

The Snapshots of Indonesian Pre-Service English Teachers' Perspectives on Integrating Technology-Based Tools to Rural Schools

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Abstract

Research on pre-service teachers (PSTs) has increasingly focused on their integration of technology-based tools during teaching practicums. However, limited attention has been given to how PSTs navigate these tools in rural school settings. This study examines the types of technology-based tools selected by PSTs and explores their perspectives on their use in English teaching. Employing a qualitative descriptive research design, data were collected through semi-structured interviews with eight PSTs from Universitas Teknokrat Indonesia who taught in two public rural schools during their teaching practicum. The interview data were transcribed, coded, and analyzed thematically. Findings revealed that PSTs primarily utilized AI, web-based, and game-based tools in their teaching. Among AI-based tools, ChatGPT was the most frequently used. *Canva*, *Pinterest*, and *Bilibili* were commonly selected for web-based tools, while *Kahoot!*, *Quizizz* and *Wordwall* were preferred for game-based learning. PSTs expressed positive views on these tools, highlighting improvements in students' learning satisfaction, motivation, and classroom engagement. However, they also faced challenges, particularly regarding accessibility and technical limitations in rural areas. Additionally, students had limited digital competencies, which must be addressed to prepare them for future technological advancements. Teaching obstacles also stemmed from the incompatibility of students' digital devices, further complicating technology integration in the classroom. Despite these barriers, such challenges should not hinder the educational process. Students' limitations can be addressed through collaborative learning strategies and enhancements in instructional quality. Therefore, this study recommends infrastructure improvements to expand technology accessibility and implement adaptive teaching strategies that maximize available resources in rural settings.

Keywords: pre-service teachers, rural schools, technology-based tools, ELT, learning motivation and engagement.

INTRODUCTION

Teaching English as a Foreign Language (EFL) in rural areas of Indonesia presents unique challenges that differ significantly from urban settings. Students in rural Indonesian schools often struggle to achieve proficiency due to limited exposure, lack of motivation, and insufficient learning support (Yulia, 2013; Febriana et al., 2018; Poedjiastutie et al., 2021; Khulel, 2021). Unlike their urban counterparts, who have access to private tutoring (Wahyuningsih et al., 2023), English-speaking environments (Purnanto et al., 2021), and a variety of learning materials, rural students primarily rely on formal classroom instruction as their sole source of English learning (Utomo, 2023). This creates a significant gap in their ability to practice and apply the language beyond academic settings. One of the considerable obstacles to English learning in rural areas is students' perception of the language's relevance. Shahnaz and Gandana (2021) argue that many rural students view English as a subject with little practical value in their daily lives. Since they rarely use English outside the classroom, their intrinsic motivation to learn the language is significantly lower than that of students in urban areas. In addition, Holguín and Morales (2016) emphasize that many families in rural areas prioritize basic education over foreign language learning, as their main concerns revolve around literacy, numeracy, and vocational skills. This lack of engagement from students and their families further hinders language acquisition, making it more challenging for teachers to cultivate an interactive and meaningful learning environment.

Given the mentioned challenges, integrating technology into English Language Teaching (ELT) in rural areas offers numerous advantages that significantly enhance teaching effectiveness and student learning outcomes. One of the key benefits is increased exposure to English, as digital resources provide students with access to authentic language input through various forms of multimedia (Ghanizadeh et al., 2015; Richards, 2015; Shadiev et al., 2017). Additionally, Insani et al. (2024) highlight that technology enhances student engagement and motivation, making learning more dynamic and interactive. As a result, students are more likely to retain information and improve their language acquisition as they actively participate in learning rather than relying solely on passive instruction. Another significant advantage is personalized learning, which allows students to progress at their own pace, revisit challenging concepts, and receive immediate feedback on their performance (Lee et al., 2018; Zheng et al., 2022). This adaptability is particularly beneficial in rural settings, where students often have diverse learning needs and varying levels of English proficiency. Furthermore, technology fosters collaborative learning (Taskiran, 2020), enabling students to engage in peer discussions (Zou et al., 2022) and cross-cultural exchanges, even from remote locations (Ismailov, 2021; Gonzalez-Vidal & Moore, 2024). It enhances communication skills and teamwork, creating a more interactive and supportive learning environment that is essential for effective language development.

