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Digital literacy of an EFL teacher in IT-based language instruction to teach speaking

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Abstract

Learners in today's modern age are highly technologically savvy. It is no surprise that some forms of IT-based instruction are used in language courses to make classes more entertaining and participatory for students. Teachers can involve their students in the learning process by providing a vibrant and engaging classroom environment using technology. This research aims to investigate the level of digital fluency of an Indonesian EFL teacher who uses IT-based language instruction to teach speaking, as well as how the Indonesian EFL teacher integrates digital tools and technology in their language instruction to teach speaking skills. These goals are achieved by observing an EFL teacher and 37 EFL students during three sessions of the teaching and learning process using a qualitative methodology. The results show that IT-based instruction is delivered through a variety of applications and websites, demonstrating the high level of digital literacy of the EFL teacher. It also reveals that the learning process is now inextricably linked to the internet as a learning resource and instrument, and that technological advancements benefit both students and teachers. Therefore, it is challenging to separate the roles of teachers and technology in constructing the current educational paradigm due to their influence on its progress.

Keywords: *Digital Literacy, IT-Based Instruction, Teaching Applications, Teaching Speaking, Website*

1. Introduction

In the contemporary educational landscape, technology has become an integral part of the teaching and learning process. The rapid advancement of information technology (IT) has transformed traditional classroom environments, particularly in the field of language education (Soegoto et al., 2025). English as a Foreign Language (EFL) instruction has witnessed significant shifts as digital tools and resources continue to reshape pedagogical approaches (Meirovitz et al., 2022). Today's learners, often characterized as "digital natives," navigate technology with considerable ease, creating both opportunities and challenges for language educators who must adapt to these changing dynamics.

The landscape of English as a Foreign Language (EFL) education has undergone significant transformation with the advent of digital technologies, as the integration of IT-based instruction in EFL classrooms has gained prominence due to its potential to create more engaging, interactive, and student-centered learning environments (Jameer MD, 2024; Kurniadi et al., 2025). Digital tools offer unique affordances for language acquisition, particularly for developing speaking skills, which have traditionally been challenging to foster in EFL contexts

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where exposure to authentic language use may be limited (Moorhouse & Yan, 2023). Through technology, teachers can provide students with authentic materials, simulated communicative scenarios, and platforms for meaningful interaction that extend beyond classroom boundaries.

Digital transformation has fundamentally altered the landscape of language education, creating both opportunities and challenges for English as a Foreign Language (EFL) teachers worldwide. However, the effective implementation of IT-based language instruction heavily depends on teachers' digital literacy—their ability to navigate, evaluate, and utilize digital tools for pedagogical purposes (Kiryakova & Kozhuharova, 2024). In the Indonesian context, where English is taught as a foreign language and technological adoption in education continues to evolve, understanding EFL teachers' digital literacy becomes particularly significant (Muslimin et al., 2023). Studies reveal that while Indonesian students increasingly embrace digital technologies in their daily lives, many EFL teachers still lag behind in acquiring necessary technological competencies (Waluyo, 2024). The gap between students' technological fluency and teachers' digital competence may impact the quality and effectiveness of language instruction.

This study aims to investigate the digital literacy level of an Indonesian EFL teacher who incorporates IT-based instruction to teach speaking skills. Additionally, it explores how this teacher integrates various digital tools and technologies into language instruction specifically for developing students' speaking proficiency. To guide this investigation, the following research questions are addressed:

1. How does the Indonesian EFL teacher integrate digital tools and technology in language instruction to teach speaking skills?
2. What is the level of digital literacy possessed by the Indonesian EFL teacher who implements IT-based language instruction to teach speaking skills?

By examining the intersection of digital literacy, language pedagogy, and speaking instruction, this research seeks to contribute to the understanding of how technology shapes contemporary EFL teaching practices in Indonesia. Through qualitative observations of an EFL teacher and 37 students across three instructional sessions, this study provides insights into the complex relationship between teachers' digital competence and their ability to leverage technology for effective language instruction. The findings may inform teacher education programs, professional development initiatives, and institutional policies aimed at enhancing digital literacy among EFL educators in Indonesia and similar contexts.

2. Theoretical Framework

2.1 A Seven-Stage Cycle of Activities in Teaching Speaking

Goh & Burns (2012) developed a seven-stage cycle for teaching speaking, offering a comprehensive framework for English as a Foreign Language (EFL) instruction. This cycle is designed to help learners develop their speaking skills systematically, integrating both language proficiency and metacognitive awareness. The framework consists of structured stages that guide students from initial awareness to practice and reflection, ultimately enhancing their speaking competence.

