Pre-service EFL Teachers' Readiness for Using ICT-based Media in Listening: A Survey on Higher Education Students

Zahra Zhafira[1]*, Daviq Rizal[2]

State Islamic University Walisongo Semarang, Semarang[1]*
State Islamic University Walisongo Semarang, Semarang[2]

ABSTRACT

With the increasing influence of technology in education, it is critical to comprehend how prepared future educators are to employ ICT technologies for language instruction. This research aims to determine the level to which pre-service English as a Foreign Language (EFL) teachers are prepared to use media based on information and communication technology (ICT) in the context of listening skills development. The research focuses on higher education students pursuing EFL teacher training programs and looks at how they use ICT-based media to shed light on their attitudes, skills, and perceived barriers. This study employs a descriptive quantitative research method, utilizing a questionnaire to assess the preparedness of 100 pre-service EFL teachers for using ICT-based media in language learning, particularly in listening classes, with data analyzed through charts and narrative explanations. The results of this study are expected to add to the existing knowledge regarding the use of technology in language teaching. Furthermore, this study can offer useful suggestions for integrating ICT-based media into improving listening abilities and encouraging more efficient and interesting language learning environments in EFL classrooms.

INTRODUCTION

Technology is a valuable tool for education, particularly when learning a language. Most foreign language teachers use technological tools to aid in language learning. Not only that, language is an ever-changing field (Yudha, 2023), but information and communication technology (ICT) integration has become crucial in the quickly changing educational landscape. They are revolutionizing conventional teaching methods and improving student experiences (Pradana, 2016; Pradana et al., 2023). The subject of teaching English as a foreign language (EFL) has seen a paradigm shift as a result of this technological revolution, with teachers increasingly incorporating ICT-based media into their pedagogical approaches. The

preparedness of pre-service EFL teachers to use ICT-based media to teach listening skills becomes critical as higher education institutions work to train the next generation of educators. With the advent of the digital age, many multimedia resources have become available to learners, including interactive platforms and online audio materials. These resources present a variety of ways to involve language learners in the auditory aspect of language acquisition. To guarantee the effectiveness and applicability of language instruction programs, it is crucial to comprehend how prepared pre-service EFL instructors are to use these resources.

For instance, 88 percent of language teachers reported using the Internet to find instructional materials like videos or online textbooks, and 87 percent reported uploading and organizing their own teaching materials online (Ding et al., 2019). In today's rapidly evolving digital world, technology has become an indispensable part of education, particularly in language acquisition. Utilizing technology from the fourth industrial revolution in the classroom is crucial to allowing students to learn and function in the technological age (Mohamad Alakrash & Abdul Razak, 2020.). Teachers of English as a Foreign Language (EFL) find incorporating technology into their lesson plans increasingly important, especially for pre-service teachers. As a result, integrating technology into their lesson plans presents both opportunities and challenges for EFL educators. It's anticipated that pre-service teachers of today will be better prepared than those of the past to use technology in the classroom (Park & Son, 2022a). Understanding their viewpoints is crucial as these future educators will play a vital role in shaping the language learning experiences of the next generation of students. (Park & Son, 2022b) state that studies on pre-service teachers' preparedness for integrating technology, as well as the state of teacher education about ICT use, must be conducted at the pre-service teacher training level so that pre-service teachers need to have both pedagogical and technological experiences that will help them in their future teaching roles. Related research has also been done to look into how EFL university students use ICT to learn and use English (Alfarwan, 2019). Utilizing technology from the fourth

industrial revolution in the classroom is crucial to allowing students to learn and function in the technological age (Mohamad Alakrash & Abdul Razak, 2020.). Their analysis of 90 relevant research papers published between 2007 and 2016 (Hwang & Fu, 2019) explored how collaborative mobile learning has evolved in various domains.

