# Optimizing the Role of Teachers as Facilitators in the Use of Technology-Based Learning Media in Elementary Schools

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#### **ABSTRACT**

The application of technology in learning in elementary schools must also be balanced with good supervision so that the use of the media runs optimally. Teachers need to ensure that students use technology correctly and do not misuse it. The purpose of this study is to determine the optimization of the role of teachers as facilitators in the use of technology-based learning media at Elementary School 2 Kaobula. This study is qualitative descriptive, based on the results of field research and uses a field research methodology. Semantic approach research is a type of research. In the use of technology-based learning media through semantic methods, so that the competence and talent of researchers to reveal a subjective event and choose informants in accordance with applicable provisions and requirements determine the source of data for research, so that the data needed by researchers is truly in accordance with the nature or facts that exist. The results of this study indicate that the use of technology-based learning media at Elementary School 2 Kaobula has had a significant positive impact on the learning process. With the role of teachers as effective facilitators, the use of technology can create an innovative and interesting learning atmosphere, as well as increase student involvement and motivation.

**Keywords:** Role of Teacher, Facilitator, Learning Media, Technology

#### 1. Introduction

Optimizing the role of teachers as facilitators is very important in improving the quality of learning in this modern era. Teachers no longer act as the only source of knowledge, but as companions who help students in the learning process. By facilitating an interactive and collaborative learning environment, teachers can help students develop critical, creative, and independent thinking skills. This approach places students at the center of learning, giving them the opportunity to explore and develop abilities according to their interests and talents. In this context, teachers need to master various learning methods and technologies that support their role as facilitators (Ningrum & Suryani, 2022). The use of educational technology, such as e-learning platforms and collaborative applications, allows teachers to create more flexible and dynamic learning spaces (Jannati et al, 2023) (Vidyastuti et al, 2018) (Wahyuni, 2022). Teachers must be able to design challenging, yet fun learning activities, and encourage active student participation (Mansir & Purnomo, 2020). In addition, teachers also need to provide constructive feedback so that students can continue to improve and develop their abilities.

Optimizing the role of teachers as facilitators also involves the ability to listen and understand the individual needs of each student (Humairah, & Safutri, 2023). Teachers must be sensitive to the differences in learning styles, backgrounds, and abilities of each student so that learning can be accessed fairly and inclusively (Fadhilah et al, 2021). By understanding the needs of each student, teachers can provide appropriate support and create a conducive learning atmosphere for all learners (Tjhin, 2022). This will increase student learning motivation and

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strengthen positive relationships between teachers and students. The role of teachers as facilitators is key to creating relevant and sustainable learning (Rahmawati et al, 2022). Teachers must continue to develop themselves through training and reflection on their teaching practices, so that they can continue to adjust learning methods to developments in the era and student needs (Al Hawa, 2024). Thus, optimizing the role of teachers as facilitators not only has an impact on student learning outcomes, but also contributes to the development of a better education system that is responsive to change.

The role of teachers in using technology-based learning media in elementary schools is very important in increasing the effectiveness of the teaching and learning process (Lie et al, 2022). In today's digital era, technology provides opportunities for teachers to deliver material in a more interesting and interactive way (Sentriyo et al, 2023). Teachers in elementary schools can utilize various technological media, such as educational applications, learning videos, and interactive presentations, to help students understand the concepts being taught (Asmara et al, 2023) (Ritonga, 2021) (Bonorden & Papenbrock, 2022). Thus, technology can enrich students' learning experiences and make learning more enjoyable and easier to understand (Sudarsana et al. 2020). However, the use of technology-based learning media requires special competencies from teachers (Salsabila et al, 2020). Teachers must understand how various technological devices and applications work that are appropriate to the learning needs in elementary schools (Belland, 2019). In addition, teachers also need to ensure that the media used is in line with learning objectives and in accordance with the level of student development. By understanding how to integrate technology into lesson plans, teachers can create a learning environment that is more modern and relevant to the demands of the times (Akram et al, 2022).