The first stage, "Focus learners' attention on speaking," emphasizes raising students' metacognitive awareness about L2 speaking. Learners are encouraged to understand the processes of planning, monitoring, and evaluating their speaking performance, which helps them become more conscious and strategic speakers (Tsang & Lee, 2023). In the second stage, "Provide input and guide planning," teachers introduce key vocabulary and discourse elements necessary for effective communication. This phase also includes exposing students to authentic language samples and equipping them with organizational frameworks to structure their speech (Whitehead & Ryu, 2023). Once students have received input, they proceed to the "Conduct

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speaking tasks" stage, where they engage in communicative activities such as role plays, debates, and presentations. These activities provide opportunities to practice speaking in real-world contexts, with an emphasis on fluency development (Xing & Turner, 2020). Following this, the "Focus on language/skills/strategies" stage allows students to analyze their performance, paying attention to specific linguistic features, speaking skills, and communication strategies needed for improvement.

To reinforce learning, the "Repeat the speaking task" stage gives students additional practice opportunities, allowing them to apply the knowledge gained from the previous analysis stage. This iterative process helps learners refine their speaking abilities over time (Ho, 2020). After repeated practice, the "Encourage direct reflection" stage prompts students to reflect on their learning experiences, challenges, and progress through self-assessment, peer feedback, and learning journals. This reflective practice fosters deeper learning and self-improvement (Li et al., 2022). Finally, the "Facilitate feedback on learning" stage provides constructive feedback through various means, including immediate corrections, written feedback, and recorded performances. This feedback helps students identify areas for improvement and refine their speaking skills further (Daumiller et al., 2022). By incorporating these structured stages, the cycle offers a well-rounded approach to speaking instruction, addressing fluency, accuracy, and strategic competence.

While this framework has been widely recognized for its effectiveness in EFL speaking instruction, research on its intersection with teachers' digital literacy and technology integration remains limited. In particular, there is a gap in understanding how this model can be adapted to digital learning environments, especially in the Indonesian context. Exploring how technology can support each stage of the cycle could provide valuable insights for modern EFL instruction.

2.2 Levels of Digital Literacy

Based on Smaldino et al (2019), digital literacy is conceptualized across three progressive levels: functional literacy, critical literacy, and transformational literacy. Functional literacy refers to the acquisition of fundamental technical competencies, including the ability to operate digital devices, navigate software applications, and execute basic digital tasks. These skills are foundational for routine engagement with technology in educational and everyday contexts. Critical literacy encompasses a more advanced set of skills, highlighting the capacity to critically evaluate digital content, assess the credibility of information sources, identify potential biases, and understand the ethical considerations associated with digital media use. This level encourages reflective and responsible consumption of digital information. Transformational literacy represents the most advanced tier of digital literacy. It involves the creative and innovative application of digital tools to solve complex problems, foster effective collaboration, and generate new knowledge or digital content. This level signifies a shift from passive use to active transformation of learning processes and professional practices through technology. Collectively, these three levels provide a comprehensive framework for understanding, developing, and enhancing digital literacy within educational environments.

2.3 Previous Studies and Gap Identification

Research on EFL teachers' digital literacy and technology integration has grown significantly, particularly with the rise of IT-based instruction. Studies highlight key challenges, including the gap between teachers' technological knowledge and pedagogical application (Dinçer, 2024) and the disconnect between personal and professional digital literacy (Meirovitz et al., 2022). In Indonesia, research shows generally positive attitudes toward ICT integration but identifies barriers such as limited training and institutional support (Hamsiah et al., 2024). While studies on technology use in speaking instruction exist, they primarily focus on student outcomes (Liu et al., 2023) rather than teachers' digital literacy and

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instructional strategies. Gaps remain in understanding how digital literacy influences speaking instruction, particularly in the Indonesian context, where qualitative classroom-based studies are limited. Additionally, much of the existing research predates recent technological advancements that have reshaped digital teaching practices. This study addresses these gaps by conducting an in-depth qualitative investigation of an Indonesian EFL teacher's digital literacy and IT-based speaking instruction. By analyzing real classroom implementation, it provides insights beyond self-reported data, contributing to a deeper understanding of how digital literacy shapes pedagogical choices and informing targeted professional development.