While technology is crucial in enhancing language learning, its successful implementation ultimately depends on the educators facilitating it. In this context, pre-service teachers act as key agents in integrating technology into English language instruction, particularly in rural areas where innovative teaching strategies are essential for maximizing learning opportunities. Garza et al. (2016) and Cavanagh et al. (2019) emphasize that pre-service teachers are unique due to their transitional role between learners and educators, allowing them to blend theoretical knowledge with emerging practical experience. This combination of academic preparation and hands-on learning enables them

to experiment with new teaching strategies, including technology integration in English language teaching (Yıldız, 2017; Hughes et al., 2023; Degirmencioglu & Gilanlioglu, 2025). Their openness to innovation makes them highly adaptable, as they are often more inclined to explore digital tools, interactive learning strategies, and student-centered approaches to enhance language instruction (Kalonde & Mousa, 2016; Görtl et al., 2024). Another distinctive feature of pre-service teachers is their dual perspective as learners and instructors. Since they are still receiving formal training while actively teaching, they possess a heightened awareness of student learning challenges. This ongoing development fosters professional growth, making them highly receptive to pedagogical improvement and instructional refinement.

Several studies have examined the classification of technology-based tools in English Language Teaching (ELT). Game-based tools enhance student engagement, motivation, and enjoyment, introducing competitive and interactive elements that make learning more dynamic and participatory (Hartt et al., 2020; Irwansyah & Izzati, 2021; Lewis et al., 2012). AI-integrated language learning offers additional benefits, such as personalized instruction, instant feedback, and adaptive learning pathways tailored to students' proficiency levels (Moybeka et al., 2023; Silitonga et al., 2023). Similarly, web-based learning tools provide comprehensive teaching and learning resources that enhance classroom engagement. Platforms like Canva offer multimedia materials, including images, videos, and interactive templates, which enrich instructional content and foster creative teaching approaches (Wijayanti, 2022). Beyond resource accessibility, web-based tools facilitate student-teacher interactions, peer collaboration, and real-time discussions, encouraging open communication and deeper engagement in learning (Sidupa et al., 2022). Research has also explored pre-service teachers' (PSTs) perspectives on using technology-based tools in language instruction (Nariyati & Pratiwi, 2020; Ridha & Fithriani, 2023; Zhang et al., 2023). Findings indicate that PSTs view these tools favorably, recognizing their potential to improve students' language skills and make learning more interactive, accessible, and practical. Their engagement with digital tools during teacher training reflects a growing shift toward technology integration in ELT, emphasizing the need to equip future educators with technological pedagogical competencies.

While research has explored the benefits of technology in English Language Teaching (ELT), limited attention has been given to how pre-service teachers (PSTs) select, implement, and perceive technology-based tools during their teaching practicum in rural schools, where infrastructural limitations and pedagogical challenges often hinder effective language instruction. Studies focusing on technology integration in ELT have primarily examined in-service teachers, with less emphasis on how structured training programs support PSTs in preparing for technology-enhanced instruction in rural classrooms. To address this gap, this study investigates PSTs who have completed a one-week technology-based media training before their two-month practicum in rural schools. It examines how they select and utilize digital tools, adapt to challenges, and assess the effectiveness of technology-enhanced ELT in resource-limited environments. Additionally, this study explores the impact of preparatory training on PSTs' classroom practices in rural settings, providing insights into teacher education programs designed for technology integration in rural ELT. Specifically, this study seeks to answer the following research questions: (1) What kinds of technology-based tools do PSTs select to integrate into their teaching practice at

rural schools during the teaching practicum? (2) How do they perceive technology-based tools incorporated into teaching English to rural school drop students?

