

**PRE-SERVICE ENGLISH TEACHERS' PERCEPTION ON TECHNOLOGY USE
AND ITS IMPACT ON TEACHING APPROACHES AND LEARNING
STRATEGIES**

A THESIS



By:

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Student Number: 06011382025063

English Education Study Program

Language and Arts Education Department

FACULTY OF TEACHER TRAINING AND EDUCATION

SRIWIJAYA UNIVERSITY

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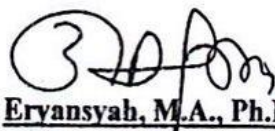
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DECLARATION

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Cerify that thesis entitled "Pre-Service English Teachers' Perception On Technology Use And Its Impact On Teaching Approaches And Learning Strategies" is my own work and I did not any plagiarism or inappropriate quotation against the ethnic and rules commended by the Ministry of Education of Republic Indonesia Number 17, 2010 Regarding plagiarism in higher education. Therefore, I deserve to face the court, if I am found to have plagiarized this work.

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DEDICATION AND MOTTOS

DEDICATION

I dedicate this thesis to my beloved family.

My parents, my sister, and the good people around me who always support and encourage me.

MOTTOS

Treat others as you would like to be treated.

ACKNOWLEDGEMENTS

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Palembang, Mei 2024

The writer

A handwritten signature in black ink, appearing to be 'Rany Remitha', written in a cursive style.

Rany Remitha

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ABSTRACT

This case study investigates the perceptions of Pre-Service English teachers at Sriwijaya University regarding the use of technology in learning and its impact on teaching approaches and learning strategies. The study, conducted using quantitative and qualitative methods, involved 167 students from semesters 3, 5, and 7 and 9 students for qualitative method. The results showed that English education students' understanding of the role of technology in learning has a significant impact on the teaching and learning process. Effective integration of technology in teaching occurs at the intersection of teachers' technological, pedagogical, and content knowledge. The Pre-Service English teachers had a positive view of technology in their classrooms, with the 7th semester students expressing the strongest agreement. The students found teachers' use of technology beneficial, making learning more enjoyable and easy to understand. Regarding learning strategies, participants reported that they use collaborative learning, interactive learning, visualization and game-based learning. Overall, pre-service English teachers recognize the value of technology in enhancing learning strategies and improving teaching approaches.

Keywords: Perception Pre-service English teachers at Sriwijaya University, the use of technology in learning, impact on teaching approaches, learning strategies

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CHAPTER 1

INTRODUCTION

1.1 Background

As technological tools become more easily accessible for teaching and learning in the classroom today, including in the context of language learning, many teachers and education systems put their focus on integrating technology into learning activities. The integration of ICT (Information and Communication Technology) has been described as "complex, multifaceted, and situated" (Mishra & Koehler, 2006, p. 1017). It is challenging for educators to become familiar with the increasing number of ICT tools currently available and for that reason, teachers knowledge of how to assess these ICT equipments effectively and productively to support teaching and learning becomes crucial. According to Tondeur et al., (2017), there is a positive relationship between educational beliefs and technological use. Using technology into the classroom education process has the ability to shift instructors' ideas to be more student-centered and constructivist. Technology is viewed as a means of motivating teachers to try, implement, and improve novel approaches to teaching and learning (Donnelly et al., 2011). It is vital to emphasize that teaching and learning with technology is an iterative process: beliefs lead to actions, which lead to the development of beliefs, which leads to the development of beliefs, which leads to the growth of beliefs. Regardless of teachers' pedagogical approaches, technology should be introduced in a way that aligns with their current approaches, appealing to their values and increasing the likelihood that teachers will integrate and use technology in learning activities, particularly language learning.

Using Shulman's work on teacher knowledge (1986) as a theoretical foundation, Mishra and Koehler (2006) created a new framework called Pedagogical and Technological Content Knowledge (TPACK). This framework consists of three core components: Pedagogical Knowledge (PK), Content Knowledge (CK), and Technological Knowledge (TK), which together produce four hybrid components: Pedagogical Content Knowledge (PCK), Technological Pedagogical Knowledge (TPK), Technological Content Knowledge (TCK), and Technological Pedagogical Content Knowledge (TPACK). TPACK is an emerging form of knowledge that goes beyond the three "core" components (content, pedagogy, and technology).