3. Research Method

In order to address these concerns, this research project used the qualitative technique proposed by Creswell & Creswell (2018). The goal of this methodology is to identify behaviors, specifically the use of applications and websites in conjunction with teaching speaking, utilizing Goh & Burns' cycles (2012). An EFL teacher and 37 upper-intermediate level EFL students from a tertiary-level institution in Indonesia participated in this study. The participants were selected using purposive sampling, a non-probability sampling technique where subjects were chosen based on specific characteristics, in this case, their proficiency level and enrolment in a technology-enhanced speaking course, to ensure the data collected would be relevant to the research objectives. Students were observed during three speaking teaching meetings. The phenomenon being studied was observed because observations of the phenomenon can provide useful information for a qualitative study. The observation was conducted using a structured observation guide adapted from Smaldino et al (2019), which provided a systematic framework for documenting technology integration practices in language learning environments. In order to acquire data, the researchers engaged in a range of activities. An initial non-participant observation was conducted. Instead of participating in the activity being studied, the researcher preferred to stand on the sidelines, observe, and write up his findings. (Creswell & Creswell (2018). The lecturer wore a voice recorder tool around her neck to help with the video recording gadget at the back of the classroom. These gadgets were used to record the complete teaching and learning process clearly and straightforwardly. The researcher listened to the observation recordings multiple times before transcribing the interaction in the second step of the process. The transcripts of the interaction are studied in the third step of the process to indicate how the applications and websites were used to teach speaking in an EFL classroom. Finally, a thorough verbal summary of the findings is presented.

4. Findings and Discussions

4.1 Applications and Websites Integration in Teaching Speaking

In this study, an EFL teacher integrates key stages of Goh & Burns' (2012) teaching speaking framework with a range of online tools to support and enhance students' speaking development. Over the course of three observed sessions, the teacher strategically incorporates digital resources to facilitate various aspects of speaking instruction, including reflection, vocabulary building, structured speaking tasks, language analysis, and feedback (Figure 1). By leveraging technology, the teacher aims to create an interactive and engaging learning environment that fosters students' fluency, accuracy, and confidence in spoken English.

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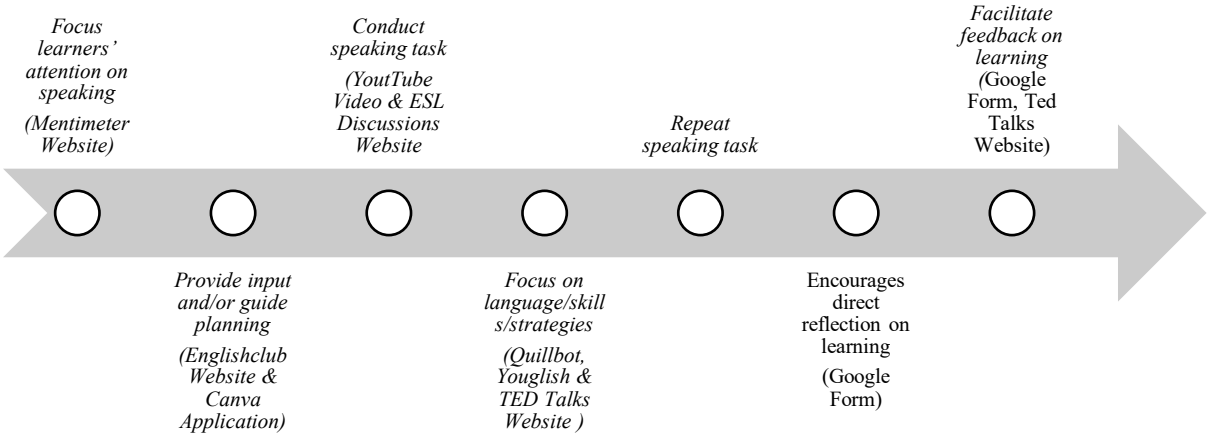

Figure 1. Internet resources in teaching Speaking

In the first session, students begin with a **Mentimeter-based reflection** on their speaking skills, identifying strengths and areas for improvement. Mentimeter facilitates engagement, metacognitive awareness, and interactive learning. Students highlight common challenges, including pronunciation, grammar, and fluency, while proposing strategies such as practice, imitation, and self-recording.