METHOD

The present study employs a qualitative approach using a case study design, which allows for an in-depth exploration of a specific phenomenon within its real-life context. In case study research, a "case" can refer to various entities, including an individual, structure, program, or system (Duff, 2018). This design enables researchers to develop detailed descriptions, providing readers with a realistic and context-rich understanding of participants' experiences, thereby enhancing the applicability of the findings to similar situations (Ridder, 2017). Moreover, a case study approach facilitates a holistic examination of the issue rather than isolating it from its broader context, making it particularly useful for studying real-world educational settings (Holley & Harris, 2019). In this study, the case study design supports an in-depth analysis of the technology-based tools selected by pre-service teachers (PSTs) for teaching English in rural schools and their perceptions of using these tools, offering valuable insights into their instructional practices and decision-making processes.

Table 1. Participants' demographic information

Participants	Gender	Age	Teaching Experience (Months)
P1	Male	21	5
P2	Female	20	2
P3	Female	21	12
P4	Female	20	6
P5	Female	21	4
P6	Female	20	2
P7	Female	20	2
P8	Female	20	2

The participants in this study were pre-service teachers (PSTs) from Universitas Teknokrat Indonesia, who were purposefully selected to ensure relevance to the research objectives. Purposive sampling is commonly used in qualitative research to identify participants who can provide in-depth insights into the phenomenon under investigation (Robinson, 2013; Subedi, 2021). To begin the selection process, a survey was conducted among twenty-four PSTs, assessing their participation in teaching practicum, completion of a technology-based training program, familiarity with digital tools, and willingness to contribute valuable insights. This pool selected eight participants based on their affirmative responses, interview availability, and direct involvement in technology integration during their practicum. Participants were assigned to three different public rural schools within the same regency but across various districts, providing diverse perspectives on technology integration in rural educational settings.

The primary research instrument used for data collection was a semi-structured interview guide designed to align with the study's research objectives. The guide consisted of five structured questions, ensuring the interviews captured relevant insights while maintaining focus and manageability. To obtain comprehensive and relevant data, semi-structured interviews were conducted, as they allow for flexibility in questioning and foster

a reciprocal dialogue between interviewer and participant (Galletta, 2012). This approach enabled the interviewer to improvise follow-up questions based on participants' responses, providing room for unique verbal expressions (Guo et al., 2024). Before data collection, informed consent forms were distributed to ensure participants knew the study's purpose, confidentiality measures, voluntary participation, and consent for recording the interviews (Laryeafio & Ogbewe, 2023). Once permission was obtained, interview schedules were communicated via WhatsApp, with flexible rescheduling options provided when necessary. Interviews were conducted via phone calls, lasting approximately 15 to 30 minutes, with minimal connectivity issues due to stable network availability. A neutral and non-intrusive stance was maintained throughout the interview, allowing participants to express their thoughts freely.

After the interview sessions, the recorded data were transcribed and manually coded using thematic analysis (Naeem et al., 2023). Data coding involved carefully reviewing the transcripts, identifying significant patterns, categorizing recurrent keywords, and generating overarching themes. A spreadsheet was used to organize key information units along with supporting excerpts to facilitate systematic analysis. A collaborative approach was employed in analyzing the data, thoroughly examining recurring themes and patterns (Braun & Clarke, 2022). To enhance the validity and reliability of the findings, an expert was consulted to discuss and refine the identified themes. Once the analysis was finalized, the results were shared with participants to ensure that the interpretations accurately represented their perspectives. Additionally, pseudonyms (e.g., P1, P2, P3) were assigned to maintain confidentiality and anonymity when presenting participant excerpts.

FINDING AND DISCUSSION

The data gathered from the PSTs' interviews were compiled into a list of technology-based tools selected for their teaching practice. Additionally, the findings section analyzes PSTs' perspectives on integrating these tools into English language instruction, highlighting their experiences, challenges, and perceived effectiveness.

