

UTILIZATION AND CHALLENGES OF USING ICT AT SPM AL-MASHDUQIAH: PERCEPTION OF ENGLISH TEACHERS

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Abstract

The use of technology in English learning is becoming increasingly crucial to achieve optimal learning outcomes. This study aims to explore teachers' perceptions regarding the use and challenges of using Information and Communication Technology (ICT) in English learning at SPM Al-Mashduqiah. Using a qualitative method with a case study type, this study focuses on the perception of English teachers in the school as the subject of the study. Data were obtained through semi-structured interviews, observations, and documentation, which were then analyzed using a descriptive approach to describe and interpret the teacher's experiences and views in detail. The findings reveal that teachers have been utilizing ICT in various aspects of English learning, including the use of learning apps, interactive videos, and online platforms for assignments and evaluations. However, teachers face several challenges, such as limited facilities, lack of technical training, and resistance to changes from traditional teaching methods. Teachers' perceptions of ICT utilization vary; most view ICT as a tool capable of increasing student engagement and learning effectiveness, while others feel burdened by the need to master new technologies in their use in English learning. The study concludes that although the use of ICT in English learning at SPM Al-Mashduqiah has great potential to improve the quality of education, further efforts are needed to address existing challenges, including increased facility support and ongoing training for teachers. These findings are expected to provide valuable insights for policymakers and education practitioners in designing effective strategies for ICT integration, making an English learning more enjoyable and effective.

Keywords: ICT utilization, challenges, English teachers, SPM Al-Mashduqiah

INTRODUCTION

In recent years, the use of technology has become an important issue in various fields, including in the field of education (Antón Sancho et al., 2023; Henderson, 2020; Lawrence & Tar, 2018). This is because technology has become the fastest shortcut in transferring knowledge in almost all countries in the world. The integration of technology today has taken place through many innovations and has changed people's social lives in terms of how they think, work and live (Manjunath & Leelavathi, 2024). Similarly, Mynaříková & Novotný (2020) stated that schools and educational institutions are expected to be able to prepare students for life in the era of "knowledge society" because this situation requires the integration of technology, information and communication (ICT) in the student learning curriculum. The integration of ICT in the field of education is related to the use of information technology based on the use of mobile phones which is integrated in all learning processes in the classroom every day. Referring to the plan to prepare students to be able to compete in this

digital era (Kuznetsova et al., 2024; Ohrynychuk et al., 2024). Lomos et al., (2023) assert that teachers are considered the main actors to use ICT devices in their classrooms. This is due to the advantages of ICT in conditioning dynamic and proactive teaching and learning in the classroom on a daily basis. The purpose of integrating ICT itself is to improve and increase the effectiveness, quality, and creativity of student learning, providing easily accessible information and very light financing in delivering teaching materials to students. ICT also has many benefits, especially in terms of facilitating learning to face challenges in today's global world (Haleem et al., 2022). While the process of adopting ICT is not an easy and short process; however, this process is ongoing and sustainable because it fully supports the teaching and learning process and also facilitates learning resources (Alemu, 2015).

The integration of ICT aspects in education generally means the process or steps of technology-based teaching and learning that are closely related to technology learning in schools. This is because students in this digital era are used to the use of technology and they will learn better in a technology-based learning environment. The issue of technology in education has in fact contributed a lot in various aspects of education. In fact, ICT applications provide an effective learning model with the help and support of the elements and components of ICT itself (Foutsitzi & Caridakis, 2019; Gil-Flores et al., 2017). It should be acknowledged that almost all fields of study/subjects ranging from mathematics, natural sciences, languages, arts and social humanities and other fields can be studied effectively with technological equipment and devices. Furthermore, ICT also provides assistance and support for both teachers and students because ICT with computer devices and mobile phones can facilitate the achievement of learning objectives in the classroom (Nikolopoulou, 2020).