In the first session, students engage in a Mentimeter-based reflection on their speaking skills, allowing them to assess their strengths and identify areas for improvement in an interactive and engaging manner. The teacher formulates three guiding questions on Mentimeter, prompting students to reflect on their speaking abilities, challenges, and strategies for enhancement. With access to the platform via mobile devices, students submit their responses in real time, fostering a collaborative learning environment where they can openly share their thoughts. As responses are displayed on the screen, common themes emerge, revealing key challenges such as pronunciation difficulties, grammatical errors, fluency issues, and vocabulary limitations. Many students report struggling with accurate pronunciation, which affects their confidence and clarity in communication—for instance, some mispronounce multisyllabic words like *'comfortable'* as /ˌkʌmfərˈteɪbəl/ instead of /ˈkʌmf.tə.bəl/, or stress the wrong syllable in words like *'develop'*. Others highlight difficulties in structuring grammatically correct sentences, such as inconsistent verb tense usage in complex sentences (e.g., *'If I will have time, I will join'* instead of *'If I have time, I will join'*), which can lead to misunderstandings in more formal or academic discussions. Some acknowledge that although they possess a sufficient vocabulary for daily conversations, they often misuse words or struggle with paraphrasing—for example, using *'big'* in academic contexts instead of more precise terms like *'significant'*, or rephrasing *'reduce pollution'* as *'make pollution less'*, which hinders their ability to express ideas effectively and naturally in extended discussions. Fluency concerns are also prominent, as some students express frustration over speaking too slowly or hesitating frequently, making their speech less natural and coherent.

Alongside identifying these challenges, students propose various strategies to improve their speaking skills, emphasizing the importance of consistent practice through regular speaking exercises and interactions with peers. Some suggest imitating native speakers by focusing on pronunciation, intonation, and natural phrasing, while others recommend recording themselves and reviewing their speech to pinpoint areas for improvement. Expanding vocabulary and studying grammar rules are also mentioned as essential steps to enhance clarity and coherence in speech. Additionally, a few students advocate for the use of online resources, such as language learning platforms and speaking clubs, to gain more exposure and practice in real-

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world communication. By utilizing Mentimeter as an interactive icebreaker, the teacher not only captures students' attention but also cultivates metacognitive awareness, encouraging them to take an active role in their language development. This initial reflection sets the stage for the speaking lessons that follow, equipping both students and the teacher with valuable insights into individual learning needs and areas that require targeted improvement.

For the language analysis stage, students present their arguments while their peers actively take notes, focusing on key aspects of their classmates' speaking performance, such as pronunciation, fluency, grammatical accuracy, and coherence. This peer observation encourages students to engage critically with spoken language, fostering a deeper understanding of both their own strengths and areas for improvement. After the presentations, the teacher provides detailed feedback using QuillBot to analyze and correct grammatical errors, helping students recognize mistakes in verb tense, subject-verb agreement, and sentence structure while offering suggestions for clearer, more precise communication. Additionally, YouGlish is used as a pronunciation tool, allowing students to hear authentic examples of how words and phrases are pronounced in various real-life contexts, helping them refine their pronunciation, intonation, and natural rhythm of speech. To further enhance their exposure to authentic English usage, students are encouraged to explore news websites such as BBC, The Guardian, and The Jakarta Post, where they can engage with real-world content, observe how English is used in professional and journalistic contexts, and expand their vocabulary. Additionally, they are introduced to TED Talks, where they can listen to expert speakers, analyze speech delivery techniques, and gain insights into effective public speaking. By integrating these digital resources, the teacher ensures that students not only receive targeted corrections but also have access to meaningful, real-world language input that can inspire their own speaking development.

The second session centers on task repetition, providing students with an opportunity to refine their presentations individually by applying the feedback received in the previous session. This task repetition involves students delivering the same or slightly modified presentations on the same topic, allowing them to focus on improving specific aspects such as content organization, language accuracy, and delivery. For instance, students are encouraged to restructure their arguments for better coherence, replace overused vocabulary with more precise terms, and pay closer attention to pronunciation and intonation patterns. This stage is crucial for reinforcing speaking skills, as it enables learners to revisit their arguments, improve their fluency, and enhance their overall performance. By engaging in this repeated practice, students gain confidence in structuring their ideas more effectively while minimizing common errors related to pronunciation, grammar, and vocabulary. Unlike the initial attempt, where they were introduced to new language elements and speaking strategies, this session encourages students to focus on self-correction and performance enhancement, ensuring a more polished and articulate delivery. The teacher observes their presentations, noting improvements as well as areas that still require attention, thereby reinforcing the importance of consistent practice in language development. To conclude the session, students complete a Google Form reflection, which serves as a self-assessment tool to evaluate their progress, challenges, and areas for further improvement. This reflective exercise encourages students to think critically about their learning journey, recognize their advancements, and set personal goals for continuous improvement in their speaking skills. By incorporating task repetition and structured self-reflection, this session ensures that students internalize the learning process while gradually refining their speaking proficiency.

