THE EFFECTS OF THE USE OF TECHNOLOGY IN PRIMARY SCHOOL CLASSROOMS

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ABSTRACT

Studies on the use of technology are very widespread nowadays. Many researchers have conducted studies related to the integration of technology in the classroom. According to A. Guzman & M. Nussbaum (2009: 453) in their statement that is, The process of integrating technology into classroom work has emerged as a significant focus of study in educational research. Interest in this trend has been motivated by the growing number of technology projects implemented in schools. In this study, the researcher describes the method of analyzing the data that has been collected using document analysis. This method of analysis is important for the researcher to obtain the findings of the study formed through appropriate methods of interpretation. The findings of this study are expected to be able to provide an initial overview to the next researcher to conduct further research.

Keywords: effects of the use of technology, primary school classrooms, teaching and learning

I. INTRODUCTION

This study was conducted to identify several factors that influence the use of technology in the classroom. It is emphasized that the things to pay attention to are the reasons for the selection of technology before a teacher to decide to use technology in teaching while in the classroom. In addition, the researcher also set the purpose of the effect of the use of technology in teaching and methods of integrating the technology in teaching. Along with the development of technology that is becoming more and more vigorous, the influence of the use of this technology began to spread to schools and generally to the classroom (Abdul Jalil et al., 2021; Mohd Noh et al., 2021; Mustafa et al., 2021; Roszi et al., 2021; Tumisah et al., 2021). Pupils are also exposed to various forms of technology in their daily lives (Irma et al., 2021; Suzana et al., 2021; Rohanida et al., 2021; Nazrah et al., 2021; Shahrulliza et al., 2021). Therefore, it is very desirable if this technology is used also during teaching and learning so that the channel of its use becomes more meaningful, not just for entertainment alone (Mohd Arafat et al., 2021; Sumaiyah et al., 2021; Hifzan et al., 2021; Shahru et al., 2021). Fulfilling that purpose, the researcher has evaluated the questions related to the study as follows:

i. What is the impact of the use of technology on the teaching process?

II. METHODOLOGY

Data analysis in qualitative research methods involves experience as well as selected data formed from non-numerical materials. According to Syahrul (2005), the data collected is not in the form of numbers, qualitative research is very rich in descriptions. The analysis was conducted on selected sources of documents, namely teaching pictures, worksheets and also teachers' teaching records. According to Christine (2011), the use of documents as a source of data is called document analysis which involves text as well as writing. This is further supported by his next statement which is “Research which employs documents as a data source is called document analysis, documentary analysis, text analysis or, more commonly, qualitative content analysis. It differs from quantitative content analysis, which is concerned with identifying and counting patterns of frequency
and regularity in a large number of texts”. Christine (2011, 221). All these documents are analyzed one by one to obtain information. The results of the analysis are as described below.

III. FINDINGS

• Student Worksheets

![Figure 1: Physical Education Worksheet](image)

The picture above is one of the pictures of student worksheets that have been distributed by physical education teachers. This worksheet is as a reference for students to perform the prescribed skills. Based on this worksheet, students will perform the demonstrated skills on a regular basis. This worksheet is prepared according to the skills that have been taught. After being examined by the researcher during the observation, it was found that the students were able to perform the skills correctly even though sometimes assisted by their teacher. Pupils re-use their experiences during the teaching and browsing the youtube portal earlier, pupils can do the skills well (Farah et al., 2021; Syahrul et al., 2021; Quah et al., 2021; Ahmad Syarifuddin et al., 2021; Jumiah et al., 2021). The use of technology appropriate to the skills and level of students can help students’ understanding and practical activities.
The worksheet shown above is a math worksheet that has been answered by the student. Through the picture above, it can be seen that the students successfully answered all the questions that were given. Learning done using technology has successfully helped students in understanding the common process of addition in mathematics. In addition to being able to have fun in a learning environment, students can also increase their understanding through the benefits of technology (Mohd Ali et al., 2021; Parimala et al., 2021; SitiJamilah et al., 2021; Nor Fauziyana et al., 2021; Noel et al., 2021).

With the availability of games and also interesting applications in learning, students can easily remember the learning in a session (Ahmad Shafarin et al., 2021; Junaidah et al., 2021; Farah Adibah et al., 2021; Ahmad Shakani et al., 2021; Muhamad Amin et al., 2021). Furthermore, the strength of deaf students in calculations further increases the appropriateness of the use of technology in the classroom during the learning process (Santibuana et al., 2021; Nor Diana et al., 2021; Zarina et al., 2021; Khairul et al., 2021; Rohani et al., 2021). The impact of the use of this technology is actually also influenced by student factors. Groff (2008) stated that student factors also play a role in the use of technology in his study as follows:

(a) legislative factors, (b) district/school-level factors, (c) factors associated with the teacher, (d) factors associated with the technology-enhanced project, (e) factors associated with the students, and (f) factors inherent to technology itself.

Pictured above is an English worksheets that have been answered by the students in the learning when to use games and applications on the tablet teachers. The use of clear pictures and interesting play applications can preserve the memory of these deaf pupils and in turn can improve their comprehension. Pupils who are happy and active in learning will indirectly affect their level of understanding.

