



# Analysis The Effect of Teaching Sources & Media on The Learning Effectiveness of Grade I Students at Karang Sari 2 Elementary School, Blitar City

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## Abstract

In today's educational landscape, teachers are expected to creatively utilize learning resources, media, and technology to create engaging and effective learning experiences—especially at the elementary level. This study aims to analyze the effectiveness of learning resources, media, and technology used in Grade I at Karang Sari 2 Elementary School. Employing a qualitative approach, data were collected through observations and interviews with teachers and classroom activities. Findings reveal that teachers use a variety of resources, including teaching modules, textbooks, PowerPoint, educational videos, and student worksheets (LKPD). Students responded positively to these media, as shown by their increased engagement and enthusiasm in learning. Nevertheless, some challenges arose, such as time management in non-digital media usage and students' limited ability to use digital tools. Teachers addressed these challenges through self-directed learning and the incorporation of real-world experiences in teaching. This study highlights that the effective integration of diverse learning tools, aligned with student characteristics, significantly enhances the learning process. The study recommends ongoing professional development to support teachers' creativity and media use for meaningful classroom learning.

**Keywords:** educational technology; instructional media; learning effectiveness, learning resources; elementary education

## 1. Introduction

Technology has transformed the way we learn today, further enhanced by the curriculum that supports innovation in the teaching and learning process in schools. The digital era offers many conveniences, including flexible learning resources that can be accessed anywhere, by anyone, and at any time. The rapid flow of information has rendered conventional methods of teaching, whereas teachers serve as lecturers, ineffective. Current technological development, teachers now serve as facilitators and learning partners for students. Gradually, students will explore things around them independently through the learning resources they find.

The role of teachers as facilitators is expected to adapt and utilize technology as a learning resource and medium to create interactive and engaging learning. The availability of media makes the information teachers become easier. However, there are some things to consider: a teacher's ability in using the learning resources and media. Errors in the use of resources, media and technology in learning will result in the lack of clear information delivery. Therefore, a specific understanding of the use of resources, media, and learning technology in the classroom learning process is needed to accommodate student characteristics.

In this regard, an observation was conducted at Karang Sari 2 Elementary School to determine the effectiveness of the use of learning resources, media, and technology in the learning process at the school. Through the results of this observation, it is hoped that a concrete picture can be obtained regarding the use of media and technology as supporting tools in improving the quality of learning at Karang Sari 2 Elementary School. With this background, the purpose of this observation is to determine the effectiveness of the use of learning resources, learning media, and technology in learning at Karang Sari 2 Elementary School. This observation is useful for the author to broaden insight and provide direct experience on how learning media is used in elementary schools. In addition, this observation will provide knowledge on selecting

appropriate learning media according to the existing student phase. In addition, the existing findings will add references for related parties in developing related policies or training programs.

## 2. Method

The research method is a qualitative method. Data collection techniques using qualitative methods are carried out through interviews and observations (Alaslan et al., 2023). Qualitative research is descriptive and tends to use analysis. Qualitative research is exploratory in nature (Wekke, 2019). According to Sukmadinata (2005), the basis of qualitative research is constructivism, which assumes that reality is multidimensional and interactive in an exchange of social experiences interpreted by each individual.

Field data was obtained through observation, the object of observation was the condition of class 1 at Karangsari 2 Elementary School during learning activities at school. Meanwhile, the resource person provided the necessary information. researcher is a first-grade teacher at Karangsari 2 Elementary School. The instrument used was an interview, a dialogue used by researchers to assess a person's condition.

## 3. Results and Discussion

### 3.1 Result

#### Learning Resources

The learning resources used in the observation class were textbooks for the Indonesian language subject: "Aku Bisa!" Jakarta: Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia. This observation focused on the learning resources used. inside class, suitability of learning resources to the curriculum, availability of learning resources, and obstacles in obtaining learning resources.

*Table 1. observation result of learning resources*

No.	Observed aspect	Observation findings
1	Availability of Learning Resources	As teaching materials, teachers use learning resources in the form of teaching modules and printed books published by the Indonesian Ministry of Education and Culture in the learning process. Learning takes place in the classroom, where there are letters of the alphabet on the wall.
2	Compatibility of Learning Resources with the Curriculum	The teacher uses the teaching module as a learning model, in which the learning achievements are written and learning objectives.
3	Obstacle in obtaining learning resources	Learning Resources in the classroom has been sufficient, only the condition of the textbooks is not good, such as torn printed books. Besides that, teachers usually invite students to study outside the environment as a means of getting to know the environment

*Source: Primary Research Data*

#### Learning Media and Its Use

##### Observation results

Observations of learning media and their use at Karangsari 2 Elementary School were conducted in a single meeting to directly observe the application of learning media in teaching and learning activities. These observations focused on the availability of learning media, teacher use of media, student responses to learning media, student interaction with media during the learning process, and obstacles encountered in using learning media.

