



## ***EXPLORING PRE-SERVICE TEACHERS' PERSPECTIVES ON THE USE OF DIGITAL LEARNING MEDIA***

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### ***Abstract***

*This journal aims to investigate the perspectives of pre-service teachers regarding the utilization of digital learning media in contemporary educational settings. As technology continues to play a pivotal role in shaping the educational landscape, understanding the viewpoints of future educators becomes crucial. The effective integration and improvement of digital learning tools in the classroom. Through interviews and surveys, this study seeks to capture the thoughts, attitudes, and concerns of pre-service teachers toward digital learning media and its impact on their teaching practices. Low familiarity with technology use as learning media among pre-service teachers was found to be a problem.*

**Keywords:** *Pre-service teachers, Technology, Learning media*

### **INTRODUCTION**

Teaching English in Indonesia is a challenge as English is a foreign language. Therefore, the EFL teacher is highly encouraged to be creative to make the class fun and interactive. Dealing with students' learning behaviors, EFL teachers should be able to play their role depending on the classroom condition. The ability to figure out the best method to teach and manage the class should be learned starting from a teacher training program. A teacher training program is a program that is offered by colleges and universities, teacher education institutions, government agencies, school districts, or private organizations to prepare pre-service teachers for careers in teaching. It provides the pre-service teachers with the knowledge, skills, attitudes, and practical experiences in teaching. The ability to manage the class affects the students' behavior and learning outcomes. To manage and attract students' attention, teachers are encouraged to choose the best methods and tools.

Technology is one of the tools that can be used to attract students' attention. Learning by using technology which is called digital learning has played a significant

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role since the pandemic (Syahdan, et al 2021). The students get used to learning online by using computers, digital media, and websites (Yuliana, 2022). As they use technology in their daily life to play games and search for video, audio, images, and information, they need to be guided to be responsible for using it.

Technology use has brought about unprecedented changes in the field of education. Many studies found that technology use in the classroom impacts students' learning (Laborda, et al, 2020). There are some reasons why technology should be used in learning. First, digital learning brings diversity to learning. Teachers can use technology as a tool for assessing students, for learning media, for exploring various subjects, and for accessing educational materials. Moreover, it allows students to use technology as media to create high-quality presentations and to access a wide range of educational mobile apps, websites, and research sources. Every student can choose the topic and resource that they want to use from technology. Second, technology can be media to facilitate a virtual meeting. The students can connect with professional speakers remotely through video conferencing, audio calls, and shared screens. The communication will be more effective as it increases flexibility and cost savings. Third, through technology, students learn about global awareness, different cultures, and various issues. This information helps to broaden students' knowledge and awareness of the world around them. Lastly, as the students have grown up surrounded by technology, incorporating technology into the classroom is a way to meet the students' needs. The shift towards student-centered pedagogies aligns with the evolving needs of a digital society, and understanding of effective technology integration strategies.

Technology use is highest in high-income countries compared to developing countries (Laborda, 2020). Indonesia as one of the developing countries still lacks of using technology. Many Indonesian students spend their time using technology only for playing games, chatting and accessing social media. School is one institution that prepares students for their future workplaces. School can play a big role in changing the students' way of thinking using technology. The exploration of the digital divide within the literature becomes imperative as technology becomes more integral to education. Despite the increasing availability of digital resources, access disparities persist, impacting students' and educators' ability to fully engage with digital learning media. Teachers need to be aware of their competence in bringing technology to the classroom.

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As the innovation brought by technology has been increasing, teachers need to consider the effectiveness of using technology in the classroom. Teachers are the educators who spend their time mostly as role models for the students. How they use technology and find information through technology will affect the students' way of using technology. However, a number of studies have found that most teachers lack the competencies to integrate technology into education (Nihuka & Voogt, 2011; Bingimlas, 2009).

Pre-service teachers, as the future heart of the educational system, play a pivotal role in increasing technology use in the classroom (Ata & Yıldırım, 2019). The increasing ubiquity of technology in our daily lives necessitates a deeper understanding of how pre-service teachers perceive and engage with digital tools. As we transition into a digitally driven era, educators must be equipped not only with content knowledge but also with the skills to leverage technology effectively in diverse learning environments (Ulfa & Purnamaningsih, 2022). Research on pre-service teachers' experiences in adapting to these emergent modes of instruction will provide insights into their preparedness for the evolving landscape of digital education. This journal explored the multifaceted perspectives of pre-service teachers on the integration of digital learning media, shedding light on their experiences, challenges, and readiness to embrace technology in their future classrooms.