In the final session, the teacher focuses on providing feedback on learning, guiding students through a reflective process to help them refine their speaking skills. This stage is essential for reinforcing previous lessons and ensuring that students recognize their progress while

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addressing remaining challenges. The teacher offers targeted feedback on aspects such as pronunciation, fluency, coherence, and grammatical accuracy, encouraging students to analyze their own speaking development critically. To further support their learning, the teacher incorporates TED Talks as an additional listening and speaking resource, allowing students to observe real-world examples of effective speech delivery, intonation, and public speaking techniques. By analyzing TED Talks, students gain exposure to diverse speaking styles and authentic English usage, which can serve as a model for their own communication. Additionally, students review their past performances, applying teacher and peer feedback to refine their speaking abilities with guided instruction. This process helps them build confidence, improve self-expression, and develop more structured and engaging speech delivery. By the end of the session, students are encouraged to reflect on their overall progress, set goals for further improvement, and continue practicing their speaking skills beyond the classroom. Through this structured feedback and exposure to high-quality language input, students leave the course with a clearer understanding of their strengths and areas for development, equipping them for more effective communication in English.

This study highlights the impact of integrating internet resources on enhancing speaking instruction, showcasing how digital tools can create a more engaging, interactive, and effective learning environment. By incorporating platforms such as Mentimeter, YouGlish, QuillBot, TED Talks, and online news sources such as, the teacher provides students with authentic language input, real-time feedback, and opportunities for self-reflection, all of which contribute to a more dynamic speaking practice. These digital resources help address common challenges in EFL speaking instruction, such as pronunciation difficulties, fluency issues, and grammatical accuracy, by offering students interactive exercises, exposure to natural speech, and structured learning opportunities tailored to their individual needs. Furthermore, this study presents practical strategies for EFL teachers to optimize their speaking lessons, demonstrating how technology can be used to foster greater student engagement, metacognitive awareness, and autonomous learning. By leveraging these tools effectively, teachers can create a student-centered learning experience that not only improves speaking proficiency but also encourages learners to take an active role in their language development. Ultimately, the findings provide valuable insights for educators seeking to enhance EFL speaking instruction through digital integration, paving the way for more effective, technology-supported language learning.

4.2 Digital Literacy of EFL Teachers in Teaching Speaking

The teacher exhibits a strong level of functional digital literacy, demonstrating the essential technical skills needed to effectively integrate digital tools into instruction. This is evident in their proficient use of platforms like Mentimeter, QuillBot, and Google Forms to facilitate interactive speaking activities. Their ability to configure real-time responses and error-correction features highlights operational competence, ensuring smooth classroom implementation. Importantly, students' seamless access to these tools via mobile devices reflects the teacher's success in creating a digitally fluent learning environment.

Beyond technical proficiency, the teacher also demonstrates critical digital literacy by guiding students to evaluate credible sources, such as BBC and The Guardian, fostering analytical thinking in an era of digital misinformation. Activities like peer feedback through Google Forms and dialectal analysis via YouGlish encourage reflective and ethical engagement with digital content. This cultivates higher-order cognitive skills, aligning with Smaldino et al.'s (2019) emphasis on critical literacy as a necessity for responsible digital citizenship.

Most significantly, the teacher achieves transformational digital literacy by redefining traditional pedagogy through technology. Rather than merely digitizing existing methods, they design student-centered learning experiences—such as metacognitive reflection via Mentimeter and self-directed grammar refinement with QuillBot. TED Talks serve as authentic

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language models, while iterative feedback loops promote autonomy. This approach shifts the classroom dynamic from passive instruction to active, collaborative knowledge construction, showcasing how digital tools can fundamentally enhance learning outcomes.

