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Integrating Technology into English Language Teaching at Indonesian High Schools: Teachers' Reflections

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Abstract

English Language Teaching (ELT) is something that has changed dramatically in recent times due to technology. Even though it could potentially reshape ELT, appropriate implementation remains a challenge for most teachers who are often uncertain as to how to use technology to improve learning. This article looks into the experiences and reflections of Indonesian high school English teachers integrating technology into their ELT pedagogical practices, from making lesson plans, having classroom activities, to setting up the assessment. Quantitative and qualitative data were collected and analyzed through a mixed-methods approach. It involved an online survey distributed to 20 diverse Indonesian high school English teachers as well as semi-structured interviews conducted with 10 teachers. The results indicated that there is an increasing use of technology for ELT purposes, particularly to facilitate language reception, language production, and interaction. The results also found some challenges and limitations, including technical issues, training and support, and access equity. These insights can help guide the future development of Indonesian high school ELT practices, inform investment in technology infrastructure, and support targeted professional development initiatives focused on technology integration. The findings are discussed in the context of existing research on ELT and technology integration, with particular emphasis on their significance for high school English teachers in Indonesia. The results provide implications for ELT policymakers, practitioners, and researchers in Indonesia and evidence the importance of context-sensitive solutions to provide meaningful integration of technology in the variability of Indonesian high school settings.

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1. INTRODUCTION

The distinctions between physical, digital, and biological entities are becoming increasingly blurred due to technological advancements (Alaloul et al., 2020; Peckham, 2021). Digital technologies have made a paradigm shift and powerful impact in the entire education system and students' learning attitudes (Haleem et al., 2022; Kędra & Žakevičiūtė, 2019). However, technological devices can only be created, utilized, maintained, and integrated through collaboration (Deschênes, 2024; Lane et al., 2024). As a result, the significance of teamwork and technology in people's lives will continue to grow because "merging digital, physical, and biological technologies promises enhanced well-being for societal actors across the board" (Noble et al., 2022, p. 199). High school students need to enhance their understanding of technology and teamwork, with schools providing an ideal starting point. Technology should be leveraged to promote collaborative learning across all grade levels and subjects (Johnson & Johnson, 2004; Lane et al., 2024).

The integration of technology into English Language Teaching (ELT) has significantly changed the teaching and learning environment with many possibilities in language learning, teaching, and assessment (Chapelle, 2006; Kern, 2006). Even the digital technologies are proliferating, a lot of ELT classrooms are facing problems due to the unsuccessful use of technology for teaching and learning (Egbert & Hanson-Smith, 2007). Technology integration into ELT is neither automatic nor straightforward; it involves a mix of technological and contextual factors (Kukulska-Hulme, 2007).

Although in recent years studies have expanded the research field into the effectiveness of the blended learning in language learning and teaching (Wu, 2014), previous studies emphasized the use of technology that can provide significant benefits through improving learning outcomes, promoting learner autonomy, and more efficient instructional practices (Chapelle, 2006; Levy & Stockwell, 2013). Research on language assessment and technology has also expanded into the use of technology to support language assessment, such as online quizzes, tests, and exams (Andrei, 2017; Chapelle & Sauro, 2017; Lee, 2022). On the other hand, despite these developing accumulated investigations, there is still much to be studied in a more detailed and context-literate way through technology-mediated practices in ELT (Kim, 2020).

By investigating how the integration of technology into ELT lesson plans, classroom activities, and assessment procedures, this study seeks to close this knowledge gap. More precisely, the purpose of this study is to investigate how high school Indonesian teachers reflect on how they incorporate technology into their ELT lesson plans, classroom activities, and assessments. The unique aspect of this study is its emphasis on how technology integration intersects with ELT lesson plans, classroom activities, and evaluation procedures. Few studies have looked at how technology is incorporated into those three ELT methods in specific circumstances, even though prior research has investigated technology in language evaluation.

To sum up, this study initially addresses the following research question: What are the English teachers' reflections on integrating technology into English language pedagogical practices? This key question is then divided into the following three sub-questions:

1. How do high school Indonesian teachers integrate technology into their ELT lesson plan?
2. How do high school Indonesian teachers integrate technology into their ELT classroom activities?
3. How do high school Indonesian teachers integrate technology into their ELT assessment?