Information and communication technology, or ICT, has been increasingly prevalent in language instruction and learning in recent decades. Information and communication technologies (ICTs) are based on computers and the internet and are used to create, store, display, and share information. ICT offers a framework for creating, displaying, distributing, and sharing information and an environment for communication between humans and machines (Al Arif et al., 2022). Through ICT methods like social networking, video-based communication, and email, English language learners can communicate with native speakers in the context of English as a foreign language (EFL). Utilization of ICT can give learners the chance to practice their English in authentic language-use contexts (Lamb & Arisandy, 2020). In the EFL context, ICT integration enhances students' motivation (Hu et al., 2022). Students' language proficiency may be enhanced by the use of ICT in language instruction.

In response to this challenge, language teacher education programs now incorporate courses on the use of ICT in language classes. Research has been done on how ready pre-service teachers are to use technology in English language instruction. The majority of participants in a study on pre-service English teachers' preparedness for CALL in Hong Kong in a small sample said they were proficient ICT users, but they did not appear to be driven to undertake technology-enhanced language learning after graduation (Park & Son, 2022b). Similar findings have been found in research on the barriers, encouragers, and maintenance of CALL among Iranian EFL pre-service teachers, indicating that the participants lacked complete confidence in executing CALL in their classes (Fathi & Ebadi, 2020). A case study conducted in Norway also looked into graduate student instructors' readiness to use

ICT to teach English as a second language. (Røkenes & Krumsvik, 2016). The result shows the student teachers' mastery and ability in teaching ESL with ICT variations. ICT can help students improve their listening, reading, speaking, and writing abilities in the English language (Jakob & Afdaliah, 2019). ICT use in the classroom has the potential to improve attitudes in both teachers and students (Jiang et al., 2021). Successful communication in daily life requires the ability to listen well. Typically, people spend 45% of their waking hours listening (Tan et al., 2020). Listening comprehension is an important core language skill for teaching EFL since it facilitates understanding and clear communication.

This study focuses on the readiness of pre-service EFL teachers to use ICT for teaching listening skills, addressing a gap in the understanding of their specific preparedness and confidence in this area. While previous research has generally explored ICT use in language teaching, this study targets listening comprehension, an essential but often overlooked skill. By assessing the challenges and opportunities these teachers face, the study aims to provide insights to improve teacher education programs, ensuring future teachers are better equipped for ICT-enhanced listening instruction. The findings will inform the development of targeted professional development initiatives and curricula, ultimately enhancing the effectiveness of language instruction for EFL students.

RESEARCH METHOD

This study uses a descriptive quantitative research method. The goal of employing quantitative methodologies in research on English as a Foreign Language (EFL) instruction is similar to applying this methodology in psychology and education. Based on the research questions and relevant literature reviews, the questionnaire was created (Yang & Wang, 2019). Questionnaires were employed to collect data and determine the pre-service EFL teachers' preparedness for using ICT-based media in language learning, especially in listening classes. The participants were 100 pre-service EFL teachers in the fifth and third semesters. The main criteria for this study are that all participants had used ICT-based media in their teaching
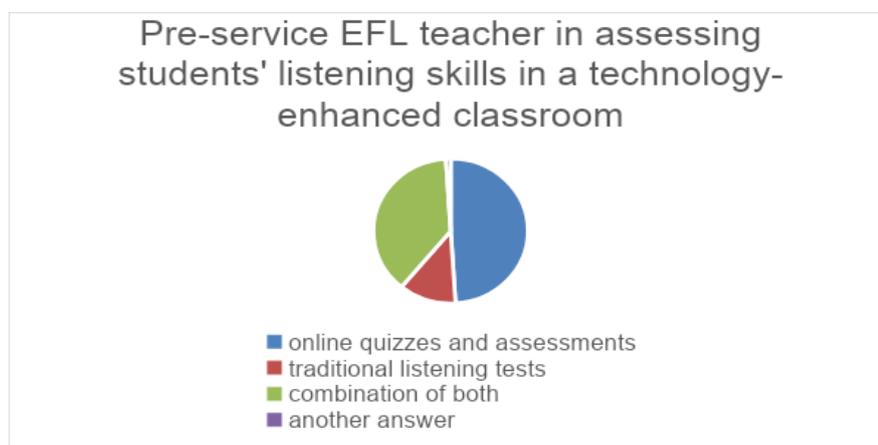
practices. The questionnaire asked pre-service teachers about their readiness for media based on ICT. The questionnaire asked about the participants' assessments of the university courses they took to enhance their TELL abilities, their opinions and perspectives about integrating ICTs into English classes, and the level of confidence pre-service EFL instructors had in using ICTs. The method of data analysis in this study is by interpreting data in the form of charts and then explaining in the form of narratives.