Technology-Based Tools Selected by PSTs

This section presents the findings related to Research Question 1, which examines the technology-based tools utilized by PSTs during their teaching practicum for English instruction. Table 2 provides a summary of the selected tools.

Table 2. Technology-based Tools Selected by PSTs

Category	Tools	Purpose of use
AI-based tools	ChatGPT	Assisting students in generating example sentences, paraphrasing, and translating texts between Indonesian and English. Providing grammar explanations, vocabulary definitions, and sentence structure corrections to support writing and speaking tasks.
Web-based tools	Canva	Supporting students in creating visually appealing presentations, posters, and flashcards for vocabulary building and writing assignments. Designing interactive worksheets for teachers to enhance writing and reading activities.

Game-based tools	Pinterest	Providing students with grammar and writing templates, sentence structure references, and creative visual prompts for language exercises. Helping teachers and students explore storytelling and descriptive writing ideas through visual examples.
	Bilibili	Offering short videos with subtitles for listening comprehension practice. Assisting students in analyzing narrative structures, character development, and storytelling techniques in English.
	Kahoot!	Conducting real-time interactive quizzes to reinforce grammar, vocabulary, and reading comprehension. Encouraging competitive and engaging classroom participation in formative assessments.
	Quizizz	Providing self-paced and teacher-led quizzes to assess students' understanding of grammar, reading comprehension, and vocabulary. Allowing teachers to give instant feedback and explanations to improve student performance.
	Wordwall	Creating customized vocabulary games, sentence structure matching exercises, and grammar drills. Supporting speaking and listening exercises through flashcard-based activities.

Table 2 presents several technology-based tools selected by pre-service teachers (PSTs) to support English language instruction. The findings reveal that AI-based, web-based, and game-based tools were integrated into their teaching to enhance students' engagement, creativity, and comprehension. Regarding AI-based tools, *ChatGPT* was the only tool selected for instruction. PSTs primarily used *ChatGPT* to assist students in translating texts between Indonesian and English, facilitating a more efficient learning process through quick access to language resources (Prasetya & Syarif, 2023; Slamet, 2024). The tool was valued for its ability to generate explanations, provide instant feedback, and simplify complex language structures, aligning with Baskara and Mukarto (2023), who highlighted *ChatGPT*'s role in enhancing efficiency and delivering insightful, natural responses, ultimately contributing to language proficiency. Similarly, Octavio et al. (2024) affirmed that *ChatGPT*, trained on multilingual data, can effectively recognize language structures and execute translation tasks, making it a valuable tool for language learning. However, while PSTs acknowledged these benefits, they also expressed concerns about students' over-reliance on AI-generated translations, fearing that it could diminish language learning's critical thinking and problem-solving skills (Avsheniuk et al., 2024).

Beyond AI-based tools, PSTs integrated web-based platforms such as *Canva*, *Pinterest*, and *Bilibili* to foster creativity and enhance lesson delivery. *Canva* was mainly used to help students create educational posters, enabling them to develop concise and visually appealing Instagram-sized content for writing assignments. This aligns with Andriyanti et al. (2023), Dmitrenko et al. (2024), and Fitria (2023), who identified *Canva* as an accessible design tool offering a wide range of customizable visual elements that enhance students' creative writing projects. In one activity, students were assigned to write a descriptive text, redesign it using *Canva*, and share their work on Instagram, reinforcing visual literacy and writing skills. Similarly, *Pinterest* was selected as a resource hub for language learning (Andujar &

Çakmak, 2022), particularly for accessing visually engaging grammar worksheets for daily practice. The search function allowed students to quickly find specific worksheets suited to their learning needs, making grammar exercises more engaging and accessible. Additionally, Bilibili was a video-based platform where students could watch and analyze narrative-based animated videos. PSTs guided students in selecting short animated films to identify narrative text structures, analyze characters, and summarize key story elements, a strategy supported by Jiang et al. (2022) and Fan (2023), who described Bilibili as a comprehensive video-sharing platform providing diverse educational content.