This study addresses a knowledge gap in the integration of technology into ELT, particularly in the context of Indonesian high schools. It explores how teachers incorporate technology into lesson planning, classroom activities, and assessments, offering valuable insights into effective ELT practices. By examining the intersection of technology integration and ELT techniques in specific settings, the study enhances our understanding of how technology can

support English language acquisition. The findings have implications for ELT policy and teacher professional development, with the potential to raise the overall quality of language instruction and improve learning outcomes.

2. LITERATURE REVIEW

2.1 Technology Integration in English Language Teaching (ELT)

In recent years, there has been a growing interest in the topic of technology integration in English language teaching (ELT). Technology can improve language learning results, encourage student autonomy, and support more efficient teaching methods, according to research (Chapelle, 2006; Kern, 2006; Kukulska-Hulme, 2007). Research has examined how to include online resources, educational software, and multimedia assets into ELT lesson plans (Egbert & Hanson-Smith, 2007; Levy & Stockwell, 2013). According to research, technology can improve language learning results by offering dynamic and captivating educational opportunities (Lee, 2022; Wu, 2014).

Online tests, quizzes, and exams are examples of how technology has been utilized to assist language assessment (Chapelle & Sauro, 2017; Kim, 2020). Technology can support more effective and efficient evaluation procedures, such as automated feedback and grading (Andrei, 2017). Additionally, studies have looked into using technology in language production, reception, and engagement activities in ELT classrooms (Chapelle, 2006; Kern, 2006). Research has demonstrated that technology can improve language learning outcomes, encourage learner autonomy, and support collaborative learning (Benson, 2017; Wu, 2014). For instance, studies have looked into how to improve language production and reception through the use of multimedia resources like podcasts and movies (Egbert & Hanson-Smith, 2007). Other research has looked at how social media and online discussion boards can help with linguistic collaboration and engagement (Kukulska-Hulme, 2007; Lee, 2022).

Additionally, studies have shown how crucial it is to take into account the technical and pedagogical ramifications of integrating technology into ELT lessons (Chapelle & Sauro, 2017; Fu et al., 2022). Teachers must, for example, take into account the pedagogical techniques and strategies required to successfully incorporate technology into classroom activities as well as the technical needs and infrastructure required to support technology integration. Notwithstanding the possible advantages of using technology in ELT, there are drawbacks and restrictions to take into account. Research has shown how important it is to address technical challenges, ensure equity of access, and provide training and support for teachers (Benson, 2017; Fu et al., 2022).

The aforementioned studies demonstrate the potential advantages of integrating technology into ELT, such as improved language learning results, greater student autonomy, and more efficient teaching strategies. But they also emphasize how crucial it is to overcome the difficulties posed by integrating technology. Technical difficulties, unequal access to technology, and the requirement for assistance and training for teachers are some of these difficulties. To successfully integrate technology into ELT, these challenges must be addressed. Teachers can use technology to enhance language acquisition by recognizing both its advantages and disadvantages.

2.2 Challenges and Opportunities of Technology Use in Indonesian High Schools

Indonesian high schools face significant infrastructure challenges in integrating technology into their educational systems. These challenges are particularly pronounced in rural areas and include the lack of reliable internet access (Mustopa et al., 2024; Retnawati et al., 2017; Yaqin et al., 2023), insufficient computer labs (Pambayun et al., 2020; Riyanda et al., 2025), outdated hardware and software (Bima et al., 2021), limited digital learning resources (Retnawati et al., 2017; Riyanda et al., 2025), and electricity supply issues (Retnawati et al., 2017). This infrastructure gap hinders effective technology integration in teaching and learning.

Those Indonesian high schools also face teachers' readiness in utilizing technology due to their lack of professional development, competency, and literacy (Hermawan et al., 2018; Lubis et al., 2024; Saa, 2024). In addition to that, there are limited policy supports in terms of technology standards (Doringin & Oktriono, 2019; Mutohar & Hughes, 2016). They lack a standardized framework for technology integration in the education system, leading to inconsistent implementation across different regions and schools. The centralized nature of the Indonesian education policy often results in a lack of flexibility and responsiveness to local needs, making it difficult for schools to adapt and implement technology effectively (Doringin & Oktriono, 2019; Prasetio et al., 2021).