FINDING AND DISCUSSION

Findings

A hundred participants of EFL students in the fifth and third semesters from some universities were conducted in this research. Almost all of participants were in the study of English Education Department major. One set of questionnaire data was collected via Google Form with twelve close-ended questions and one open-ended question. This survey was focused on the pre-service EFL teachers' readiness to use ICT-based media in listening class, their competence, also their views regarding some tools that they used in listening class.
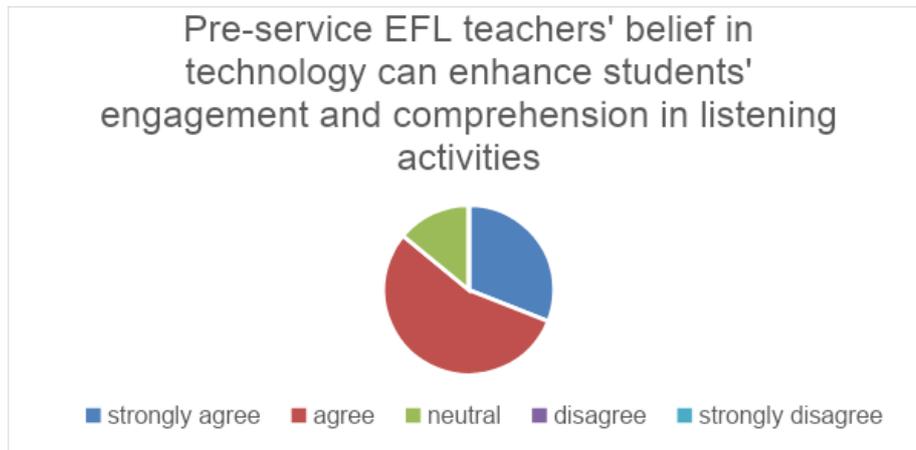
Thus, pre-service teachers generally perceive themselves as highly proficient in utilizing technology as an educational instrument, particularly when it comes to listening. According to pre-service EFL teachers, technology in listening classes has several advantages and can help students learn how to listen.

Pre-service EFL teacher in assessing students' listening skills in a technology-enhanced classroom

- online quizzes and assessments
- traditional listening tests
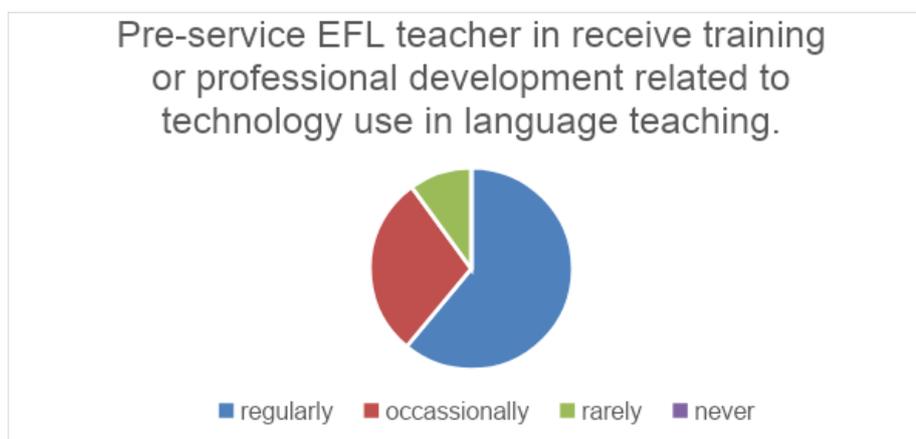- combination of both
- another answer