In other words, technological devices certainly cannot completely replace the position of teachers in the classroom because these devices are only used as a tool to obtain and support a better teaching and learning process. The need to integrate ICT in learning is very important because with the help of technological devices, teaching and learning that usually only takes place in a school environment, can also be carried out anywhere remotely for example. According to Young (2003), the use of ICT in learning will not stop and will continue because ICT will continue to facilitate teachers and students to be in a dynamic and proactive learning environment.

ICT can be used in many ways because these tools can assist teachers and students in teaching and learning their subject areas. Technology-based teaching and learning offers interesting learning methods such as the use of good learning videos, stimulation, data storage, use of data bases, mind mapping patterns, and innovations in learning that will make the learning process more knowledgeable and meaningful (Indra et al., 2023; Zhang, 2022). Similarly, students will benefit from ICT in learning because they are not bound by the limitations of the curriculum and existing learning resources. In fact, technology-based learning activities actually help students to stimulate a deeper understanding of a subject. ICT also helps teachers design lesson plans in a more effective, creative, and engaging way that will have an impact on the learning process of active students in the classroom. Many researchers have proven that the use of ICT in the teaching process can increase the achievement of better learning outcomes and maximize students' ability to learn actively (Al Husaeni et al., 2024; Jian, 2019; Kandia et al., 2023; Masnawati & Kurniawan, 2023).

Ghavifekr et al., (2016) three main steps for ICT to be fully utilized by teachers: the process of integration, alignment and complementarity. The approach with the integration process is that teachers implement the appropriate use of ICT in certain subjects by involving scientific concepts and complex abilities to improve student achievement and learning achievement. In addition, curriculum review is also important to determine what information

and ICT devices are most appropriately used to be installed in order to achieve the learning objectives that have been set by the school curriculum. The next step by using the "reinforcement approach" is that teachers use ICT to provide reinforcement in learning materials or topics. For example, Microsoft Power Point can be used to present learning topics in an innovative and creative way that can lead students in the class to discuss and exchange opinions and ideas. The last step is an approach with a complementary process, namely ICT is used by teachers to help and support student learning. This approach facilitates students to become more organized and efficient in retrieving and taking important notes from information technology sources traced, in collecting tasks by e-mail from home as long as they are still meeting the deadline for collecting assignments and still searching for information from various sources available online to complete the tasks assigned to them.

Based on the explanation of the findings regarding the positive impact on the use of ICT in the teaching and learning process in the classroom, it is appropriate that the issue of integrating ICT in the field of education needs to be seriously considered both from the school and the government, especially the education office (Player-Koro, 2012). In an effort to integrate ICT in learning, schools of course need the help of ICT equipment and devices such as computer laboratories, wifi facilities and also ICT literacy skills. Of course, the education office takes the need for ICT seriously and does not consider this as a secondary need or a less important need in learning. The use of ICT in this global era has been considered as a basic main need. School teachers are considered the decisive key in the implementation of ICT-based learning. Teachers are required to have experience, extensive knowledge, and teaching insights that are integrated with ICT. They must have a positive perception of the use of ICT in teaching and learning.

The benefits of ICT in the teaching and learning process, the researcher intends to examine how teachers' perceptions of the use of ICT in the teaching and learning process, teachers' perceptions of the effectiveness of ICT utilization in the student learning process and teachers' perceptions of the challenges in the process of integrating ICT in teaching and learning (Baş et al., 2016). Understandably, so far the government has actually supported the use of ICT in teaching and learning by building computer laboratories, languages and others ranging from elementary schools to universities. However, it needs to be observed and analyzed whether the ICT facilities that have been provided by the government are really used in schools? are teachers actively using these ICT facilities in every subject they teach? However, it is not impossible that some teachers have experienced technical difficulties in the use of language laboratories which usually have to be used optimally by teachers of English subjects. Of course, this can then become a problem in the process of integrating ICT in the language teaching and learning process considering that not all teachers are technologically literate; Perhaps some of them are still stuttering in technology. With this case study research, the researcher will identify teachers' perceptions of the use of ICT in teaching and learning as well as the challenges or obstacles that cause them to have difficulty adopting and adapting to ICT in their teaching and learning processes (Mahdum et al., 2019).