At the same time, there are some opportunities for the use of technology in Indonesian high schools. It includes the enhanced learning outcomes in academic performance and quality learning (Fatayan et al., 2023; Rusgowanto, 2020), development of critical thinking (Nurhidayat et al., 2024; Saddhono et al., 2019), personalized learning (Lubis et al., 2024), professional development and collaborative learning (Lindberg & Olofsson, 2010; Parker, 2014), and cultural integration (Sithira Vadivel et al., 2021).

2.3 Teachers' Perceptions and Reflections on Technology Integration

Teachers perceive technology both positively and negatively. Generally, teachers who perceive technology integration positively believe that it enhances instructional practices, makes learning more interactive, and keeps students motivated (Akram et al., 2022; Anderson & Putman, 2020; Nogaibayeva et al., 2024). They recognize the importance of professional development in building their technological competencies, which is crucial for effective technology integration (Abel et al., 2022; Akram et al., 2022; Hutchison & Woodward, 2018; Nugroho et al., 2024). In special education, technology is valued for providing differentiated instruction, varied content representation, and facilitating formative assessments (Anderson & Putman, 2020).

Teachers' negative reflections on technology integration are influenced by various factors, including perceived risks, lack of competence, and inadequate support. They often experience anxiety and view technology integration as risky. This includes fear of being replaced by technology and general risk-aversion in teaching (Howard, 2013; Li, 2007). Many teachers feel they lack the necessary skills and training to effectively integrate technology into their teaching practices. This inadequacy in training leads to negative attitudes towards technology use (Hismanoglu, 2012; Tokmak, 2013). Some teachers remain skeptical about its value in education. This skepticism contributes to the phenomenon of technology being "oversold and underused" in schools (Li, 2007). Additionally, teachers' negative attitudes can stem from the belief that technology is unnecessary or not beneficial for their specific teaching context (Tokmak, 2013).

3. METHODS

3.1 Research Design and Participants

To collect and analyze data, this study used a mixed-methods strategy that combined quantitative and qualitative techniques (Creswell, 2014). Twenty English language instructors from various senior high school settings in Central Java, Indonesia, including public, vocational, and religious schools, participated in the study. A convenience sample technique was used to choose the participants, and they willingly consented to take part in the research (Dörnyei, 2007).

Table 1 indicates that the participants are combined in terms of their genders, ages, education, years of work, and schools. Most of them are bachelors working for less than ten years. Male participants are a bit more dominant than females, while the percentage of their ages is almost similar. Young English teachers of less than 30 years of age dominate the participants. The types of schools are diverse, including public, vocational, and religious high schools. Religious schools represent Islamic and Catholic high schools, and the like. The concepts of anonymity, secrecy, and informed consent were all used in this study. Participants received

comprehensive information on the study's goals, methods, possible risks, and advantages. They received assurances that their involvement was entirely voluntary and that there would be no consequences if they chose to stop.

Table 1. The participant demographics.

Variable	Item	Number	Percentage (%)
Gender	Male	8	40
	Female	12	60
Age	≤ 30	7	35
	31-40	4	20
	41-50	5	25
	≥ 51	4	20
Education	Bachelor	16	80
	Master	3	15
	Doctor	1	5
Years of work	1-10	9	45
	11-20	6	30
	Over 20	5	25
School	Public	8	40
	Vocational	5	25
	Religious	7	35

3.2 Data Collection

Semi-structured interviews and online surveys were the two primary methods used to gather data. To gather quantitative information on instructors' opinions, reflections, and practices around integrating technology into ELT, a self-administered online survey was created. The poll has 39 items, including open-ended, multiple-choice, and Likert scale questions. Ten teachers who chose to take part in in-depth conversations were interviewed in a semi-structured manner. The interviews gathered instructors' experiences, challenges, and recommendations for integrating technology into ELT (Mackey & Gass, 2015).

3.3 Data Analysis

Descriptive statistics were used to analyze the quantitative data from the online survey (Fink, 2002), and thematic analysis was used to analyze the qualitative data from the semi-structured interviews (Braun & Clarke, 2006). Following transcription, coding, and topic and sub-theme classification, the interviews were subjected to descriptive analysis and interpretation. Through member verification, peer debriefing, and triangulation of data sources (online survey and semi-structured interviews), the findings' validity and reliability were guaranteed.

4. RESULTS AND DISCUSSION

4.1 Results

Twenty high school teachers in Central Java, Indonesia, completed an online survey, and ten joined semi-structured interviews, providing insights on integrating technology in ELT, from lesson planning to classroom instruction and assessment.