As for the first question about how pre-service EFL teachers assess students' listening skills in a technology-enhanced classroom, there are many variations of the answer. 495 participants or 49 pre-service EFL teachers prefer to use online quizzes and assessments. However, 12% of participants prefer to use traditional assessment. The effectiveness of online or traditional assessments is often debated. Both assessment methods are equally effective but have their own advantages and disadvantages. However, 38% of participants prefer to use a combination of both online and traditional assessments. Indeed, it would be more effective to combine these two assessment methods. Both will be equally effective with online or traditional assessment, depending on how the teacher packages it in the lesson.
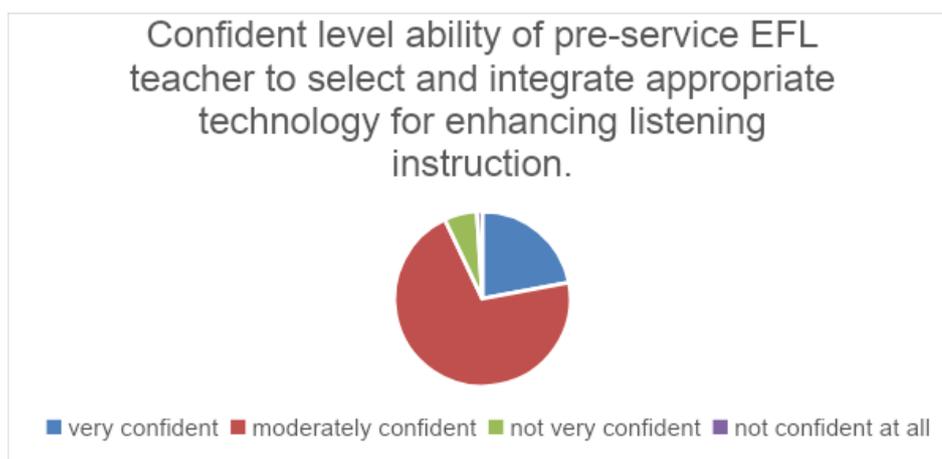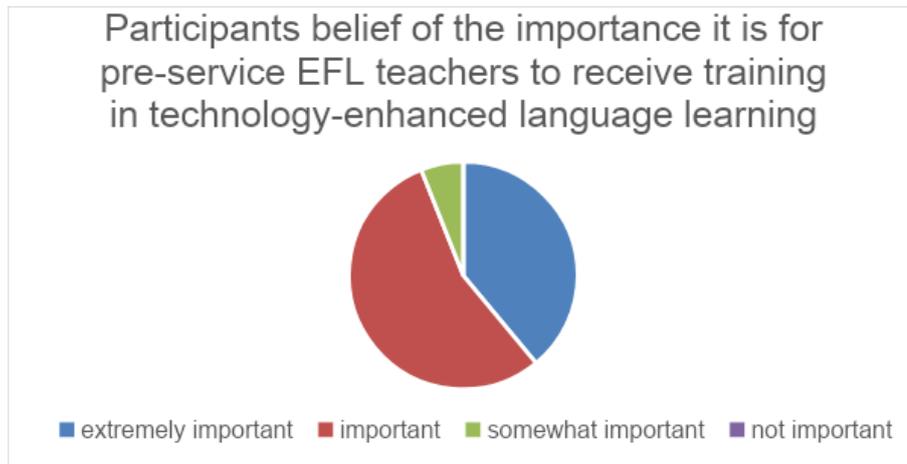

As seen from the chart above, the confidence level in pre-service EFL teachers' ability to integrate ICT-based media for listening is very diverse. 71% of participants feel moderately confident in integrating technology into listening learning media. 22% of participants or pre-service EFL teachers feel confident integrating technology into listening learning. But 6% of participants feel less confident integrating technology into listening learning. Integrating technology into learning is very diverse. Many online applications can be applied in listening learning. In addition, there are also many online resources that can be used for listening and learning at various levels in the classroom.