*Table 2. Observation Result of Learning Media And Its Use*

No.	Observed aspect	Observation finding
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1	Media Availability Learning	In learning, teachers have provided various media learning, both non-digital learning media and digital learning media.
2	Use of media learning by the teacher	Teachers use PowerPoint to present learning materials and non-digital learning media in the form of LKPD to help students practice regarding material studied.
3	Student responses to learning media	Students are more enthusiastic when learning using engaging learning media than when learning without it. They can be more active and creative in their learning process.
4	Interaction with learning media	Through the LKPD distributed by the teacher, each student can interact directly and actively using the learning media provided.
5	Obstacle in media use	The obstacle found in the use of learning media is the allocation of appropriate time in the use of non-digital media in the form of LKPD.

Source: Primary Research Data

Table 2 shows that the use of learning media in grade 1 of Karang Sari 2 Elementary School has been quite successful, both digital and non-digital. The school already has facilities such as projectors, allowing teachers to integrate digital media into their teaching, particularly by using PowerPoint to deliver learning materials in a more enjoyable way for students.

Students generally respond positively to learning that utilizes learning media, as evidenced by increased interest and engagement in class. However, when using non-digital learning media, such as worksheets (LKPD), students who are too focused on completing their assignments forget the teacher's time limit and, if they finish early, disrupt their peers or play games.

#### Interview results

Table 3. Interview Result of Learning Media And Its Use

No.	Observed aspect	Observation findings
1	What kind of media is often used?	Non-digital media such as LKPD is often used in learning.
2	How do the teachers choose the appropriate learning media?	The way to choose appropriate learning media is to pay attention to the students' ability levels and the material to be learned. Learning media must not deviate from or be inappropriate to the material being taught so that students do not become more confused.
3	To increase student understanding, how effective learning media is?	Very effective, because by using media in learning, students can interact with teacher and anything else
4	What kind of obstacles that happen to the teacher when using learning media?	A common obstacle in using learning media is that students spend too much time in class, or when it gets late in the day. Even when using learning media, students will play alone and make noise because they're

		bored. That's because they are still in 1st grade of elementary school, and many students are less able to learn using media such as Quizziz and similar.
5	How did teacher overcome its obstacles?	To overcome this, teachers will invite students to leave the classroom and study outside the classroom by using concrete media. In addition, for assignments eachers choose to use easier LKPD used by students.
6	Are there any inovation or new strategy in learning media?	One of the new strategies is to use learning videos from YouTube so that students don't get bored easily during learning and also to occasionally invite students to participate.learn to use the things around them
7	What are your hope on learning media development at the school?	Hopefully teachers at school can be more creative in presenting learning media and can be more innovative.again.
8	What can be able to do for the school, in the way increasing learningg quality from better media?	Schools can hold training, outreach and seminars for teachers.

*Source: Primary Research Data*

Interviews revealed that teachers have a positive view of the use of instructional media in the learning process. They believe that learning media is very effective and helps explain difficult material more easily and engagingly, while also helping students understand what they are learning.learn. To choose appropriate learning media, you can pay attention to the students' ability level and also pay attention to the material to be taught.studiedHowever, there are still challenges faced by teachers in learning, such as students who get bored easily and students' lack of ability to use digital media such as Quizizz.

Apart from that, the first grade teacher at Karang Sari 2 Elementary School himself hopes that the teachers at Karang Sari 2 Elementary School will be more creative and innovative learning media. He also suggested holding training, outreach, or seminars on the use of learning media for teachers.

### **Learning Technology and Its Use**

#### **Observation results**

Observations regarding the learning technology at Karang Sari 2 Elementary School include the availability of digital-based learning resources and media, whether or not there are digitalization efforts in the learning process and what form of digitalization, if any, and what efforts are made to improve teachers' abilities/skills in using digital-based learning media.