The findings collectively indicate that the teacher operates at an advanced level of digital literacy, where technology serves not merely as an instructional aid but as a catalyst for pedagogical innovation. By addressing all three dimensions of Smaldino's model—functional, critical, and transformational—the teacher's methodology effectively bridges the gap between technological integration and meaningful educational outcomes. This holistic approach results in a learning environment that nurtures students as reflective, autonomous, and critically engaged English speakers, well-prepared to navigate the complexities of digital-age communication. The study thus presents a compelling case of how digital literacy, when fully realized across all three levels, can significantly enhance language teaching and learning in EFL contexts.

4.3 Discussion

This study examined the digital literacy of an Indonesian EFL teacher in IT-based language instruction for teaching speaking. The findings reveal that the teacher demonstrates a high level of digital literacy, effectively integrating various digital tools and online resources into different stages of speaking instruction. By leveraging technology, the teacher enhances students' learning experiences, promoting engagement, metacognitive awareness, and communicative competence (Zou et al., 2023). The study highlights how structured digital integration supports fluency development, language analysis, and self-reflection, ultimately leading to more effective speaking instruction.

The results indicate that the teacher's strategic use of digital tools follows a well-structured approach that aligns with pedagogical objectives. Various platforms such as Mentimeter, QuillBot, YouGlish, TED Talks, and online discussion forums were employed at different instructional stages. Mentimeter facilitated self-reflection and metacognitive awareness, allowing students to assess their speaking abilities and set learning goals (Carter et al., 2023). QuillBot and YouGlish provided real-time grammar and pronunciation feedback, offering students opportunities to refine their speaking skills independently (Asratie et al., 2023). TED Talks and online discussion platforms introduced authentic language input, exposing students to natural speech patterns and effective communication strategies (Williyan, 2023). The teacher's ability to integrate these tools meaningfully into classroom activities reflects both technical proficiency and pedagogical expertise, reinforcing the importance of digital literacy in modern EFL instruction.

Beyond tool integration, the findings underscore the role of task repetition and self-reflection in technology-enhanced speaking instruction. The teacher employs a cyclical approach, where students first engage in speaking tasks, receive digital feedback, and then refine their presentations based on structured self-reflection and peer evaluation. This method ensures that students internalize feedback and progressively improve their fluency and accuracy (Witzel et al., 2024). The use of Google Forms for structured reflection further demonstrates how digital tools support autonomous learning, enabling students to track their progress and identify specific areas for improvement (Han & Reinhardt, 2022). The findings suggest that digital literacy in EFL instruction extends beyond technical knowledge, encompassing the ability to foster independent learning, metacognitive growth, and continuous skill development through technology.

The results of this study align with previous research on digital literacy and technology integration in language teaching. Saubern et al. (2020) emphasized that while many EFL teachers possess technological knowledge, their ability to effectively integrate technology into pedagogy remains a challenge. The teacher in this study demonstrates advanced technological

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pedagogical content knowledge (TPACK) by selecting and adapting digital tools that enhance learning rather than simply incorporating technology for its own sake. Similarly, this study supports the findings of Chiu et al. (2023), who noted that many language teachers struggle to bridge the gap between personal digital literacy and classroom application. In contrast, the teacher in this study successfully translates digital competence into instructional practice, creating a student-centered, interactive, and communicative learning environment.

In the Indonesian EFL context, these findings expand on research by Williyan and Sirniawati (2020) and Habibi et al. (2019), which highlighted positive attitudes toward ICT integration but identified barriers such as limited training and institutional support. This study presents a successful case of an Indonesian EFL teacher overcoming such barriers through self-directed digital literacy development. The teacher's ability to independently explore and integrate digital tools suggests that teacher agency plays a significant role in effective technology adoption (Stenalt, 2021). However, as previous research has pointed out, the need for continuous professional development remains crucial, particularly as digital tools and instructional technologies continue to evolve.

While the study highlights the teacher's strong digital competence, it also emphasizes that digital literacy is an ongoing process. Technology in education is constantly evolving, and EFL teachers must continuously adapt and expand their digital skills to remain effective (Anderson & Kyzar, 2022). Although the teacher in this study effectively incorporates digital tools, future exploration of AI-driven educational technologies, adaptive learning platforms, and interactive virtual communication tools could further enhance the effectiveness of IT-based speaking instruction. This aligns with the argument made by Çetin (2021), who suggest that teacher digital literacy must evolve alongside emerging innovations in educational technology.