The application of technology in learning in elementary schools must also be balanced with good supervision so that the use of the media runs optimally (Laili et al, 2022). Teachers need to ensure that students use technology correctly and do not misuse it. In addition, teachers must also continue to pay attention to social interactions and the development of students' motor skills which are very important at elementary school age (Farisatma, 2023). Therefore, technology should be seen as a learning support tool, not as a substitute for direct interaction between teachers and students. Teachers as facilitators in the use of technology-based media must continue to update their knowledge and skills (Lu'Luilmaknun et al, 2021). Taking technology training and sharing experiences with fellow teachers can help improve their ability to utilize technology for Education (Karim et al, 2023). With skills that continue to develop, teachers can ensure that technology-based learning media in elementary schools really provide benefits to the learning process, creating students who are smarter, more creative, and ready to face future challenges (Meiryani et al, 2021).

Optimizing the role of teachers as facilitators in the use of technology-based learning media at State Elementary School 2 Kaobula faces gaps in terms of technological understanding and infrastructure readiness. Many teachers are still unfamiliar with modern technological devices that are relevant to learning needs. In addition, infrastructure such as uneven internet access and lack of supporting devices in schools are major obstacles in the implementation of technology-based learning media. This makes it difficult for teachers to fully utilize technology in the learning process, so that students do not get maximum benefits from interactive and innovative learning media. Another problem is the limited training provided to teachers in improving their technological skills. Although technology continues to

develop, training for teachers is not always updated or held regularly, leaving them behind in utilizing new tools.

To address the gaps and problems in optimizing the role of teachers as facilitators in the use of technology-based learning media at State Elementary School 2 Kaobula, a holistic approach is needed that includes ongoing training for teachers, infrastructure improvements, and adequate technical support. Schools can work with the government or related institutions to provide regular training that focuses on improving teachers' technology skills, as well as ensuring that facilities such as internet access and learning devices are available and easily accessible. In addition, developing a learning community between teachers who share experiences and best practices in the use of technology can also help improve their confidence and skills. Thus, teachers can be more effective in facilitating interactive and relevant technology-based learning for students.

#### 2. Methods

This research is qualitative descriptive, based on the results of field research and using a field research type research methodology (Jeevan et al, 2022) (Haryono, 2023). Relating to the topic discussed based on events that actually occurred in elementary schools in Baubau City regarding the role of teachers as facilitators in the use of technology-based learning media in Elementary Schools. Semantic approach research is a type of research. In the use of technology-based learning media through semantic methods, so that the competence and talent of researchers to reveal a subjective event and select informants according to applicable provisions and requirements determine the data source for research, so that the data needed by researchers is truly in accordance with the nature or facts that exist (Fitri et al, 2023) (Khairunnas & Desfandi, 2020). The researcher's efforts to reveal as many subjective events as possible are the basis for determining the data source in this study. Thus, data informants are selected through in-depth knowledge and understanding competencies during interviews, while the data sources needed in this study are information obtained from sources or informants.

The data techniques used in this study are 1) Interviews are direct observation techniques in research through direct questions to respondents, interviews are a data collection tool to obtain direct information. The interviews here are aimed at teachers of Elementary School 2 Kaobula; 2) Recording techniques are carried out by recording the results of interviews with teachers in Baubau City who are directly involved in the development of Video-Based Learning Curriculum at Elementary School 2 Kaobula; 3) Note-taking techniques are carried out by recording important data related to relevance analysis. Researchers carry out note-taking techniques after recording and listening and then rewriting the results of the interview; and 4) Documentation is a method of reviewing and processing data from previously existing documents and supporting research data. "Documentation is a method used to trace history". The documentation referred to here is documenting all activities carried out by the research object.

## 3. Findings and Discussions

Optimizing the role of teachers as facilitators in the use of technology-based learning media in elementary schools is highly dependent on improving teachers' technological competence, the availability of adequate infrastructure, and the support of relevant school policies. Effective teachers in this role are able to utilize various technological media to create interactive learning, encourage student engagement, and shift the focus from conventional teaching methods to a more

collaborative and independent approach. However, challenges such as limited access to technology in remote areas need to be addressed to ensure successful implementation in various educational contexts.

