therefore, improvements are needed in learning models, increased access to information, and development of learning facilities.

Recommendations to improve students' cooperation skills in elementary schools include the application of collaborative learning models, developing learning models integrated with local wisdom. Further research that is appropriate to be carried out is the development of SETS learning models integrated with local wisdom.

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