4.1.1 The integration of technology into the ELT lesson plan

Data on the integration of technology into the ELT lesson plan was gathered through an online questionnaire consisting of 11 questions, which was supplemented by follow-up interviews. The summary of participants' responses to the 11 questions is presented in Table 2.

Table 2. Integration of technology into ELT lesson plans

No.	Questions	Responses
1.	Do you state the use of technology in the lesson plan?	100% of participant teachers reported using technology in their lesson plans, confirmed through the researcher's review of lesson plans.
2.	If yes, in what sections of the lesson plan?	Technology is integrated into various sections: Instruction (40%), Assessment (30%), and unspecified areas (20%), showing varied but widespread use.
3.	What kinds of devices do you plan to use in the lesson plan?	Laptops (80%), Mobile Phones (45%), LCD Projectors (35%), Tablets & TVs (20%), Computers & Speakers (10%), Others (e.g., smartboards, videos): 5%.
4.	What kinds of learning applications do you plan to use in the lesson plan?	Canva (35%), Quizizz (25%), Google Classroom & PowerPoint (20%), Kahoot & Google Tools (15%), Others (YouTube, game-based learning, etc.): 5–10%.
5.	What kinds of social media do you plan to use in the lesson plan?	YouTube (85%), Instagram (65%), TikTok (30%), WhatsApp (15%), Facebook & Gemini (5%).
6.	Why do you make these choices?	Usability (35%), Student Engagement (30%), Relevance to Students (25%), Enhanced Learning (20%), Digitalization & Practicality (10% each).
7.	Have you attended professional development on technology use?	70% have attended training; 30% have not.
8.	How well do you use technology for instructional purposes? (Scale of 1–10)	Mean: 8.1 Ratings: 8 (40%), 9.3 (30%), 7.2 (15%), 6 (10%), 10 (5%). Indicates moderate to high proficiency with consistency around score 8.
9.	How does the school provide the devices for instructional purposes?	70% report schools provide devices (e.g., TVs, computers, tablets, smartboards). 30% describe the provision as positive; 20% note device limitations.
10.	How does the school provide technical assistance for instructional purposes?	95% report tech support (e.g., workshops, training, gadgets); a few say it's not specifically for lesson plan development.
11.	Do you find any problems in making a lesson plan for integrating technology into ELT? If yes, mention them.	70%: No problems. 30% report issues: poor internet, lack of devices/data, unfamiliarity with tools, low student readiness

From Table 2, for Question 1, "Do you state the use of technology in the lesson plan?", the qualitative data shows that all of the participant teachers mentioned using technology integrated into the ELT lesson plan. The researcher then checked their lesson plans, confirming their responses, and ensured that all the teachers mentioned it, even if they had different portions. For the next Question 2, "If yes, in what sections of the lesson plan?" The teachers' constant integration of technology into all areas of the lesson plans shows how important it is becoming to ELT. Two important areas of attention are instruction and assessment: technology's potential to increase teaching efficacy and student evaluation is highlighted by the fact that it is mostly used to improve instructional delivery (40%) and assessment techniques (30%). There is variation in the way technology is integrated: one-fifth (20%) of teachers struggled to identify specific areas, highlighting variations in technology use and integration.

More precisely, the use of technology in ELT is mentioned in three different sections of the lesson plan. The opening/main action portion was the most prominent. This demonstrates how technology sets the tone for instruction, drawing students in and launching interesting learning activities. The assessment portion is the second one: technology-based evaluation techniques provide prompt feedback and insights while streamlining the assessment process. The final teaching phase enables effective delivery of complex topics through technology-enhanced instruction.

Next, in response to Question 3, "What kinds of devices do you plan to use in the lesson plan?", the majority of participants mentioned laptops, with 16 participants (80%) indicating their use. Mobile phones were cited by 9 teachers (45%), followed by LCD projectors by 7 (35%), tablets by 4 (20%), and televisions also by 4 (20%). Computers and audio speakers were each mentioned by 2 participants (10%). Devices such as e-books, YouTube, PowerPoint, smartboards, videos, and TVs with Wi-Fi were each mentioned by 1 participant (5%). In response to Question

4, “What kinds of learning applications do you plan to use in the lesson plan?”, participants mentioned Canva most frequently, with 7 responses (35%), followed by Quizizz with 5 (25%). Google Classroom and PowerPoint were each cited 4 times (20%), while Kahoot and Google Tools were mentioned 3 times each (15%). YouTube and game-based learning were each mentioned by 2 participants (10%). Microsoft 365, e-learning, and WhatsApp were each cited once (5%).