Pre-service EFL teachers' belief in technology can enhance students' engagement and comprehension in listening activities
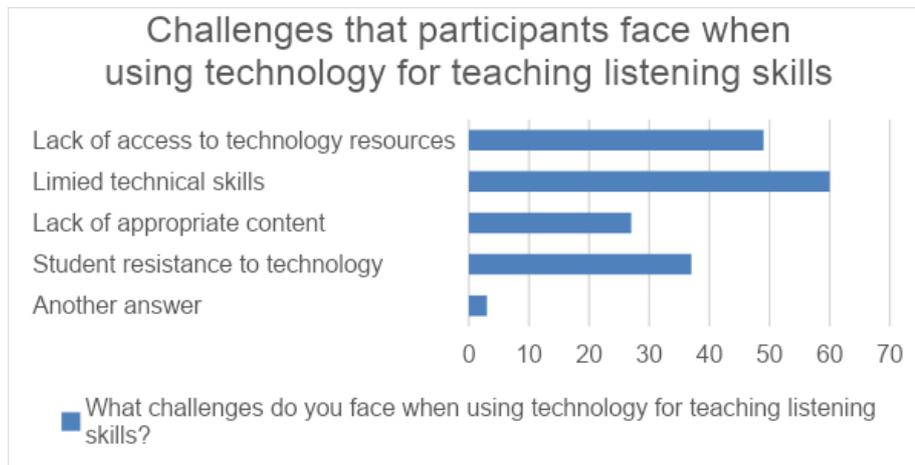
According to the chart data presented, 55% of the participants agreed that technology can increase students' engagement and comprehension in listening activities. 31% of the participants strongly agreed with this statement. There are also many variations of technology that can be used to increase students' engagement and comprehension, such as the use of online sources and online applications for listening learning in the classroom, which can improve student competence.

Pre-service EFL teacher in receive training or professional development related to technology use in language teaching.

From the data above, it can be concluded that 61% of participants receive regular training or professional development related to technology use in language teaching. And 29% of participants occasionally receive training related to integration technology in language teaching. And 10% of participants rarely receive training programs for integrating technology into language teaching.

Participants belief of the importance it is for pre-service EFL teachers to receive training in technology-enhanced language learning

■ extremely important   ■ important   ■ somewhat important   ■ not important

Related to training in technology-enhanced language learning, 55% of participants or pre-service teacher state that it is important for them to receive training in technology-enhanced language learning. 39% of participants also state that is extremely important for pre-service teacher in receiving training of technology-enhanced language learning.

Challenges that participants face when using technology for teaching listening skills

Lack of access to technology resources
Limied technical skills
Lack of appropriate content
Student resistance to technology
Another answer

0   10   20   30   40   50   60   70

■ What challenges do you face when using technology for teaching listening skills?

In using technology, there are some challenges that participants face. As shown in the data above, most of participants choose that limited technical skill is the biggest challenge in using technology. Lack of access to technology resources is also an obstacle to using technology. Furthermore, participants also state that student resistance to technology is one of the challenges in the classroom. And lack of

appropriate content also being an obstacle in the listening class integrated with technology.
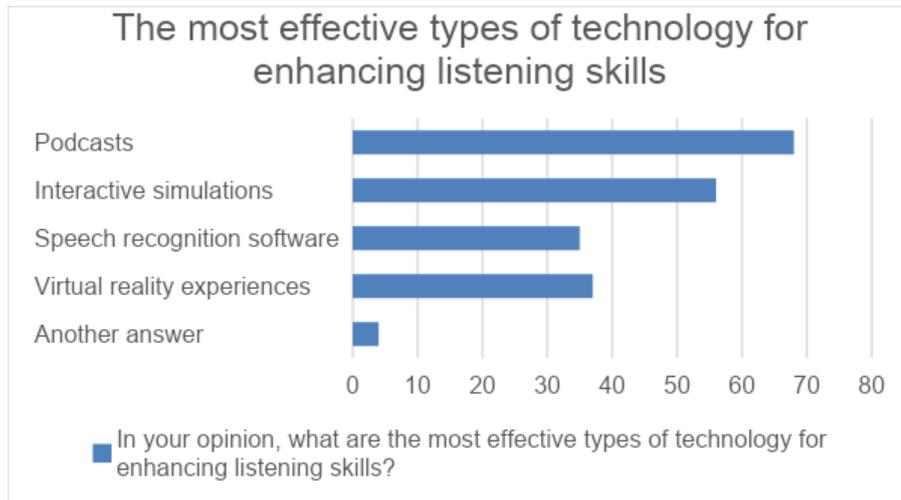
There are many resources or types of technology to enhance students' listening skills. Based on that data, participants state that podcasts and interactive simulations are the most effective types of technology for enhancing listening skills. Besides that, speech recognition software and virtual reality experiences are also effective in enhancing students' listening skills. All of those types of technology can be used to improve students' listening skills well, depending on the teachers themselves in how to integrate the technology in the classroom effectively.