## **RESEARCH METHOD**

The participants in this research were 50 pre-service teachers from the Faculty of Teacher Training and Education at a university in Medan. The students were in 5<sup>th</sup> semester majoring in English education. The average age was ranging from 21 to 25. A mixed-methods approach was adopted to gather comprehensive data, incorporating both qualitative and quantitative research methods. Surveys were distributed to 50 pre-service teachers. The questionnaire was translated into the Indonesian language, the native language of the participants. It was a 4-point *Likert-type scale* that ranged from strongly disagrees to strongly agree. The data from the questionnaire were used to investigate the teachers' perspectives about their attitudes toward technology as learning media. The participation was anonymous and voluntary, the informed consent forms were given to participants to use the data by using pseudonyms. After filling out the questionnaire, 10 participants were selected to be interviewed to gain an in-depth

understanding. The data from the interview was used to find the challenge that the pre-service teacher faced.

## FINDINGS AND DISCUSSION

### *Finding*

This part presents the empirical findings obtained from the surveys and interviews. The empirical findings of this study offer a nuanced understanding of pre-service teachers' perspectives on the use of digital learning media. Through a mixed-methods approach encompassing surveys and interviews, a range of themes emerged, providing insights into how these aspiring educators navigate the intersection of technology and pedagogy. The data from the questionnaire were shown in table 1 below.

**Table 1** Data from the Questionnaire (N=50)

Question	N	Mean	Std.Deviation
I can use a computer to present a slide, a video, music, or an image	50	3.45	0.577
I can use technology to find teaching material	50	2.91	0.894
I can use technology to assess my students	50	1.58	0,707
Technology makes my job easier	50	1.73	0.568
I need to integrate technology into the classroom because it is important	50	3.35	0.581
I know websites used for learning English	50	2.10	0.548
I know how to make a blog and content for learning on social media	50	1.75	0.791
I can use apps and games to teach English	50	1.85	0.930
I can manage a virtual meeting	50	2.52	0,577
I can use a computer for sending email and sharing files	50	3.23	0.737

\*)1=Strongly Disagree, 2=Disagree, 3=Agree, 4=Strongly Agree

As can be seen from the table, many teachers use technology as learning media. It mentions that “I can use a computer to present a slide, a video, music, or an image” with an average of 3.45 out of 4 as the maximum rating. This shows that teachers can work with technology. The EFL pre-service teachers are aware that integrating technology into the classroom is important with a rating of 3.35. Moreover, they have basic competency to send and share files with a rating of 3.23.

However, the statements “I can use technology to assess my students”, “Technology makes my job easier”, “I know how to make a blog and content for learning on social media”, and “I can use apps and games to teach English” were

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confirmed as low at the mean of 1.58, 1.73, 1.75, and 1.85. This confirms that most pre-service teachers do not know how to integrate technology into the classroom.

The interview also shows the challenges the pre-service teachers faced. One of the challenges is that the university does not provide any lessons for teaching pre-service teachers how to integrate technology into the classroom. One of the male participants said:

*“The university did not teach me how to use a computer for learning media. Most of the lectures also did not use a computer to present a video or slides while teaching. They keep talking without using any media.”*

Another female participant said:

*“When I was in senior high school, my math teacher liked to use games and slides. The students were eager to learn math. I think at that time, math became an easy subject, but if I am asked whether I will use technology as learning media in my future class, I do not have any idea how to make it as we are not prepared to make it in university.”*

The second challenge is a lack of competencies and devices in using technology. From the interview, most of the participants know basic competencies in technology like operating MS. Word and PowerPoint. Most of them even did not know how to make slides using Canva. One female participant was quoted saying:

*“I used to use technology to do my assignments such as typing in MS Word and making slides using PowerPoint. My friend said Canva is easier to use but I do not know how to design using it”.*

Another male also said:

*“I did not have a computer. I do everything using my mobile phone to type, design, and open apps and the web but not all apps and webs can be accessed through my mobile. Some websites are new to me and I do not know how to use them.”*

The third challenge is the lack of access and devices in most schools in remote areas in Indonesia. When asked whether the teacher should use technology while learning, one female participant believed that technology is not the most important that the EFL teachers in Indonesia need most. He said:

*“It is hard for me to use technology; I do not understand much about it. But I know some schools are not provided with internet even with computers and*

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*projectors including schools in my hometown. I think teachers should focus most on how to interact with the students. Technology cannot be applied in some areas in Indonesia. EFL teachers need to upgrade themselves to use English while teaching”*

However, the big challenge is in the pre-service teachers’ confidence in their ability to use technology. Another female participant said that:

*“I can use technology in the classroom but I am afraid that I can not manage the class while using technology. Integrating it to assess the student and provide the webs and games will be complicated as I need to teach the student to use it”*

### **Discussion**

The study identified a prevalent positive attitude among pre-service teachers towards digital learning media. Many participants expressed excitement about the potential of technology to enhance student engagement and facilitate personalized learning experiences. This study is linked with the study done by Ndibalema (2014) about Teachers’ Attitudes towards the ICT as a Pedagogical Tool in Secondary Schools in Tanzania. The positive sentiments were often rooted in the belief that digital tools could cater to diverse learning styles and offer opportunities for creativity and collaboration. However, it is noteworthy that these positive attitudes did not uniformly translate into a high level of confidence in the integration of technology, suggesting a nuanced relationship between attitude and perceived preparedness.

Conversely, the study also revealed apprehensions and challenges faced by pre-service teachers in incorporating digital learning media into their teaching practices. Common concerns included a lack of competencies and devices in using technology, a lack of access to adequate training and professional development opportunities from universities and government, a lack of access and devices in most schools in remote areas as well as anxieties about their ability to use technology and potential disruptions in the classroom. Some participants expressed concerns about the digital divide, highlighting the need to address disparities in access to technology among students. These findings underscore the importance of comprehensive and ongoing training programs to build the confidence and competence of pre-service teachers in utilizing digital tools effectively. While some pre-service teachers seamlessly integrated technology into their lessons, others exhibited hesitancy or faced technical challenges

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during implementation. This variability underscores the need for tailored support and mentorship to address individual needs and enhance the integration skills of pre-service teachers. Furthermore, the impact of the ongoing shift towards online and hybrid learning models encourages pre-service teachers to have specialized training in navigating virtual classrooms and utilizing digital tools for remote instruction. The findings suggest that teacher education programs should adapt to these changing dynamics, ensuring that pre-service teachers are well-prepared to navigate the challenges of digital education in both traditional and virtual settings.

In conclusion, the findings of this study illuminate the complex landscape of pre-service teachers' perspectives on digital learning media. While there is enthusiasm for the potential benefits, there are also notable challenges that must be addressed to ensure effective integration. These findings will contribute to the ongoing discourse on technology in education and inform the development of targeted interventions and support mechanisms for pre-service teachers as they prepare to embrace the digital future of teaching.

## **CONCLUSION**

In conclusion, this study offers a comprehensive exploration of pre-service teachers' perspectives on using digital learning media. The findings underscore the complexity of their experiences, ranging from positive attitudes toward technology's potential to apprehensions and challenges in its practical integration. The implications drawn from the discussion point towards a recalibration of teacher education programs to better align with the evolving needs of 21st-century classrooms.

One of the overarching themes is the imperative for ongoing and targeted professional development. Pre-service teachers demonstrate a willingness to engage with digital learning media, but the varying levels of confidence and competence necessitate structured training programs. Institutions must prioritize the development of Technological Pedagogical Content Knowledge (TPACK) and provide opportunities for hands-on experiences to bridge the gap between theoretical knowledge and practical application.

Addressing the digital divide is another critical aspect highlighted in the findings and discussion. As pre-service teachers express concerns about unequal access to technology among students, it becomes paramount for educators and policymakers to devise strategies that ensure equitable access collaboratively. Initiatives aimed at providing devices, internet connectivity, and digital literacy resources to underserved communities are essential to create a level playing field for all students.

Furthermore, the study emphasizes the need for mentorship and peer support within teacher education programs. Establishing mentorship initiatives can guide pre-service teachers in navigating the challenges of technology integration, while peer-to-peer learning opportunities can foster a culture of continuous improvement. The observed variability in the actual integration of digital tools suggests that a collaborative learning environment can contribute to a more consistent and effective implementation of technology in the classroom.

Teacher education programs must adapt swiftly as education undergoes a paradigm shift towards online and hybrid learning models. The study's findings highlight the pre-service teachers expressed need for specialized training in virtual instruction. This shift necessitates a reevaluation of pedagogical strategies, technical proficiency, and considerations for maintaining student engagement in digital learning environments.

In essence, this research contributes valuable insights into the ever-evolving landscape of technology integration in teacher education. The conclusions drawn from the study inform recommendations for refining teacher preparation programs, addressing access disparities, promoting mentorship, and adapting to the changing dynamics of digital education. As we move forward, these insights serve as a foundation for fostering a generation of educators equipped not only with pedagogical knowledge but also with the skills and mindset required to navigate the complexities of digital learning in the modern educational landscape.

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