To assist in creating the lesson plan, participants were asked Question 5, “What kinds of social media do you plan to use in the lesson plan?” Six platforms were mentioned. YouTube was the most popular, cited by 17 participants (85%), followed by Instagram with 13 mentions (65%) and TikTok with 6 (30%). WhatsApp was mentioned by 3 participants (15%), while Facebook and Gemini were each cited once (5%). In response to Question 6, “Why do you make these choices?”, teachers identified several factors influencing their selection of technologies such as smartphones, learning apps, and social media. The responses highlighted the following considerations: (1) Usability, mentioned by 7 participants (35%), with comments such as “Easy,” “Easy to use,” and “User-friendly”, (2). Student engagement, mentioned by 6 participants (30%), including responses like “Catch attention,” “Interesting,” and “Prevent boredom”, (3) Relevance to students’ lives, mentioned by 5 participants (25%), with remarks such as “Used by students,” “Close to students,” and “Adapting to students’ needs”, (4) Enhanced learning, mentioned by 4 participants (20%), with examples like “Easy to understand” and “Supports lesson”, (5) Digitalization, mentioned by 2 participants (10%), and (6) Practicality, also mentioned by 2 participants (10%), with comments like “Helps me a lot”.

Subsequently, teachers were asked Question 7, “Have you attended professional development on technology use?” The majority (70%) reported that they had received such training, while 30% indicated they had not. The next Question 8 focused on self-assessed proficiency: “How well do you use technology for instructional purposes? Rate this on a scale from 1 to 10 (1 = very poor, 10 = excellent)”. Based on the responses, 8 participants (40%) rated themselves an 8. Additionally, 6 participants (30%) gave a rating of 9.3, 3 participants (15%) selected 7.2, 2 participants (10%) chose 6, and only 1 participant (5%) rated themselves a 10, indicating excellent proficiency.

Table 3. Descriptive statistics.

Mean	8.1
Standard Error	0.235
Median	8
Mode	8
Standard Deviation	1.050
Sample Variance	1.103
Kurtosis	- 0.074
Skewness	- 0.0411
Range	4
Minimum	6
Maximum	10
Sum	161
Count	20

Based on Table 3, most teachers consider themselves to be proficient (8-9) in using technology in the classroom. Consistency is indicated by most of the replies clustering around the mean (8.1). The range (4) shows diversity in self-assessed skill, while the mode (8) suggests a basic competency level.

In response to Question 9, “How does the school provide the devices for instructional purposes?”, 6 participants (30%) used favorable descriptors such as “Very good,” “Good,” “OK,” and “Enough”. Four participants (20%) highlighted limitations in device availability or restrictions on usage. Meanwhile, 14 participants (70%) indicated that schools supply instructional devices, including computers, tablets, TVs, and smartboards. This suggests that schools generally recognize the importance of technology in education and support teachers with appropriate teaching tools.

Regarding Question 10, "How does the school provide technical assistance for instructional purposes?", the vast majority (95%) reported that their schools offer technical support for professional development. This support includes in-house training, seminars, workshops, Google training, and general technical assistance. A few participants also mentioned that their schools provide resources such as TVs, language labs, and instructional gadgets. However, some teachers noted that their institutions do not offer technical support specifically aimed at lesson plan development.

Finally, when asked Question 11, "Do you find any problems in making a lesson plan for integrating technology into ELT? If yes, mention them", 14 participants (70%) responded that they do not face difficulties incorporating technology into their ELT lesson plans. Those who did report challenges mentioned technical issues such as limited Wi-Fi, poor internet connectivity, and unreliable electricity. Others cited resource constraints, including students' limited internet data and lack of access to devices. Additional concerns included knowledge gaps, such as staying current with technological tools or unfamiliarity with certain applications, and student-related challenges, such as low readiness or difficulty using technology.

4.1.2 The integration of technology into ELT classroom activities

The participants were asked 15 questions through an online questionnaire, followed by interview confirmations, regarding their use of technology in ELT activities and classroom practices. Table 4 presents a summary of all responses categorized by question type.

Table 4. Technology integration into ELT classroom activities.