This is different from Shulman (1986), in that Shulman's theory (1986) introduced the notion of pedagogical content knowledge (PCK), which highlights the unique synthesis of the two knowledge bases. Shulman (1986) introduced the notion of pedagogical content knowledge (PCK), which highlights the unique synthesis of two knowledge bases. The extensive use of ICT in education has radically changed the teaching process, and teachers must have skills and understanding of educational technology to ensure successful teaching with technology. By adding a technological knowledge component to the PCK framework.

Shulman (1986) has several main components of PCK consisting of: the first is teachers comprehend effective methods for clarifying concepts to students. This includes knowing common student misunderstandings and how to resolve them. Second, is teachers can utilize diverse techniques like analogies and examples to make material clear and comprehensible for students. Third is, teachers grasp how students gain knowledge, including their cognitive abilities and effective learning methods applicable in educational settings. Fourth is, teachers have knowledge of how curriculum subject matter is structured, including the order of learning and connections across topics. Based on Shulman theory, it can be concluded that technology plays an essential role in the twenty-first century as a tool that helps teachers provide instruction and students learn, which complements the PCK paradigm and is known as Pedagogical and Technological Content Knowledge (TPACK).

TPACK is a conceptual and comprehensive framework for understanding the knowledge needed by teachers to effectively integrate technology into learning and teaching (Mishra & Koehler, 2006). In learning and teaching, TPACK emphasizes the complex interdependencies between content, pedagogy, and technology (Koehler et al., 2014), TPACK is seen as a form of knowledge that is essential in the digital age to integrate technology to enhance learning (Koehler & Mishra, 2009, 2014), TPACK is seen as an important form of teacher knowledge in the digital age to integrate technology to enhance learning (Koehler & Mishra, 2009). Therefore, the TPACK framework is useful for guiding research and practice related to the role of technology in improving educational quality (Koehler et al., 2014). TPACK also has the potential to serve as a conceptual foundation in teacher professional development related to technology integration (Koehler & Mishra, 2016). Although the operationalization and measurement of TPACK require further validation, TPACK is seen as important for educators and researchers in the systematic effort to integrate technology for the improvement of learning

in the digital era. Teachers bring TPACK into lessons every time they teach a unique combination of the three aspects by integrating technology, pedagogy, and content knowledge together. As a result, there is no technology solution that can be applied to every teacher, every subject or every teaching approach. Instead, the solution is found in the teacher's capacity to navigate the space defined by the three elements of content, pedagogy and technology and the complex interactions between these aspects in a given context.

Utilizing modern technology in the field of English language teaching is generally understood as encompassing innovative approaches, tools, resources, equipment, systems, and strategies that are directly relevant to English language teaching and contribute to the achievement of desired educational goals. Furthermore, Ahmadi (2018) investigate the impact of motivation on reading comprehension. In Ahmadi's study, (2018) there are several important points regarding the effect of motivation on reading comprehension and overall, it can be said that EFL teachers should go beyond their traditional roles by providing EFL students with opportunities to become motivated and substantially improve reading comprehension skills, therefore Ahmadi (2018) underlines the importance of instructional methods used by teachers in facilitating the language learning process. As a result, while technology is widely recognized as a valuable educational and complementary tool in a variety of teaching and learning settings, it has particular relevance in the context of English language teaching. This is because technology presents many opportunities to enrich the content and delivery of teaching methods, which are often juxtaposed with traditional approaches to English language teaching. Education becomes a more important element to create effective learning activities, especially in the English language learning process, because using technology in the learning process can make students better prepared to face the advancement of an increasingly complex world. Pre-service English teachers play an important role in integrating technology into classroom teaching. However, their perceptions on the use of technology in English language teaching and its impact on their teaching approaches and learning strategies remains an unresolved topic and requires further research.

According to Ahmadi (2018), providing technology in the classroom helps students learn better. The researchers emphasize the importance of technology. Ahmadi (2018) argued technology facilitates interaction between teachers and students, provides understandable inputs and outputs, assists learners in developing thinking skills, makes learning and teaching more

student-centered, encourages students' autonomy and confidence, and increases learners' motivation to learn foreign languages effectively because of the accessibility of English learning media utilizing technology, it is simpler for students to grasp the subject in learning and to continue practicing English. Furthermore, According to Shadiev & Yang (2020), all these technologies are listed and provide some examples of how they have been applied to support language learning and the results of their study's shows that most studies reported positive results. That is, learners get better results when their learning is supported by technology. In addition, learners have positive perceptions of the technology used. This shows that technology is effective in supporting language learning and learners accept and use it. Findings related to the effectiveness of applying technology to support language learning and the use of technology in language learning are discussed below.