*Table 4. Observation Result of Learning Technology and Its Use*

<b>No.</b>	<b>Observed aspect</b>	<b>Observation findings</b>
1	Media Availability Learning Digital/Technology Based	Teachers have used learning resources and media based on technology in the learning
2	The Existence of Digitalization in Learning	Teachers have implemented digitalization of learning in the form of utilizing digital teaching materials, such as videos and PowerPoint.

3	Efforts to Improve Teachers' Ability in using media digital based	Efforts made by teachers to improve their ability to use digital-based media are by learning and seeking information about how to create and use various media.digital-based learning.
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*Source: Primary Research Data*

Observational data on the use of learning technology at Karangsari 2 Elementary School shows that teachers have utilized digital or technology-based learning resources and media. Furthermore, the elementary school has implemented digital learning, as evidenced by the use of PowerPoint and videos in its lessons.

Based on observations, it can be seen that teachers have made efforts to improve their skills in using digital-based learning media. These efforts include self-study and information seeking on how to create and use digital learning media.

#### **Interview results**

The interview conducted with teachers regarding the use of learning media aims to find out if teachers already use technology in the learning process and how the teacher's efforts to improve their ability to use technology in the learning process.

*Table 5. Interview Result of Learning Technology and Its Use*

No.	Observation aspect	Obervation findings
1	Have teachers used technology in their learning?	Teachers have used technology in learning, for example the use of digital teaching materials, such as videos and PowerPoint, the use of WhatsApp as a communication tool between teachers and parents, and the use of spreadsheets to process grades and create reports.academic, and analyze student data efficiently.
2	How do the teachers effort in increasing their ability?	Apart from self-study, teachers also participate in various training activities, outreach, and seminars related to digital learning media to improve teacher skills inusing learning technology.

*Source: Primary Research Data*

Interviews revealed that technology is already being used in the first grade at Karangsari 2 Elementary School. These include video, PowerPoint, WhatsApp, and spreadsheets. Furthermore, to improve their technology use, teachers are taking steps such as self-study and participating in various training activities, socialization, and also seminars.

### **3.2 Discussion**

#### **Effectiveness of Using Learning Resources**

According to the Association for Educational Communication Technology (AECT), learning resources are all sources (whether data, people, or objects) that can be used to facilitate learning for students. These resources include messages, people, materials, equipment, techniques, and the environment/setting (AECT, 1986). Furthermore, learning resources are everything that exists.aroundto help someone learn (Seels&Richey, 2012).

Learning resources are something that can contain messages to be presented through the use of tools or by themselves, they can also be something used to convey messages stored in the learning materials that will be given (Sulesna, 2011). Learning resources can also mean anything, whether intentionally designed or already available, that can be used either individually or together to make or help students learn.

The objects of observation were elementary school students in Phase A, studying Indonesian language, covering the elements of reading, writing, and listening. The learning

resources used were teachers as information providers. Additionally, the teaching materials used were printed textbooks and learning modules.

The use of print media and teaching modules as a learning resource specifically in Elementary School is very necessary to help students and also Teachers play a vital role in the learning process. With printed textbooks and learning modules, students can effectively engage in learning activities such as reading, writing, and listening. Furthermore, learning resources also facilitate teachers in delivering material and giving assignments.

#### **Effectiveness of Using Learning Media**

The effectiveness of the learning process relates to the methods, techniques, and strategies used to achieve goals optimally, precisely, and quickly. Learning can be considered effective if it meets several aspects, namely:

- (1) The teacher's ability to prepare and manage good learning,
- (2) Activities of students in participating in the learning process,
- (3) Students' responses to learning activities are positive, and
- (4) Student learning outcomes are completed classically on the condition that they meet the Minimum Completion Criteria.

#### **Power point**

Teachers use PowerPoint to present learning materials to help students understand the material being studied. Interviews with teachers at Karangasari 2 Elementary School revealed that learning using visual media, such as PowerPoint presentations and student worksheets, is easier for students to grasp because they not only listen but also interact directly.

The use of Power Point media in reading learning in class I of Karangasari 2 Elementary School students followed and paid attention with wisdom and focus, seen from the reduction in students who did activities outside the ongoing learning process, even the reduction in students who were sleepy even though the lesson was during the day. This is because the material was delivered in an interesting way using Power Point learning media. Using Power Point also stimulates students to ask questions about what they see.

While effective, PowerPoint can be too boring, leaving students passive listeners and potentially losing focus if the design is unattractive. Furthermore, PowerPoint presentations can rely heavily on the teacher's ability to explain, so the lack of variety in teaching methods can reduce optimal student engagement. These constraints highlight the importance of developing interactive and varied media to make learning more effective and engaging for students.