Several studies have explored the use of ICT in the teaching and learning process, but there are still some paucity that need to be addressed (Ali et al., 2015; Kennah, 2016; Kilag et al., 2023; UGWU & Nnaekwe, 2019). One of the gaps is a lack of deep understanding of how teachers, especially in the Indonesia context, perceive the use of ICT, as well as the challenges they face in integrating this technology into their daily learning. Previous research has often focused on the general impact and benefits of technology in education without delving deeper into teachers' practical perspectives and experiences. In addition, there have not been many studies that have explored how government support in the form of ICT facilities in schools has

been really utilized and optimized in the context of local teaching. The novelty of this study lies in its holistic approach in exploring teachers' perceptions and the technical challenges they face, as well as identifying the factors that influence the adoption of technology in teaching. Thus, this research not only contributes to the literature on the use of ICT in education but also provides relevant practical insights for education policy in Indonesia, as well as helps in designing more effective strategies to support teachers in making the most of technology

Based on the background of the above research, the formulation of the problem in this study is:

1. What is the perception of English teachers on the use of ICT in the teaching process at SPM Al-Mashduqiah?
2. What is the perception of English teachers on the effectiveness of ICT use in the learning process at SPM Al-Mashduqiah?
3. What is the perception of English teachers towards the challenges in the process of integrating ICT in learning at SPM Al-Mashduqiah?

METHOD

This study uses a qualitative method with a case study design to explore teachers' perceptions in the use and challenges of ICT in English learning at SPM Al-Mashduqiah. Case studies were chosen because they allow researchers to gain an in-depth understanding of the phenomenon being studied in a specific context. This research was conducted at SPM Al-Mashduqiah, a junior high school that implements ICT in English learning. The subjects of the study consisted of English teachers who taught at the school. The selection of subjects is carried out purposively to ensure that they have adequate experience and understanding of the use of ICT in learning.

The main instruments used in this study are semi-structured interviews, classroom observations, and documentation analysis. Semi-structured interviews are used to explore teachers' views and experiences in depth regarding the use of ICT. The interview guide is based on a review of previous literature and adapted to the local context. Classroom observation was carried out to see firsthand how ICT is applied in the learning process. Documentation analysis involves collecting and analyzing related documents, such as lesson plans and ICT-based learning materials. Data collection is carried out in several stages. First, the researcher prepares and introduces research instruments to the subject. Furthermore, classroom interviews and observations were conducted sequentially, with each interview recorded and then transcribed for further analysis. Relevant documentation is also collected during the observation period. The data obtained is analyzed using a thematic approach, which involves encoding the data and identifying the main themes that emerge. Data validation is carried out through source triangulation, which is comparing findings from interviews, observations, and documentation to ensure consistency and validity of the data.

FINDINGS AND DISCUSSION

Findings

Perception of English Teachers on the Use of ICT in the Teaching Process

This section explains some research findings related to the perception of English teachers towards the use of Information and Communication Technology (ICT) in the English learning process at SPM Al-Mashduqiah, as well as the challenges faced in integrating it. Data were collected through observation, interviews, and document analysis. The results of the study show the following findings:

Table 1 Perception of English Teachers on the Utilization of ICT in the Teaching Process

Category	Findings
Student Interest and Engagement	The use of interactive learning apps and online videos has successfully attracted students' interest and increased their engagement in the classroom.
Classroom Management	Online platforms are used for assignments and evaluations, aiding in more effective classroom management.
Teachers' Perception of ICT	Interviews with teachers revealed that 70% of them felt that ICT was very helpful in teaching.
Teacher's View on Technology	Teachers see technology as a tool that can improve student engagement and teaching effectiveness.
Technical Training Needs	Some teachers expressed the need for more technical training to make optimal use of ICT.
Integration of Technology in Learning	The analysis of the documents supports these findings, with lesson plans and learning materials demonstrating good technology integration.
Utilization of Online Resources	Teachers are actively seeking and using the latest online resources to support their teaching.