The findings also have significant implications for EFL teaching, teacher training, and institutional support. To maximize the benefits of technology-enhanced speaking instruction, EFL teacher education programs should prioritize digital literacy training, ensuring that teachers not only develop technical proficiency but also learn how to integrate technology pedagogically and strategically (Yang, 2020). This training should encompass not just operational skills but also include critical assessment of digital tools, adaptive implementation strategies, and methods for evaluating technology's impact on learning outcomes. Furthermore, schools and institutions must support continuous professional development, providing teachers with access to training, resources, and collaboration opportunities to keep pace with technological advancements. This institutional support should include establishing technology mentorship programs, creating resource repositories of effective digital teaching materials, and allocating specific time for teachers to experiment with new tools in low-stakes environments. Encouraging peer collaboration and professional learning communities could also help teachers share best practices and refine their digital integration skills. These communities might take the form of regular technology showcases, collaborative lesson design workshops, or action research groups focused on measuring the effectiveness of specific digital approaches in local contexts. Additionally, policymakers should consider developing standardized digital competency frameworks specifically tailored to language education contexts, which could guide both pre-service and in-service teacher development programs and ensure more consistent quality in technology-enhanced language instruction.

Despite its contributions, this study has certain limitations that should be acknowledged. As it focuses on a single EFL teacher, the findings may not be fully generalizable to all teaching contexts. Future research could examine a larger sample of EFL teachers to explore variations in digital literacy levels and instructional strategies across different settings. Additionally, the study is based on three observed sessions, which may not capture long-term digital literacy development. A longitudinal study tracking teachers' evolving digital practices over an

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extended period would provide deeper insights into the sustainability of digital literacy growth. Moreover, while this study focuses on the teacher's digital literacy, future research could explore students' perspectives on technology integration, assessing how different digital tools impact their engagement, motivation, and speaking proficiency.

This study reinforces the critical role of digital literacy in IT-based speaking instruction, demonstrating how a highly digitally literate EFL teacher effectively integrates technology to enhance student engagement, metacognitive awareness, and language proficiency. The findings contribute to the broader discussion on technology-enhanced language learning, emphasizing the need for continuous digital literacy development among teachers. As technology continues to evolve, EFL educators must remain adaptable and proactive, ensuring that their digital competencies align with pedagogical best practices to create more effective, interactive, and engaging learning environments.

5. Conclusions (and Suggestions)

This study examined the digital literacy of an Indonesian EFL teacher in IT-based language instruction for teaching speaking. The findings demonstrate that the teacher possesses a high level of digital literacy, effectively integrating a range of digital tools and online resources to enhance students' speaking proficiency. By incorporating platforms such as Mentimeter, QuillBot, YouGlish, TED Talks, and online discussion forums, the teacher creates an interactive and student-centered learning environment that fosters engagement, metacognitive awareness, and communicative competence. The study highlights that structured and purposeful technology integration can significantly improve students' fluency, accuracy, and confidence in speaking. Furthermore, the teacher's strategic use of digital tools for task repetition, self-reflection, and digital feedback mechanisms illustrates critical digital literacy skills, showing that effective technology use in EFL instruction requires more than technical knowledge—it demands a deep understanding of how digital tools align with pedagogical objectives. Additionally, this study expands on existing research in the Indonesian EFL context, demonstrating how a digitally literate teacher can navigate challenges such as limited institutional support and training opportunities by actively engaging in self-directed digital learning.

Despite these valuable insights, this study has certain limitations. Since it focuses on a single EFL teacher, the findings may not be fully generalizable to all teaching contexts. Future research involving a larger sample of teachers across diverse educational settings would provide a broader perspective on digital literacy levels and instructional strategies in IT-based speaking instruction. Additionally, the study is limited to three observed sessions, which may not fully capture the long-term impact of digital integration on student learning outcomes. A longitudinal study tracking teachers' evolving digital literacy practices would offer deeper insights into the sustainability of technology-enhanced instruction. Moreover, while this study focuses on the teacher's digital literacy, future research should explore students' perspectives on digital integration, examining how they engage with digital tools, perceive digital feedback, and develop speaking proficiency through technology. With the rapid evolution of educational technology, future studies could also assess the impact of emerging AI-driven tools, adaptive learning technologies, and immersive virtual environments on EFL speaking instruction. Ultimately, this study reinforces the importance of continuous professional development in digital literacy, emphasizing that EFL teachers must remain adaptive and innovative, ensuring that their technology integration aligns with best pedagogical practices to create engaging and effective learning environments.

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