No.	Questions	Findings
1.	Do you use technology in English classroom practices?	All participants (100%) reported using technology in ELT classroom practices.
2.	What kinds of devices, applications, social media, and multimedia do you use?	Devices: Laptops (14), Projectors (8), Phones (6), Tablets (4), Smartboards (3), Smart TVs (1)
3.	Do you use the technology you plan to use (as written in the lesson plan)?	100% of teachers follow their technology plans in the classroom.
4.	What are the supporting factors for your technology use?	Institutional support, Wi-Fi/internet access, available devices, pedagogical benefits (e.g., student engagement, convenience, learning outcomes).
5.	How do you use technology in your classes? For what purposes?	Engagement (55%), Instructional support (45%), plus assessment, skill development, and time efficiency.
6.	Why do you make these choices?	Engagement & fun (35%), Practicality & ease (30%), Student diversity (20%), Learning improvement (15%)
7.	How do you feel when using technology in the English classroom?	95% feel positive (happy, excited, confident); a few feel nervous or uncomfortable.
8.	How does technology facilitate students' vocabulary learning?	Enhances vocabulary via games, quizzes, multimedia, and instant feedback; supports varied media exposure.
9.	How does technology facilitate students' grammar learning?	Grammar videos, interactive tools, instant feedback, grammar checkers, and AI editing help reinforce grammar concepts.
10.	How does technology facilitate students' pronunciation learning?	Audio tools, speech recognition, YouTube songs/videos, and imitation activities support pronunciation development.
11.	How does technology facilitate students' listening activities?	Multimedia content (e.g., YouTube), varied accents, songs, and stories enhance listening skills and real-world comprehension.
12.	How does technology facilitate students' speaking activities?	AI tools like ChatGPT, video role-plays, personalized practice, and peer activities improve speaking proficiency.
13.	How does technology facilitate students' reading activities?	Access to e-books, online texts, PDF tools, and film-linked narrative texts aid comprehension and reading development.
14.	How does technology facilitate students' writing activities?	Use of Word/Pages, grammar checkers, collaborative tools, and structured video/PPT explanations support writing skill acquisition.
15.	What problems have you encountered when implementing technology in ELT?	Internet issues, lack of devices, student unpreparedness, teacher tool difficulties, distractions, and time management challenges.

From Table 4, for Question 1, "Do you use technology in English classroom practices?", received unanimous "yes" responses from all participating teachers via the online survey. This was further supported by interviewees, who confirmed that they use various technology platforms during English lessons. The next Question 2, "If so, what kinds of devices, learning applications, social media, and multimedia do you use?", revealed diverse technology use. Devices included laptops (14 mentions), LCD projectors (8), mobile phones (6), tablets (4), smartboards (3), and smart TVs (1). Furthermore, the learning applications mentioned were YouTube (13), Canva (8), Quizizz (6), Kahoot (5), Google Classroom (3), Jigsaw (1), and Gemini (1). Additionally, social media platforms used included Instagram (7), TikTok (6), YouTube (5), and WhatsApp (2). Finally, multimedia tools included videos (2), music (1), pictures (1), and sound speakers (1). These responses indicate that all teachers utilize a range of tools and devices to support English learning.

The following Question 3, "Do you use the technology you plan to use (as written in the lesson plan)?", also received unanimous "yes" responses. This indicates that teachers consistently follow their planned integration of technology in classroom activities. The subsequent Question 4, "If so, what are the supporting factors?", revealed that 15 participants (75%) credited their use of technology to institutional support and available technical infrastructure. Factors such as access to Wi-Fi, internet connectivity, and devices were highlighted as enablers for integrating technology and facilitating self-study. Other supporting factors included pedagogical benefits such as ease of understanding, effectiveness of technology in achieving learning outcomes, enhanced student engagement (e.g., curiosity and motivation), and teacher convenience. Teachers also mentioned that the ability to track and monitor students' progress through technology policies contributes to their effective use in the ELT classroom. The following Question 5 explored "How do you use technology in your classes? For what purposes?" The data reveal that 55% of teachers use technology in their ELT classes to enhance engagement and capture students' attention with the materials. Meanwhile, 45% reported using technology primarily for instructional support, such as delivering explanations, visual illustrations, and teaching materials. The remaining participants stated that they use technology for assessment, developing English language skills, and facilitating easier or more time-efficient learning.