According to Ringotama (2020) most pre-service teachers tend to use technology in the classroom. Pre-service English teachers' perceptions on using common technologies consisting of online media sources such as e-books and other digital resources in a lesson. Students love YouTube as one of the technologies they use because they can open it later at home. Nazari, Nafissi, Estaji, and Marandi (2019) showed that there are some differences in the understanding of technology between inexperienced EFL teachers and experienced EFL teachers. Qualified teachers, on the one hand, have extensive knowledge of PK and PCK, how to develop their pedagogical and content knowledge for their professional development. Yet, they lack technical expertise, so they need a professional development course on technology integration tailored to their needs. Furthermore a study conducted by Maharrani, et.all (2023) shows that, English language teachers in rural areas have insufficient understanding of digital learning resources was indicate that they may not be completely qualified to properly integrate technology into their teaching practices. This implies that some teachers still lack the requisite understanding and integration of technology in language education.

Furthermore, the TESOL technology standards for language instructors emphasize the need for language teachers to obtain and retain basic knowledge and abilities in technology for professional purposes, implying that not all teachers will have this knowledge and skill set. According to Czaja et al. (2006), technology adoption is a complex issue driven by various factors, such as sociodemographic characteristics, attitudes, and cognitive aspects. The interaction between these factors is very complicated. Therefore, a person's decision to use a

particular technology in teaching activities cannot be explained solely based on their age or education. Other psychological considerations such as attitudes and cognitive abilities also need to be taken into account. In other words, teachers' adoption of technology is influenced by a complex combination of personal, social and psychological characteristics.

According to the findings, pre-service English teachers should obtain training on how to effectively use technology to increase teaching and learning, as well as understanding techniques in the learning process implementing technology. This aims to make sure that pre-service teachers not only understand the subject but also have pedagogical and technological understanding and can use it correctly. Pre-service teachers are supposed to provide interactive learning, engage students in active learning, encourage good attitudes toward technology, and improve their students' 21st-century abilities, such as critical thinking, problem-solving, and digital literacy

Based on the explanation above, there are still issues with teachers' understanding of the use of technology as a media of learning, so the aim of this study is to investigate pre-service English teachers' perceptions of the use of technology in learning and its impact on teaching approaches and learning strategies at Sriwijaya University. The use of technology in the learning process, or TPACK, is one of the frameworks used by teachers to enhance teaching and learning activities in the classroom. Whether pre-service teachers' perceptions of the role of TPACK impact the use of technology on the teaching approaches used by pre-service teachers, and how technology affects the learning strategies used by pre-service teachers and their students. Based on these objectives, this study is titled Pre-Service English Teachers' Perception on Technology Use and Its Impact on Teaching Approaches and Learning Strategies.

1.2 The problems of study

The problems of study are formulated as follows :

1. What are the perceptions of pre-service English teachers regarding the utilization of technology in educational settings?
2. What are the perceptions of pre-service English teachers regarding the impact of technology on the teaching approach they experienced in the classroom?
3. What are the perceptions of pre-service English teachers regarding the impact of technology on their learning strategies?

1.3 The objectives of study

This study was conducted to achieve the following objectives:

1. To know the perception of pre-service English teachers regarding the utilization of technology in educational settings.
2. To find out the perceptions of pre-service English teachers regarding the impact of technology on the teaching approaches they experienced in the classroom.
3. To find out the perceptions of pre-service English teachers regarding the impact of technology on their learning strategies.

1.4 The Significance of the study

It is expected this study could contribute some benefits to the following parties.

1. For Teachers and Lectures

The results of the study will provide teachers and lecturers can utilize the findings of this study to improve the use of technology in the teaching process and can design learning that is more innovative and relevant to technological developments, so as to improve the quality of education.

2. For Student

Through this research, students are expected to benefit from technology-enhanced teaching approaches. They can engage in more engaging and interactive learning, which supports the development of their skills and understanding in English.

3. For Other Researchers

Other researchers are expected to use this study as a foundation for further research in the field of educational technology. It is also hoped that this study can spark further discussion and collaboration in exploring the role of technology in English language learning.

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