## 3.1 Findings

Teachers must actively follow the development of educational technology and be able to integrate it with learning strategies that are in accordance with the curriculum. Research also shows that collaboration between teachers, students, and schools can strengthen learning outcomes with technology, because all parties can share knowledge and experiences. Thus, the role of teachers as facilitators is not only about mastering technology, but also about creating an adaptive, inclusive, and student-centered learning environment. The results of this study are as follows:

# **Teacher Skills Improvement**

Improving teacher skills in the use of technology-based learning media at Kaobula 2 Elementary School is an important step in improving the quality of education in the digital era. Along with the rapid development of technology, teachers are required to integrate technology-based media into the learning process to make it more interesting and relevant for students. At Kaobula 2 Elementary School, this effort can be started by providing training and guidance to teachers in utilizing technology such as computers, projectors, and the internet to create interactive learning experiences. The training provided to teachers at Kaobula 2 Elementary School should include a basic understanding of the use of hardware and software that supports learning. Teachers need to be familiar with various digital learning platforms, such as Google Classroom or other interactive learning applications, to facilitate distance or face-to-face learning. In addition, teachers must also be taught how to design technology-based learning media to suit the curriculum and student needs.

Table 1. Teacher Interviews on Teacher Skills

Interview Questions	Teacher's Answer
What is the main motivation of Kaobula 2 Public Elementary School in improving teacher skills in using technology-based learning media?	Our main motivation is to improve the quality of learning and ensure that students get a more interactive and relevant learning experience with the development of the times. By integrating technology, we hope to enrich the learning materials and make the teaching and learning process more interesting and effective.
What types of technology-based learning media are currently used at Kaobula 2 Public Elementary School?	In our school, we use various technology-based learning media, such as educational applications, learning videos, and interactive presentation tools. We also utilize e-learning platforms for online assignments and quizzes, as well as game-based learning applications to increase student motivation.
How is the training process carried out for teachers so that they can utilize technology in teaching?	POur training processes involve regular workshops and training sessions conducted by educational technology experts. We also conduct internal training by bringing in experienced resource persons. In addition, we provide resources and technical support so that teachers can continue to learn and develop their skills independently.

One of the biggest challenges is limited time and access to technology devices. Some teachers also have difficulty understanding and operating new What are the biggest challenges applications. To address this, we have provided teachers face in adopting additional training and technical support, and technology-based learning media ensured that each classroom is equipped with and how to solve them? adequate technology devices. We also encourage teachers to share experiences and tips with their colleagues. We have seen an increase in student motivation and engagement in learning. With interactive learning What impacts have been seen media, students are more active and enthusiastic in from the use of technology-based following lessons. In addition, we also noted an learning media on student increase in understanding the material and better learning outcomes at Kaobula 2 learning outcomes, because technology helps Public Elementary School? present the material in a more interesting and easyto-understand way.

The use of technology in learning at Kaobula 2 Elementary School will help teachers present materials in a more varied and dynamic way. For example, learning videos, animations, or digital simulations can be used to explain abstract and difficult-to-understand concepts conventionally. With technology-based learning media, students will be more motivated and interested in learning because of the attractive visualizations and more intensive interactions. In addition, improving teachers' technological skills can also support more effective learning evaluations. Teachers can use various applications and software to create questions, collect assignments, and analyze student learning outcomes quickly and efficiently. At Elementary School 2 Kaobula, the use of this technology will provide opportunities for teachers to track student development more accurately, so that appropriate interventions can be made if there are students who are left behind.

## Strengthening the Role of Teachers as Facilitators

Teachers must have the skills to select and implement learning media that are appropriate to the curriculum and students' needs. In Sekolah Dasar Negeri 2 Kaobula, strengthening the role of teachers as facilitators involves providing effective training and access to relevant technology resources. This includes workshops, seminars, and training programs designed to update teachers' knowledge and skills in educational technology. As facilitators, teachers also need to develop strategies to evaluate the effectiveness of the learning media used. This involves direct observation of the use of technology in the classroom, as well as obtaining feedback from students on how the media affects their learning. With this approach, teachers can make necessary adjustments to ensure that technology is used in the most productive way. Effective communication between teachers, students, and parents is also an important aspect in strengthening the role of teachers as facilitators. Teachers must explain to students and parents how technology is used in learning and how they can support the use of technology at home. This will help create a consistent learning environment and support student development.