At the end of the questionnaire, we ask an open-ended question about how participants describe the level of their confidence and competence in using ICT-based media in their teaching-listening practice experience.

> I feel confident enough in using technology for teaching listening.

> I think my level of confidence and competence in the use of ICT based media is a beginner, because there's a lot of application and method that I just knew when I'm in ICT classroom, and my skill is very basic about technology in teaching. I'll learn a lot, and I hope in the future will be more adaptive with technology.

> I only have a little experience in using ICT-based media in listening, such as using a smart TV for presentations.

> I am very confident and competent in using ICT-based media in my listening teaching practice.
>
> Maybe a moderate level, I know how to use some technologies as media to teach, but not too good because there are many things/tools that I should learn more to improve my ICT skills.
>
> I really believe and am competent in the use of ICT based media in my teaching listening practice experience can increase students' understanding.
>
> ICT based media makes teaching in class easier and more effective without having to spend more preparation beyond a certain time allocation.

Most of the participants described their confidence level in using ICT as good. Some have good experiences using ICT-based media for teaching listening practice, such as using smart TV or powerpoint for explaining material. Participants also state that they usually conduct their teaching listening with audio-visual approaches, such as using YouTube and assessing them with Quizziz website. Participants believe many technology tools, applications, and strategies should be explored further.

Discussion

Most participants stated that using ICT-based media in teaching listening was very powerful in engaging interactive learning experiences in the classroom. In addition, the participants discussed their experiences using various websites and technologies for listening activities in class. In their listening class activities, it was discovered that some participants mostly used PowerPoint combined with YouTube or podcasts as their medium of education. Additionally, the researcher found several benefits that participants reported related to technology's beneficial effects on listening skills. Moreover, this result, in line with prior studies (Szeto & Cheng, 2014), indicates the extensive usage of YouTube, suggesting that it is the most commonly visited video website among pre-service teachers. Participants think they may easily get authentic media using ICT-based media as learning tools.

From the questionnaire, most participants feel comfortable using technology and often incorporate it into their teaching practice. Regarding the teacher's element, a

significant connection was found between the educational approaches used by the classroom teacher and the students' perceptions of the influence of ICT use (Park & Son, 2022a). The participants also shared their experiences with several tools of resources that they used in learning. Such as online listening exercises, interactive multimedia content, and language learning applications. This finding corresponds to what is revealed in (Park & Son, 2022b), that pre-service EFL teachers have a wide range of experience in ICT teaching activities.

Besides that, assessment is one of the important things in teaching and learning activities. Assessment is more than just administering tests and assigning grades; it's meant to give teachers and students an in-depth understanding of how well they're doing in terms of the course objectives as they relate to the teaching and learning process (Torres, 2019). Participants also answer how they assess their students' listening skills in a technology-enhanced classroom. Participants use online assessment, and some still use traditional listening tasks to assess their students. Because assessment is so complicated, language teachers may feel overpowered when looking for new methods to employ in the classroom. Nevertheless, it is crucial to research the effects of assessment on teachers and students to make meaningful changes that will improve language acquisition (Torres, 2019). In line with the statement, participants combine both online and traditional assessments. The results of this study are also in line with previous research conducted by (Karatza, 2019), which states that compared to traditional teaching techniques, the appropriate use of technology in education provides positive advantages and facilitates collaborative learning among educators and students. To conduct online assessments in the classroom, teachers should be confident in integrating appropriate technology for enhancing listening instruction. (Aisyiyah, 2022) also state that in order to improve their instruction and help their students' language acquisition in the future, EFL pre-service instructors are also expected to be proficient in using technology.