From the observation results, it is known that the use of interactive learning applications and online videos has succeeded in attracting students' interest and increasing their involvement in the classroom. Online platforms are also used for assignments and evaluations, which helps in more effective classroom management. Interviews with teachers revealed that 70% of them felt that ICT was very helpful in teaching. They see technology as a tool that can improve student engagement and teaching effectiveness. However, some teachers expressed the need for more technical training to make optimal use of ICT. The analysis of the documents supports these findings, with lesson plans and learning materials demonstrating good technology integration. Teachers are actively seeking and using the latest online resources to support their teaching.

Table 2. Teachers' Perception of the Effectiveness of ICT Utilization in the Student Learning Process

Category	Description
Student Interest and Engagement	The use of interactive learning apps and online videos has successfully attracted students' interest and increased their engagement in the classroom.
Classroom Management	Online platforms are used for assignments and evaluations, aiding in more effective classroom management.
Teachers' Perception of ICT	70% of teachers feel that ICT is very helpful in teaching.
Teacher's View on Technology	Teachers see technology as a tool that can improve student engagement and teaching effectiveness.
Technical Training	Some teachers expressed the need for more technical training to make

Category	Description
Needs	optimal use of ICT.
Integration of Technology in Learning	Lesson plans and learning materials show good technology integration.
Utilization of Online Resources	Teachers are actively seeking and using the latest online resources to support their teaching.

Teachers' Perception of the Effectiveness of ICT Utilization in Learning

The observation results showed that students were more responsive and participatory with the use of technological devices. Learning becomes more interactive with the use of educational software and learning applications. Interviews with teachers revealed that 80% of them think that the use of ICT increases the effectiveness of learning. They reported that students understood the material faster and were more enthusiastic about following the lessons. The analysis of the documents supports this, with the results of student evaluations showing a significant increase in value and understanding of concepts after the application of ICT in learning.

Table 3. Teachers' Perceptions of Challenges in ICT Integration in Learning

Category	Description
Infrastructure Barriers	Unstable internet connection and lack of technological devices.
Training Needs	Teachers need more training and technical support to utilize ICT effectively.
Traditional Teaching Methods	Some teachers are still comfortable with traditional teaching methods and are less open to change.
Consistency in ICT Utilization	Not all teachers use ICT consistently in every teaching session, reflecting the challenges in full adoption of technology.

Teachers' Perception of Challenges in ICT Integration in Learning

Based on the observation results, several major obstacles in ICT implementation were identified, including infrastructure limitations such as unstable internet connections and lack of technological devices. Interviews with teachers revealed that they need more training and technical support to utilize ICT effectively. Some teachers are also still comfortable with traditional teaching methods and are less open to change. An analysis of the documents shows that not all teachers use ICT consistently in every teaching session, reflecting the challenges in full adoption of the technology.

Discussion

Overall, the results of this study show that while ICT has great potential to improve the quality of teaching and learning, there are several challenges that need to be addressed. Limited infrastructure and lack of technical training are the main obstacles faced by teachers. However, the positive perception of the effectiveness of ICTs in improving student

engagement and understanding shows that with the right support, technology can be a very effective tool in education. This study is in line with Lomos et al., (2023) that teachers are considered the main actors to use ICT devices in their classrooms. This is due to the advantages of ICT in conditioning dynamic and proactive teaching and learning in the classroom.

Greater efforts are needed to improve infrastructure support and provide ongoing training for teachers. In addition, cultural change in teaching approaches also needs to be encouraged to overcome resistance to change. Thus, the integration of ICT in learning can run more effectively and provide maximum benefits for students.