Attention then shifts to Question 6, "Why do you make these choices?" Seven participants (35%) emphasized technology's role in increasing engagement, making learning more enjoyable, interactive, and fun. Six participants (30%) highlighted practicality and user-friendliness, citing technology's convenience, ease of use, and cost-effectiveness. Four teachers (20%) pointed out its ability to meet diverse student needs, accommodating different learning styles, skill levels, and generational preferences. Three participants (15%) stressed its capacity to enhance student knowledge, soft skills, and overall learning effectiveness. Next, in response to Question 7 of "How do you feel when you use technology in the English classroom?", almost all participants expressed overwhelmingly positive emotions. Nineteen participants (95%) reported feeling happy, excited, satisfied, confident, comfortable, and even sophisticated when integrating technology into ELT classroom activities. Only a few expressed nervousness or discomfort. The following question (8), "How does technology facilitate students' vocabulary learning?", revealed that teachers believe technology enhances vocabulary acquisition by providing extensive resources and interactive tools such as games, quizzes, and instant feedback. For instance, students can learn new vocabulary by watching narrative texts on a Wi-Fi-enabled television. Devices aid comprehension and vocabulary expansion through engaging and varied media.

Regarding "How does technology facilitate students' grammar learning?" in Question 9, participants noted that technology provides accessible and effective resources for grammar instruction. Tools such as interactive activities, real-time feedback, and visual explanations help reinforce grammar rules. Teachers reported that students engage with grammar-related videos (e.g., narrative films) on smart TVs and access grammar materials through platforms like Google and YouTube. Additionally, students use grammar games, worksheets, and AI-powered editing tools to correct sentence errors. These digital resources significantly enhance grammar acquisition by offering interactive feedback, providing understanding, and accommodating different learning

preferences. Technology effectively complements traditional grammar instruction by providing immediate, personalized support.

Proceeding to the next Question 10, "How does technology facilitate students' pronunciation learning?", participants explained that technology supports pronunciation through audio examples, speech recognition tools, and language apps that offer real-time feedback and practice. Students develop pronunciation skills through auditory and visual engagement with content such as songs on YouTube and Spotify. They also imitate pronunciation from films related to narrative texts using Wi-Fi-enabled televisions. Technology significantly enhances pronunciation learning by providing authentic language exposure, interactive practice opportunities, and personalized feedback. Teachers use multimedia, imitation, and modeling to improve pronunciation acquisition, enriching traditional teaching approaches.

The following Question 11, "How does technology facilitate students' listening activities?", revealed that teachers believe technology improves listening through multimedia resources, audio recordings, and interactive platforms. These tools enable students to engage with diverse accents and real-life contexts. Teachers use online videos and audio from platforms such as YouTube to help students practice listening to songs, stories, and other English materials. Listening tools such as speakers, laptops, and smart TVs are used to deliver content. Technology thus enhances listening activities by providing access to authentic materials, interactive tools, and personalized learning experiences. Repetition, multimedia exposure, and varied auditory input strengthen listening comprehension.

The next area of focus on Question 12, "How does technology facilitate students' speaking activities?", highlighted that technology enables personalized speaking practice through speech recognition tools and language learning applications. Students interact with AI platforms such as ChatGPT to pose and respond to questions, thereby enhancing their conversational abilities. Teachers also use YouTube videos as references for role-play, encouraging students to create and perform their own dialogues in class. This method provides students with meaningful opportunities to practice speaking in engaging, authentic contexts. Thus, technology significantly enhances speaking skills by offering personalized, interactive, and realistic learning experiences. Multimedia, role-playing, and AI tools boost students' confidence and speaking skills, enhancing traditional ELT methods.

Moving forward, Question 13 explores "How does technology facilitate students' reading activities?" Most teachers (65%) agreed that technology supports reading development by offering convenient access to digital resources such as e-books, online texts, and tools like text-to-speech software. Students can access English reading materials via platforms like Google and other educational applications. Tools like PDF Readers are commonly used to view digital texts. Additionally, students can deepen their understanding of reading content by engaging with narrative texts linked to films. In summary, technology significantly enhances reading activities by providing access to digital resources, interactive tools, and authentic reading experiences. This accessibility supports the development of strong reading skills and fosters independent learning.

The subsequent issue on Question 14 addressed, "How does technology facilitate students' writing activities?" Technology supports writing through various tools for drafting, editing, and feedback, such as word processors, grammar checkers, and collaborative platforms, which help improve students' organization and writing proficiency. The internet provides a wide range of opportunities for writing practice. After receiving explanations from teachers via videos or PowerPoint presentations, students can draft their writing using applications like Pages or Microsoft Word. In essence, technology substantially enhances students' writing development by streamlining the writing process and promoting precision, collaboration, and skill development.