#### **LKPD**

The results of the study show that the use of LKPD is effective in improving students' conceptual understanding abilities. The use of non-digital LKPD learning media to help students practice the material being studied. The presence of media is expected to facilitate students' understanding of the knowledge they are learning. One such learning medium is the Student Worksheet (LKPD). LKPD is a guide for students to conduct investigations or solve problems. Learning media in the form of LKPD based on a scientific approach is a learning media that can be designed and created by teachers to help teachers attract interest and motivate students in learning. In a scientific approach, learning materials will be presented based on facts or phenomena that can be explained with certain logic or reasoning, not just guesswork or imagination (Compiling Team, 2013b in Sari, 2015).

The use of LKPD can make lessons more efficient and effective, students become more focused and responsible in completing the assignments given to teachers. The effectiveness of using LKPD can be seen from the enthusiasm and enthusiasm of students in participating in learning and the results of students' understanding of the material on word segmentation. This is also in accordance with the results of research conducted by Rosalia Dyah (2017) regarding the Effectiveness of Integrated Thematic Student Worksheets (LKPD) Based on Character Education on the Theme of Our Friend's Environment, Statistics Material for Elementary School Grade V. Therefore, the use of LKPD can help teachers in conveying lesson material messages to students more easily and so LKPD is something that is very important to support the success of learning.

Obstacles in using LKPD (Worksheets) as a learning medium include several aspects. One is the need for special attention from teachers to design LKPDs to align with a scientific approach and attract student interest. If the LKPD design is less than optimal, students may not be fully focused or motivated. Furthermore, the effectiveness of LKPDs depends on students' ability to understand and complete the assigned tasks, so obstacles can arise if students have difficulty or lack responsibility in handling the tasks. In other words, the use of LKPDs requires active involvement from both teachers and students to maximize learning outcomes.

### **Effectiveness of Using Learning Technology**

Today, the continuous advancement of technology is pushing educators to become more proficient in its use. Therefore, as educators in the digital age, if they fail to adapt to the times, they will feel left behind. With the rapid development and advancement of technology, it is hoped that it will transform and positively impact various aspects, especially the advancement of education. One positive impact on education is improving the quality of education. However, some educators still experience limited knowledge regarding the use of technology (Tricahayu et al., 2024).

Constructivist theory states that learning occurs through interactions between students and the learning environment, so technology can be a tool to enrich students' learning experiences. Therefore, this student-centered learning theory emphasizes that learning must be tailored to students' needs and abilities, allowing technology to be used to provide a more personalized and flexible learning experience for students (Wijayanti et al., 2021). In addition to developing the effective use of technology in education, it is also necessary to consider the learning model used.

Technology in education has become commonplace. The use of technology in the learning process will be crucial to improving the effectiveness of the learning process, sooner or later. Research shows that teachers have shown that technology is very helpful in enhancing knowledge and developing new skills. They say that the use of technology in education is very beneficial because it can support diverse learning. For example, teachers can present material in various formats (text, images, and videos) that can be tailored to students' learning styles. Furthermore, teachers can use technology to design engaging teaching media, such as PowerPoint, which can make learning more interactive (Na'im, 2019).

The effectiveness of the use of learning technology at Karang Sari 2 Elementary School, based on the results of observations and interviews, can be concluded as follows:

#### **(1) Improving the Quality of Learning**

Teachers said that technology provides many conveniences, such as being able to access educational materials and videos from the internet (for example YouTube), and delivery of materials is also faster and more systematic. Through PowerPoint uses technology like PowerPoint. The use of this technology has been proven to help students focus and understand the material better, increase student interaction and engagement in class, and stimulate learning interest, especially in early grades like first grade. Teachers also report that students become more engaged and less sleepy when the material is presented through engaging visual media. They are even encouraged to ask questions, indicating increased student engagement in learning.

#### **(2) Providing Facilities for Teachers**

Some teachers at Karang Sari 2 Elementary School have utilized technology such as creating groups on WhatsApp not only to communicate with parents but also to share learning materials such as video links, images, or PDF files that help student in home learning. This way, the relationship between school and home becomes more connected and learning can continue even outside the classroom. Most teachers also use spreadsheets for grades, attendance, etc. This shows that technology is very needed because it can make things easier for all teachers.