- Teaching Pictures

The image above shows the teacher is teaching students in first Malay to use tablet. Since there is only one student, the use of a tablet is very appropriate. When this picture was taken, the pupils looked so excited to
answer the questions through the interactive games provided (Badaruddin et al., 2021, Abdul Rasid et al., 2021). Pupils are also able to answer almost all the questions correctly with the help of the teacher as well as the motivation from the interactive game itself. This situation is in line with what has been interviewed of teachers who conduct the teaching. The use of technology that is easy, fast and cheap to find can not only attract students, but also help students' understanding. It is highly relevant to the situation of students with hearing problems such as the subjects of this study to learn interactively. In addition to the interesting and flexible content, the movements and arrangements found in this interactive game to some extent help students focus on learning. Even in game situations, it can still help learning. The use of this tablet also makes it easier for students to explore the game themselves and in turn make them more active in learning. This is supported by Groff (2008) as his statement that ‘however, indicate that effective technology-enhanced environments need to be more student-centered’.

Figure 5: The use of video in teaching.

When teaching another teacher who teaches physical education, the use of a laptop is also shown. The selection is based on the number of students and also the condition of the students. The use of a larger labtop than a tablet was chosen because students could watch or access it more comfortably. Through this labtop, the teacher browsed the Youtube portal to reveal the students on how to send the ball correctly. The video selected is a video of a ball -sending training session that has been run on a football field. The selection of the video was made because the students involved were deaf students where the students found it difficult to understand the instructions verbally. They are more interested and more understanding if the use of tools or situations is realistic.

This situation requires students to see for themselves how a skill is performed before they can do it themselves. Therefore, the use of this video is very appropriate to achieve this objective. When this picture was taken, the researcher could see that the students were very excited and at the same time told each other about the skills. They seemed eager to show their abilities to the teacher and friends. in the video. It is very fitting that the selection of this video by the teacher to teach such subjective skills. Thus, through this pictorial evidence, it is proven what has been expressed by the respondents in the interviews conducted.
The picture above shows the learning environment of students during Physical Education classes conducted using technology integration. Through observations and interviews, the use of this technology has succeeded in attracting the interest and concentration of students in the classroom. There are also students who are not clumsy to show the behavior in the video to the researcher. The use of technology in addition to influencing student behavior, it can also develop the potential of students to be involved.

**Teacher Teaching Record Book**

In addition to pictorial evidence during teaching, researchers also examined teachers' teaching record books related to learning that uses technology in the classroom. This research is important in obtaining information related to the development and achievement of students during the teaching. Based on the notes on the teacher's teaching record book above, the reflection recorded by the teacher was the student's ability to spell syllables correctly by almost 80%. This shows a very good result based on the level of students and also the condition of students with hearing problems.

Through these findings, the researcher can state that this achievement is influenced by the way of learning that integrates technology in the classroom. As stated by the teacher during the interview, it coincides with the
observation and analysis of the documents analyzed. With technology, students are more focused and easier to understand the content of teaching.

In the researcher's study of the mathematics teacher's teaching record above, it can be stated that the use of technology has made the involvement of students active in the classroom. Through the notes on the teacher's reflection section, it is clearly stated that students are actively carrying out activities in the classroom and students are always trying to get the correct answer.

The picture above is a record of the teaching of physical education teachers that has been carried out with the use of videos browsed through the youtube portal. The skills learned are the skills of sending the ball with several methods such as feet, hands, head and tools. Through a brief note in this record book, the researcher found that the teacher has reflected as students like to do activities, students can do the skills taught and students are also cheerful and active in carrying out activities.
Analysis of this teacher's teaching record document can prove that the use of technology that is video can stimulate students' understanding and behavior. This is also reinforced by observations and interviews that have been conducted with teachers and students. In short, it can be stated that the use of video in the classroom this time has a good effect and it is relevant to the skills and level of students.

IV. DISCUSSION

Once the researcher has finished analyzing all the data obtained and validating all the sources, the researcher can state the findings obtained. These findings can answer the research questions that have been set at the beginning of the writing of this study. Below is a summary of the findings of this study.

The Impact of the Use of Technology in Teaching

Through the data analyzed, the following findings can be stated. Indeed, technology has a great impact on teaching in the classroom while it is running. Among the effects that occur are related to pupils. Of course teachers will set the impact on students as their priority. In studies that researchers have done, it proves the same thing. It can be stated that the effect of the use of technology in the classroom is to increase students' understanding, attract students' interest, make teaching more interesting, safe and motivate students. This description can be summarized through the figure below.

![Figure 10: Effects of the Use of Technology in Teaching in the Classroom](image)

Based on the diagram above, it can be stated that the technology has a good effect on its use in the classroom. All respondents gave a positive impact on the use of technology in their teaching. There are also similarities in the opinions of these respondents.

V. CONCLUSION

Overall, the use of technology is something that is very much needed nowadays. Tempiasnya also affected the field of education. Technology -assisted teaching makes it more interesting and helps to increase students' understanding. With good access and infrastructure in schools, it provides ample opportunities for teachers to implement this in their teaching. The readiness and skills of teachers are required to realize the integration of technology in teaching in the classroom. Extensive exposure to technology -related students also makes the integration of technology in the classroom increasingly relevant. According to Kathleen, Mei-Yu & Vishal (2006: 293) that is' Our students have grown up in a "high technology" environment and are adept at the use of computers and the Internet for information exchange'. Sesungguhnya the use of technology has a very impact good and in line with the interests of students nowadays.