**Table 2**. Teacher Interviews on Strengthening the Role of Teachers as Facilitators

Interview Questions	Teacher's Answer
What is meant by the role of the teacher as a facilitator in the	The role of the teacher as a facilitator means that the teacher is not only a transmitter of material, but also as a supporter and guide for students in using

context of using technology- based learning media?	technology-based learning media. Teachers help students understand how to use technology to learn effectively, provide guidance in the use of digital tools, and create a learning environment that supports technology exploration.
How is technology used in the learning process at Kaobula 2 Public Elementary School, and what benefits are seen from its use?	Technology is used through various media such as computers, tablets, and interactive learning applications at Kaobula 2 Public Elementary School. The benefits seen from its use include increased student motivation, access to more varied learning resources, and ease of accessing learning materials that can be tailored to individual student needs.
What challenges do teachers face in implementing technology-based learning media in the classroom, and how do they overcome them?	Common challenges include limited access to devices, lack of training for teachers, and students' inability to use technology. To address this, teachers need to receive adequate training, schools need to provide sufficient devices, and teachers need to provide intensive guidance to students on how to use the technology.
How do you ensure that the use of technology-based learning media can improve the quality of learning in the classroom?	To ensure the quality of learning improves, I conduct regular evaluations of technology use, monitor student progress, and adjust teaching methods based on student feedback and evaluation results. In addition, I also involve students in choosing and using technology that suits their learning styles.
What steps are taken to involve parents in the process of using technology in their children's learning?	We hold meetings with parents to introduce the technology used in school and how it can support learning at home. We also provide guidance and resources to parents to help them understand how to use technology and how to support their children in technology-based learning.

Strengthening the role of teachers as facilitators also includes the ability to innovate and explore the latest technologies that can support learning. By following the latest technological developments, teachers can continue to update their teaching methods and provide more relevant and interesting learning experiences for students. To achieve optimal results in strengthening the role of teachers as facilitators, collaboration between all related parties, including the principal, teachers, students, and parents, is very important. By working together, State Elementary School 2 Kaobula can create an innovative and adaptive educational environment, where technology is used effectively to support the achievement of learning goals.

## Student Response and Active Engagement

The use of technology in learning also encourages students to collaborate more with their peers. Some learning applications allow students to work in groups online, share ideas, and complete assignments together. This helps improve students' social skills and collaboration abilities, which are essential parts of the learning process. However, not all students adapt well to the use of technology immediately. Some may find it difficult to use new tools or experience technical glitches that hinder the learning process. To address this issue, teachers at Sekolah Dasar Negeri 2 Kaobula proactively provide additional training and support to students so that they can use technology more effectively. In some cases, the use of technology also helps teachers identify individual student learning needs. By

utilizing applications that can track student learning progress, teachers can see which areas need more attention and adjust their teaching methods. This allows for a more personalized approach to learning, which has the potential to improve student learning outcomes. In addition to its benefits, the use of technology in learning also requires attention to the challenges and obstacles that may arise. The availability of adequate devices and stable internet access are important factors that need to be ensured so that all students can make maximum use of technology-based learning media. Kaobula 2 Public Elementary School continues to work to ensure that all students have equal access to technology.

**Table 3.** Teacher Interviews on Student Responses and Active Involvement

Interview Questions	Teacher's Answer
How do students respond to the use of technology-based learning media in grade IV?	Students' responses were generally positive. They seemed more enthusiastic and interested when the material was taught using technology such as tablets or laptops. Technology makes lessons more interactive and interesting, so students are more motivated to learn and actively participate in class activities.
What technology-based learning media is most effective in increasing student engagement in grade IV?	The most effective technology-based learning media are interactive learning applications and learning videos. These applications allow students to practice independently and receive immediate feedback, while learning videos provide clear visualizations and make it easier to understand difficult concepts.
Are there any challenges or difficulties faced in using technology-based learning media, and how to overcome them?	One of the main challenges is limited access and skills to technology among students. Some students may not be familiar with technology devices or may not have adequate access at home. To address this issue, we provide short trainings on the use of technology and ensure that all students have the opportunity to use devices at school.
How do you assess the influence of technology-based learning media on students' academic achievement?	The impact is quite positive. Technology-based learning media helps students understand the material better and improve their practical skills. I have seen improvements in their exam and assignment results, as well as an increase in their interest in the subject.
What strategies do you use to ensure all students are actively engaged when using technology- based learning media?	Some of the strategies I use include organizing learning sessions that involve group interaction, giving assignments that require collaboration, and using gamification to make learning more engaging. I also regularly monitor student progress and provide additional assistance to those who need it to ensure that all students are engaged and benefiting from the technology being used.