Furthermore, the other participants believe that in using ICT based media in teaching methods, students will be more active and the learning process will be easier to carry out and also easier for students in understanding the materials. And participants believe that many technology tools, applications, and strategies that should be explored further.

CONCLUSION

In conclusion, this research paper delves into the crucial aspect of pre-service English as a Foreign Language (EFL) teachers' readiness to incorporate Information and Communication Technology (ICT)-based media in the context of listening skills. The survey conducted among higher education students provides valuable insights into the current state of preparedness among future EFL educators.

The findings of this study underscore the significance of addressing the technological readiness of pre-service EFL teachers, particularly in the realm of listening instruction. As ICT continues to evolve and play an increasingly integral role in education, understanding and enhancing teachers' proficiency in utilizing digital media becomes paramount.

The identified factors influencing readiness, such as prior ICT training and perceived self-efficacy, offer valuable points for intervention and improvement. Educational institutions can use these insights to design targeted programs that bridge the gaps in technological skills and confidence among pre-service EFL teachers.

Furthermore, the study emphasizes the need for a holistic approach that not only focuses on technical skills but also considers pedagogical strategies for effective integration of ICT-based media in listening instruction. Training programs should address not only the tools but also the methodologies that enhance the learning experience for students.

In light of the ever-growing importance of technology in language education, the outcomes of this research highlight the urgency for educational institutions and policymakers to invest in comprehensive training programs. By doing so, they can ensure that the next generation of EFL teachers is well-equipped to harness the potential of ICT-based media in fostering enhanced listening skills among language learners. As the landscape of language education continues to evolve, adapting to these changes becomes essential for preparing teachers who can effectively navigate and leverage the benefits of technology in the language learning process.

REFERENCES

Aisyiyah, M. N. (2022). PRE-SERVICE ENGLISH TEACHERS' READINESS FOR TECHNOLOGY-ENHANCED LANGUAGE LEARNING. *ELT Echo: The Journal of English Language Teaching in Foreign Language Context*, *7*(2). https://doi.org/10.24235/eltecho.v7i2.12509

Al Arif, T. Z. Z., Hidayati, & Kurniawan, D. (2022). EFL University Students' Attitudes Towards ICT Use for English Language Learning. *European Journal of Language and Culture Studies*, *1*(5), 68–75. https://doi.org/10.24018/ejlang.2022.1.5.36

Alfarwan, S. (2019). UNIVERSITY STUDENT ACCESS TO AND USE OF ELECTRONIC DEVICES: A LATENT ENGLISH LANGUAGE LEARNING POTENTIAL. In *Teaching English with Technology* (Vol. 19, Issue 1). http://www.tewtjournal.org

Ding, A.-C. E., Ottenbreit-Leftwich, A., Lu, Y.-H., & Glazewski, K. (2019). EFL Teachers' Pedagogical Beliefs and Practices With Regard to Using Technology. *Journal of Digital Learning in Teacher Education*, *35*(1), 20–39. https://doi.org/10.1080/21532974.2018.1537816

Fathi, J., & Ebadi, S. (2020). Exploring EFL pre-service teachers' adoption of technology in a CALL program: obstacles, motivators, and maintenance. *Education and Information Technologies*, *25*(5), 3897–3917. https://doi.org/10.1007/s10639-020-10146-y

Hu, X., Zhang, J., He, S., Zhu, R., Shen, S., & Liu, B. (2022). E-learning intention of students with anxiety: Evidence from the first wave of COVID-19 pandemic in China. *Journal of Affective Disorders*, *309*, 115–122. https://doi.org/10.1016/j.jad.2022.04.121

Hwang, G. J., & Fu, Q. K. (2019). Trends in the research design and application of mobile language learning: a review of 2007–2016 publications in selected SSCI journals. In *Interactive Learning Environments* (Vol. 27, Issue 4, pp. 567–581). Routledge. https://doi.org/10.1080/10494820.2018.1486861