Regarding game-based tools, PSTs commonly integrated Kahoot!, Quizizz, and Wordwall to introduce interactive language assessments. Kahoot!, which features games, quizzes, discussions, and surveys, allowed PSTs to design multiple-choice questions that tested grammar and vocabulary knowledge in an engaging, competitive format (Rowiyah, 2024). Similarly, Quizizz provided self-paced and multiplayer quiz sessions, fostering student engagement by rewarding quick and accurate responses. This supports Fadhilawati et al. (2022), who identified Quizizz as a game-based platform that makes classroom assessments more enjoyable and interactive. Furthermore, Wordwall was explicitly chosen for vocabulary reinforcement, as it offers customized matching games, sentence-building exercises, and interactive word-based challenges. This aligns with Hasram et al. (2021), who recognized Wordwall as an effective platform for vocabulary learning, featuring a wide range of visually engaging game formats that stimulate student participation.

Students' Learning Satisfaction

PSTs concurred that providing students with easy access to learning resources through technology-based resources in English classes was brilliant. Students could quickly and easily translate texts from their native language to the target language using ChatGPT. Furthermore, it was clear that the tool would always be helpful as a search engine. The PST replied as follows.

"While teaching Narrative text, I assigned my students to create Indonesian text. It was translated into English using ChatGPT because it provides a rapid translation process instead of asking them to translate their works manually. Due to its quick process of translating, my students and I have more time to discuss the work" (P1)

Additionally, students showed that ChatGPT did provide quick and easy access. The PSTs noticed that her students were less exposed to the tool because textbooks constituted the primary source of English language instruction in schools. When ChatGPT was first introduced, the students were happy with the tool's ability to assist them in resolving their problems. The PST replied as follows.

"Once I introduced them to ChatGPT, surprisingly, none of my students knew what ChatGPT is. Having never been exposed to this AI tool, I found that my students are satisfied and amazed with tools that could easily and progressively fulfill their request" (P2)

Conversely, incorporating ChatGPT into the classroom might be problematic concerning ethical concerns. Rural students might find ChatGPT helpful, but there was a chance it would stifle their imagination and critical thinking. The situation was exacerbated

by students who relied on the tool to complete their assignments and claimed that their work was original. This means that the tool reduced students' critical thinking and creativity. As a result, a shift in the method of instruction was required. A sort of response was as follows.

"I felt worried that my students were dependent on ChatGPT. They might use ChatGPT to generate homework and claim it as their original work. Consequently, they became less creative and critical. When I assigned my students to create a short narrative text, I anticipated asking them to retell their works. It is used to ensure that they understand the content." (P3)

On the other hand, it was noteworthy that the other web-based tools successfully satisfied students with the creative project they made using *Canva*. Students can utilize them as educational resources to enhance their learning experience. Replacing textbooks with technology-based tools has led to a gradual disenchantment with the monotony of a textbook-based teaching methodology. PST responded in the following manner.

"My students confirmed that they should always use textbooks to learn English. Then, I assigned them to access Canva, write their works of narrative text with Instagram-post size, and upload them on their account. I found that my students did their work very well and reported to me that they were happy with the teaching process and their attractive project" (P4)

PSTs agreed that *ChatGPT* and *Canva* led their students to experience happiness, satisfaction, and self-fulfillment as they first occupied their English learning activities with these tools. The quick access to learning sources and fast response on translating pieces of works were sounded by the students in response to *ChatGPT*. Empirical evidence reported by Slamet (2024) found that the amount of time spent receiving individualized instruction was significantly correlated with learner-reported measures of satisfaction with *ChatGPT*, interest in using *ChatGPT*, self-confidence, preferred tutoring, and decision-making input. In addition, *Canva* was reported as an effective tool to help students boost their creativity by giving them a clear understanding of what learning is all about, creating brief learning materials, guiding students' learning strategies, and presenting the material in an easy-to-understand manner so that learning satisfaction was achieved (Dmitrenko et al., 2024). In addition, Silitonga et al. (2023) pointed out that students who engage in creative writing projects with originality improve their critical thinking, honest communication, and teamwork abilities as they emerge from digital literacy and language learning. Thus, having the project completed, students' self-fulfillment arose.