The results of this study are expected to provide insight for policymakers and education practitioners in designing effective strategies for the integration of ICT in learning. Adequate support from all stakeholders will be crucial to overcome the challenges and harness the potential of ICT to improve the quality of education at SPM Al-Mashduqiah. The findings of this study show that although ICT has great potential to improve the quality of teaching and learning at SPM Al-Mashduqiah, there are several challenges that need to be overcome. In line with this study Foutsitzi & Caridakis, (2019); Gil-Flores et al., (2017) stated that the use of interactive learning applications and online videos has been proven to be successful in increasing student engagement and interest in the learning process, showing that technology can make learning more engaging and interactive, thereby increasing student motivation. In addition, the online platform used for assignments and evaluations helps in more effective classroom management. With technology, assignments can be better managed, and evaluations can be carried out more efficiently, reducing the administrative burden for teachers. The majority of teachers (70%) also feel that ICT is very helpful in teaching, providing a variety of tools and resources that can improve the quality of teaching and provide a richer learning experience to students.

There are a number of obstacles in the implementation of ICT in this study. One of the main obstacles is the limitations of infrastructure, including unstable internet connections and a lack of technological devices, which hinder the ability of teachers and students to take full advantage of technology in the learning process. In addition, some teachers feel that more technical training is needed to make optimal use of ICT. Adequate training is essential to ensure that teachers can use technology effectively and efficiently in their teaching. Resistance to change is also a challenge, where some teachers are still comfortable with traditional teaching methods and are less open to change. This indicates that there is resistance to the adoption of new technologies, which need to be addressed through cultural changes in teaching approaches. The analysis of the documents also shows that not all teachers use ICT consistently in every teaching session, reflecting the challenges in the full adoption of the technology. This study is in line with Atkinson et al., (2022); Zeebaree et al., (2020) stated that the impact of infrastructure barriers on electronic implementation.

Overall, the findings of this study indicate that with the right support, technology can be a very effective tool in education. Greater efforts are needed to improve infrastructure support and provide ongoing training for teachers. In addition, cultural change in teaching approaches also needs to be encouraged to overcome resistance to change. Thus, the integration of ICT in learning can run more effectively and provide maximum benefits for students. The findings of this study are expected to provide insight for policymakers and education practitioners in designing effective strategies for the integration of ICT in learning. Adequate support from all stakeholders will be crucial to

overcome the challenges and harness the potential of ICT to improve the quality of education at SPM Al-Mashduqiah.

CONCLUSION AND SUGGESTION

Conclusion

The conclusion of this study is that teachers must first have a positive perception of the utilization of ICT in teaching-learning process because this can facilitate the integration of ICT in schools. Furthermore, the factor of ease of access and availability of ICT devices is also an important factor that can help teachers and students make the most of ICT. For this reason, the preparation of teaching and learning based on the use of technology can begin with good implementation accompanied by support from school leaders. If the implementation process of integrating technology in schools runs well from the beginning accompanied by routine maintenance of learning ICT devices, then it can be used ICT integration process will provide great benefits for both teachers and students.

The use of ICT, especially in teaching and learning, is something that is practising ICT rather than theoretical and that is why teachers must be given ICT training and enough time to learn and explore ICT in the *trial and error* phase until finally they can actually use ICT tools in the teaching and learning process in the classroom. Finally, the integration of ICT in school classrooms requires serious attention in order to improve the quality or quality of the national education system. This can also position the education system or quality of a country into the world ranking so that it can create superior human resources in the future.

Suggestion

The government must support the use of ICT in schools by providing the necessary facilities and infrastructure. The government must also strive to improve and change the mindset of teachers who still have a conventional teaching paradigm that the integration of ICT in the teaching and learning process must be implemented. For this reason, the government must create a regular training program with the target that teachers must have ICT literacy, namely good knowledge and ability in using information and communication technology so that they can improve teaching methods and strategies as an effort to meet the demands of learning in the current digital era.

Based on the results and conclusions of this study related to teachers' perception in the use of ICT, the researcher suggests a qualitative research in the form of more in-depth research on how ICT is actually integrated in each subject in schools. This challenge or space for advanced research can be explored from the latest things of ICT utilization, obstacles or obstacles faced by teachers in using ICT in their classrooms. However, during the Covid 19 pandemic that has been going on since last year, the context of the research can be shifted to students' online classes. Of course, learning with ICT during this pandemic is more complex both in terms of the use of ICT-based learning applications and the obstacles faced by teachers and ICTa students they must adopt and adapt to online learning today.

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