Jakob, J. C., & Afdaliah, N. (2019). Using Oxford Smart Choice Multi-ROM to develop the students� listening ability. *EduLite: Journal of English Education, Literature and Culture*, *4*(1), 25. https://doi.org/10.30659/e.4.1.25-34

Jiang, M. Y., Jong, M. S., Lau, W. W., Meng, Y., Chai, C., & Chen, M. (2021). Validating the General Extended Technology Acceptance Model for E-Learning: Evidence From an Online English as a Foreign Language Course Amid COVID-19. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.671615

Karatza, Z. (2019). Information and Communication Technology (ICT) as a Tool of Differentiated Instruction: An Informative Intervention and a Comparative Study on Educators' Views and Extent of ICT Use. *International Journal of Information and Education Technology*, *9*(1), 8–15. https://doi.org/10.18178/ijiet.2019.9.1.1165

Lamb, M., & Arisandy, F. E. (2020). The impact of online use of English on motivation to learn. *Computer Assisted Language Learning*, *33*(1–2), 85–108. https://doi.org/10.1080/09588221.2018.1545670

Mohamad Alakrash, H., & Abdul Razak, N. (2020). Towards the Education 4.0, Readiness Level of EFL Students in Utilising Technology-Enhanced Classroom. In *International Journal of Innovation, Creativity and Change. www.ijicc.net* (Vol. 13). www.ijicc.net

Park, M., & Son, J.-B. (2022a). Pre-service EFL teachers' readiness in computer-assisted language learning and teaching. *Asia Pacific Journal of Education*, *42*(2), 320–334. https://doi.org/10.1080/02188791.2020.1815649

Park, M., & Son, J.-B. (2022b). Pre-service EFL teachers' readiness in computer-assisted language learning and teaching. *Asia Pacific Journal of Education*, *42*(2), 320–334. https://doi.org/10.1080/02188791.2020.1815649

Pradana, S. A. (2016). The Use of Videocast in Improving the Speaking Ability Integrated in a Drama Class. *English Education: Jurnal Tadris Bahasa Inggris*, 9(2), 409–428. https://doi.org/10.24042/ee-jtbi.v9i2.389

Pradana, S. A., Marselina, S. D., & Yudha, G. T. (2023). The Effectiveness of Memrise Application toward Students' Adjective Mastery. English

Education: Jurnal Tadris Bahasa Inggris, 16(1), 25–38.
http://dx.doi.org/10.24042/ee-jtbi.v16i1.16615

Røkenes, F. M., & Krumsvik, R. J. (2016). Prepared to teach ESL with ICT? A study of digital competence in Norwegian teacher education. *Computers & Education*, *97*, 1–20. https://doi.org/10.1016/j.compedu.2016.02.014

Szeto, E., & Cheng, A. Y.-N. (2014). Exploring the Usage of ICT and YouTube for Teaching: A Study of Pre-service Teachers in Hong Kong. *The Asia-Pacific Education Researcher*, *23*(1), 53–59. https://doi.org/10.1007/s40299-013-0084-y

Tan, C.-C., Chen, C.-M., & Lee, H.-M. (2020). Effectiveness of a digital pen-based learning system with a reward mechanism to improve learners' metacognitive strategies in listening. *Computer Assisted Language Learning*, *33*(7), 785–810. https://doi.org/10.1080/09588221.2019.1591459

Torres, J. O. (2019). Positive Impact of Utilizing More Formative Assessment over Summative Assessment in the EFL/ESL Classroom. *Open Journal of Modern Linguistics*, *09*(01), 1–11. https://doi.org/10.4236/ojml.2019.91001

Yang, Y., & Wang, X. (2019). Modeling the intention to use machine translation for student translators: An extension of Technology Acceptance Model. *Computers & Education*, *133*, 116–126. https://doi.org/10.1016/j.compedu.2019.01.015

Yudha, G. T. (2022). An Analysis of the Translation Procedures Used by Digital Happiness. *English Education: Jurnal Tadris Bahasa Inggris,* 15(2), Article 2. https://doi.org/10.24042/ee-jtbi.v15i2.14283