Students' Learning Motivation

Subsequently, PSTs viewed technology-based tools as essential for breaking through students' passivity and boosting learning motivation through animated videos. It was thought that teaching with animated videos stimulated students' curiosity and improved their capacity to recognize the information presented in the videos. Ultimately, they were guided to recount the narrative as shown in the videos. The transcribed was seen as follows.

"I use animated videos, namely Bilibili. As free access, Bilibili provided many videos that served as authentic materials for my students. They were curious to watch and retell the videos reflecting narrative text. I also found that my students

were motivated to learn because they enjoy learning through audio-visual media" (P5)

The web-based application proved beneficial for the students. PSTs explicitly used Pinterest as a social media platform for information sharing and discovery. They used Pinterest to find engaging English grammar worksheets rather than giving their students assignments to complete from the textbooks. As a result, the tool improved students' learning motivation in understanding English grammar. The transcribe was as follows.

"I introduced Pinterest to my students so they could look for English grammar worksheets. My students were keen on using Pinterest because they got various attractive worksheets that helped them practice and strengthen their knowledge of English grammar. Thus, students were not only motivated but also had a better understanding of the subject learned" (P6)

PSTs asserted that *Pinterest* and *Bilibili* boosted their students' learning motivation. Providing organized and thematic content sources, *Pinterest* grabbed students' attention in searching for appealing learning worksheets compared to textbooks. In addition, animated videos provided by *Bilibili* could enrich the learning nuances before the traditional learning environment. Empirical evidence by [Al Mardhiyyah et al. \(2021\)](#) found that worksheets and interactive videos were among the various forms of instructional media used, effectively meeting the success criteria. The results of the students' worksheets demonstrated increased motivation because the students' efforts to complete the worksheet showed a progressive improvement in the quality of the exercises ([Andujar & Çakmak, 2022](#)).

Students' Learning Engagement

PSTs concurred that students' curiosity about hitting the highest quiz score has been piqued by using technology-based resources, such as game-based applications. Students were curious about their quizzes' right and wrong answers after using *Kahoot!* and *Quizizz*. As these tools offered an attractive and interactive learning process, students actively engaged with the classroom's digital activities, elevating their' interest.

"In teaching descriptive text, I provide quizzes using Kahoot! and Quizizz. After using those two, I found that students were motivated to answer questions using the tools. They were curious to answer the questions correctly and quickly to get the highest score. Whenever the game ended, they requested me to add more" (P7)

In a similar vein, applications based on games offered PSTs advantages. *Wordwall* was a game-based application that provided words and meanings. It also offered templates such as match-ups with a plethora of entertaining activities. So, the quiz preparation process did not take too long. According to the responses below, *Wordwall* was adequate to stimulate students' engagement.

"Wordwall helped me during my hectic schedule. I prepared the words and meanings that were relevant to teaching materials. Wordwall automatically generates the activities that I expect. Thus, Wordwall was efficient to use. As it offered an interesting and attractive design, Wordwall was applicable in terms of game-based learning that all students were waiting to participate" (P8)

Game-based tools were seen as promoting students' learning engagement while teaching English. PSTs argued that the selected tools were used as media for game-based learning assessments. As these media provided interactive use and attractive design and features, the PSTs agreed that their students were fully engaged during gaming sessions. Öden et al. (2021) examined how the gamified response system *Kahoot!* affected students' attitudes toward the EFL course, motivation, and exam anxiety. It was discovered that *Kahoot!* was found to improve EFL learning engagement and reduce exam anxiety. On the other hand, Anak Yunus and Hua (2021) reported that *Quizizz* is a handy tool for encouraging young ESL learners to be passionate about learning the English language and for improving the teaching and learning of English irregular past verbs. In addition, in terms of learning vocabulary, Hasram et al. (2021) found that *Wordwall* affected how the students interacted with the online resources and the learning environment. It demonstrated that *Wordwall* encouraged students to study independently, supporting their active learning and focusing their attention.