#### **(3) Flexibility in Learning**

Teachers say technology allows them to tailor learning to students' needs, in line with the student-centered learning approach of constructivist theory. For example, instructional videos provide real-world visualizations, and digital media facilitates different learning styles (visual, auditory, and kinesthetic).

### Challenges and Solutions

There are various challenges that may be encountered when using learning resources, media, and technology in the learning process. These challenges need to be addressed to ensure smooth learning activities. Observations and interviews also revealed challenges related to learning resources, media, and technology that require solutions to ensure a more optimal learning process in the future.

In the use of learning resources in grade 1 of Karang Sari 2 Elementary School, teachers utilize textbooks and teaching modules from the Ministry of Education and Culture. The use of textbooks and teaching modules from the Ministry of Education and Culture demonstrates the alignment of the learning resources used with the applicable curriculum. This alignment is crucial to ensure optimal learning outcomes. However, it was found that some of the learning resources, such as textbooks, were in poor physical condition, which can reduce learning effectiveness and student interest in learning.

Possible solutions to address the inadequate physical condition of learning resources include procuring new books or utilizing alternative learning resources, such as digital books and teaching materials provided by the Ministry of Education and Culture's Rumah Belajar platform. Research (Kurniawan et al., 2024) indicates that integrating digital technology into the curriculum can enrich the learning experience and accelerate student comprehension.

In addition to learning resources, the use of varied learning media is also crucial in supporting a meaningful teaching and learning process. A first-grade teacher at Karang Sari 2 Elementary School has integrated digital learning media such as PowerPoint with non-digital media such as Student Worksheets (LKPD). This combination has been proven to increase student participation and engagement in the learning process. In their research, Suyuti et al. (2023) stated that learning media presented in an interactive and engaging format can help increase student interest and motivation to learn, which

Ultimately, this can help improve the effectiveness of learning and student learning outcomes. However, a new challenge arises in the form of a lack of time control when using LKPD, which causes some students to focus too much on completing assignments and exceed the allotted time, while students who complete assignments faster actually disrupt their classmates.

This challenge highlights the importance of more adaptive classroom management and learning strategies that accommodate differences in learning speed among students. One approach is to provide alternative activities, such as educational games or reflection activities, for students who complete assignments more quickly. According to Yusuf et al., 2024, adapting learning media to classroom management is crucial for developing learning activities for students.

In the context of learning technology, teachers have attempted to integrate various forms of technology into the teaching and learning process. These include the use of instructional videos, PowerPoint presentations, and administrative applications such as Spreadsheets. Furthermore, communication with parents also utilizes technology, particularly through the WhatsApp application. According to (Ika et al., 2023), the use of technology in learning has been proven to increase student motivation because it provides a variety of more visual and interactive material delivery methods. Furthermore, (Mahyudi, 2023) stated that various platforms are provided with the aim of facilitating learning implementation, one of which is to facilitate teachers in assessing students.

However, the limited ability of first-grade students to use interactive digital media like Quizizz remains a challenge. This situation encourages teachers to adapt learning media to student characteristics, which are more suited to concrete and hands-on approaches, such as learning outside the classroom using real objects. Furthermore, teachers demonstrate a strong commitment to improving their competencies, both through independent learning and by participating in training, seminars, and other professional activities. Suyuti et al. (2023), stated that it is important to improve the quality of teachers and educational staff so that they can provide better learning to students and help them achieve optimal learning outcomes.

### 4. Conclusion

Based on the results of observations and interviews conducted at Karang Sari 2 Elementary School, it can be concluded that the use of learning resources, learning media, and technology in the learning process in the classroom has been running quite well and has had a positive impact on student learning effectiveness. The learning resources used—such as teaching modules and printed textbooks from the Ministry of Education and Culture—are in accordance with the applicable curriculum, although some challenges were encountered, including the inadequate physical condition of the books.

In terms of learning media, teachers have integrated both digital media such as PowerPoint and videos, as well as non-digital media such as student worksheets (LKPD), which have been proven to increase student engagement and enthusiasm for learning. Technology has also begun to be implemented in teaching and administration, although students' skills in using digital media still need to be improved. Challenges such as time constraints, student boredom, and technological skills are addressed by teachers with creative approaches and contextual learning that involves the surrounding environment.

This research shows that a combination of relevant learning resources, engaging media, and technology tailored to student characteristics can improve the quality of learning. Therefore, ongoing teacher training is highly recommended to foster innovation and creativity in learning, creating an active, enjoyable, and meaningful learning environment.

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