The use of technology-based learning media at Kaobula 2 Elementary School also shows a positive impact in terms of inclusion and accessibility of education. Technology allows teachers to provide learning materials in various formats, such as text, audio, and video, which can be accessed by students with various learning needs. For example, students with hearing impairments can benefit from materials in text or video formats with subtitles, while students who need additional explanations can access learning videos repeatedly. Thus, technology not only increases active engagement but also ensures that all students, regardless of their

special needs, have equal access to quality educational materials. Overall, the use of technology-based learning media at Kaobula 2 Elementary School has shown a positive impact on student active engagement. With the various advantages it offers, technology is a very useful tool in supporting the teaching and learning process. As long as these challenges can be overcome properly, technology will continue to be an important component of education at this school.

#### 3.2 Discussions

## **Teacher Skills Improvement**

The use of technology-based learning media also allows for collaborative learning between students and teachers. By utilizing online discussion or forum applications, students can share opinions, ask questions, or discuss the material being taught. Teachers at Elementary School 2 Kaobula can act as facilitators who direct discussions and ensure that each student actively participates. Improving teacher skills in using technology-based media at Elementary School 2 Kaobula will have a significant positive impact on the quality of learning. With the support of technology, teachers will be better able to create an innovative and interesting learning atmosphere, so that students can more easily understand the material and improve their academic achievement. In addition, to ensure the sustainability of improving teacher skills in using technology-based learning media, Elementary School 2 Kaobula needs to build a learning culture that supports the development of digital competencies. Support from the principal, provision of adequate technology infrastructure, and easy access to digital resources will be important factors in maintaining the enthusiasm of teachers to continue learning and innovating. The development of a learning community between teachers, such as discussion groups or regular workshops, can also help teachers share experiences and solutions related to the use of technology in learning, so that the teaching process at Elementary School 2 Kaobula is increasingly effective and adaptive to changes in the times.

#### Strengthening the Role of Teachers as Facilitators

In today's digital era, the use of technology-based learning media is very important in improving the quality of education. At Kaobula 2 Elementary School, strengthening the role of teachers as facilitators in the application of this technology is crucial to ensure that students can utilize technology optimally. Teachers not only function as teachers, but also as guides who help students integrate technology into their learning process. The role of teachers as facilitators includes the ability to adapt various technology-based learning media, such as educational software, interactive applications, and other digital resources. By using this media, teachers can create a more interesting and dynamic learning experience, which can increase student motivation and engagement in learning. Therefore, adequate training and support for teachers in the use of technology is very important. In addition, strengthening the role of teachers also involves support in terms of solving technical problems that may arise during the use of technology. Teachers must be prepared to handle technical constraints and provide effective solutions so that the teaching and learning process is not disrupted. Adequate technical support from the school and technology providers is also an important part of the overall strategy.

#### Student Response and Active Engagement

The use of technology-based learning media has become an important strategy to increase student engagement in the teaching and learning process at Kaobula 2 Elementary School. Media such as tablets, computers, and interactive learning applications have been effectively implemented by teachers to make the learning process more interesting and dynamic. With this technology, students not only become more active, but also more motivated to engage in daily learning activities. Student responses to the use of technology-based learning media are generally very positive. Many students reported that they felt more involved and excited when lessons were presented through this media. For example, the use of learning videos and animations makes complex subject matter easier to understand. This shows that technology can clarify abstract concepts and improve students' understanding of the material being taught. In addition, students' active involvement in the learning process also increases when they are given the opportunity to use technology directly. In some activities, students are given assignments to create projects using design applications or multimedia programs. These activities not only train their technological skills, but also encourage them to think creatively and critically in completing tasks.

#### 4. Conclusion

The use of technology-based learning media in Kaobula 2 Elementary School has had a significant positive impact on the learning process. With the role of teachers as effective facilitators, the use of technology can create an innovative and interesting learning atmosphere, as well as increase student engagement and motivation. Adequate support in the form of teacher training, technology infrastructure, and technical problem solving are essential for the successful implementation of this technology. Students' positive responses to the use of technology-based learning media indicate that technology can clarify subject matter and improve their understanding and skills, thereby supporting better quality education in schools.

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