Teaching Barriers Encountered by Pre-Service English Teachers

Apart from benefits integration, PSTs encountered a few teaching barriers, such as accessibility concerns and technical problems. The rural locations of the schools where the teaching practicum was conducted erased internet connectivity. Erratic internet access hindered the learning process, heavily relying on technology-based tools. As a result, the learning process was not completed satisfactorily. The PST responded as follows.

"I was placed at the schools where it took 3 hours motorcycle ride from the city center. The school facilities did not provide a high bandwidth of internet connection. Therefore, my students experienced an unsmooth learning process using Kahoot! Sometimes, the internet signal suddenly disappears. It made the game-based activities keep pausing. We have to wait until it can run well" (P7)

Furthermore, PSTs discovered that because most students relied on the textbooks provided by the schools, they were less exposed to the aforementioned resources. Students encountered technical problems during their first experience learning English using technology-based tools.

"I was shocked that my students had never heard of ChatGPT and Canva. That's why, when I tried to introduce them to the tools, they were confused and hard to follow the instructions on accessing, logging in, and using the tools. But I frequently assist them until they independently get used to the tools" (P1)

Finally, PSTs attested that students' devices were incompatible, causing a technical problem. However, as they responded to the interview, they needed to offer every student in the classroom a way to use technology to enhance their learning experience.

"I realized that not all students' devices were compatible with certain applications. Some students found that their mobile phones did not work when downloading the application and accessing the browser. Then, I tried to group the students to employ peer tutoring in students' learning activities so that they get experience in using Canva for creating educative posters" (P4)

PSTs recognized several teaching barriers that emerged during the instructional process, particularly in rural schools. The findings highlight two primary challenges: accessibility concerns and technical issues (Mudra, 2018). Given that the schools where PSTs conducted their teaching practicum were situated in remote areas, they often lacked a stable internet connection, whether through students' mobile data or school Wi-Fi. Another challenge was device compatibility, as some students' smartphones or school-provided digital tools were not fully compatible with the applications used in class. In some cases, outdated operating systems or limited storage capacity prevented students from downloading or running specific web-based tools (Dolgunsöz & Yıldırım, 2021). This further hindered engagement and participation, requiring PSTs to find alternative ways to deliver lessons, such as screen-sharing activities, group work with shared devices, or using printed materials as a backup strategy.

CONCLUSION

This study investigated the technology-based tools selected by PSTs during their teaching practicum and their perspectives on integrating these tools into English teaching. The findings revealed that PSTs used AI-based (*ChatGPT*), web-based (*Canva*, *Pinterest*, *Bilibili*), and game-based tools (*Kahoot!*, *Quizizz*, *Wordwall*) to enhance teaching efficiency. While these tools improved learning satisfaction, motivation, and engagement, concerns arose over students' over-reliance on ChatGPT and accessibility challenges in rural schools, including internet instability, technical issues, and limited digital competencies. Despite these barriers, collaborative learning and adaptive instruction helped sustain effective learning.

Furthermore, this study has limitations, including a small sample size from a single university and a short practicum duration, limiting its generalizability. Future research should include more PSTs from diverse universities and rural schools over an extended period to provide broader insights. Additionally, while this study focused on affective aspects of learning, future studies are suggested to examine the cognitive impact of technology integration on students' academic achievement using a mixed-method approach. Addressing these gaps can enhance technology-based English teaching in rural Indonesia and support high-quality education.

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