Teachers were also asked the last Question 15, "What problems have you encountered when implementing technology in English language teaching?" Participants identified several challenges, including technical difficulties, insufficient student preparedness, limited resources, distractions, and time management concerns. Many of the issues stem from unreliable internet connections and students lacking access to suitable devices. These technological barriers can significantly hinder the learning experience. Some students are not adequately prepared to use technology for learning, and some teachers face difficulties operating specific tools or

applications, sometimes reverting to traditional teaching methods. Therefore, integrating technology into ELT is hindered by infrastructure, resource gaps, and digital literacy disparities. Overcoming these challenges is key to effective, inclusive instruction.

4.1.3 The integration of technology into ELT assessment

This section presents the findings on the integration of technology into ELT assessment. The findings, gathered from 11 questions via online surveys, were validated through interviews. The questions and their corresponding responses are summarized in Table 5.

Table 5. The integration of technology into ELT assessment.

No.	Questions	Responses
1.	Do you use technology in the assessment activities?	✓ Yes: 90% X No: 10% (Interview data suggests 100% use it)
2.	What devices, apps, social media, or multimedia do you use in assessment?	Devices: Cell phones, laptops, PCs Apps: Quizizz, Kahoot, LMS, Google Forms Multimedia: Videos, music, images Social Media: TikTok, YouTube
3.	Do you use technology in assessment as planned in the lesson plan?	✓ Yes: 90% X No: 10% Indicates alignment between planning and practice.
4.	What are the supporting or inhibiting factors?	✓ Supporting: Device access, internet, ease of use, institutional/technical support, PD X Inhibiting: Poor internet/data, app limitations, student device access, or task completion issues
5.	How do you use technology in assessment activities?	Through tools like Google Forms, Quizizz, YouTube, Eraport, Testmoz, Exambro, Fresto, and AI tools like ChatGPT Includes project-based work and digital presentations
6.	Why do you make these choices?	Practicality, efficiency, improved student learning, curriculum alignment, engagement, and academic integrity (e.g., Fresto limiting access to other apps)
7.	How does technology help you design the assessment?	Enhances efficiency, scoring automation, templates, and AI-generated questions Saves time, improves focus on pedagogy
8.	How does technology facilitate the assessment of English language knowledge?	Interactive multimedia, instant feedback, automated scoring, improved access, and assessment delivery
9.	How does technology facilitate the assessment of English language skills?	Enables personalized feedback, greater practice, varied assessment types, and more precise evaluations
10.	How does technology facilitate the assessment of English language attitudes?	Supports attitude assessment via feedback systems, self-reflection, and ethical evaluation Some teachers noted limitations in capturing affective data digitally
11.	What problems do you face in making ELT assessments integrated with technology?	Challenges include: - Technical issues - Uneven student digital literacy - Inconsistent access to devices - Strict platforms (e.g., Fresto) causing stress for students

From Table 5, Question 1 is, 'Do you use technology in the assessment activities?' 90% of participants said "Yes," while the rest said "No". Those percentages illustrate that most teachers use technology in assessment activities, suggesting widespread adoption and integration of digital tools in the evaluation process. However, these findings differ slightly from the interview data, which indicated that all teachers reported using technology in ELT assessment activities. The subsequent Question 2, "If so, what kinds of devices, learning applications, social media, and multimedia do you use in the assessment process?", revealed that participants primarily use applications such as Quizizz, Kahoot, Learning Management Systems (LMS), and Google Forms for assessments. Devices commonly referenced include cell phones, laptops, and personal

computers. As for multimedia, teachers mentioned using videos, music, and images, while for social media, TikTok and YouTube were noted.

Next, Question 3, "Do you use technology in the assessment as planned in the lesson plan?" found that 90% of teachers confirmed implementing technology as outlined in their lesson plans. This reflects a successful integration of technology into instructional design and indicates strong alignment between planned learning objectives and actual assessment practices. The follow-up Question 4, "If so, what are the supporting factors? If not, what are the inhibiting factors?", identified several contributing elements to successful implementation. These include student access to devices, reliable internet connectivity, user-friendly tools, institutional support, technological infrastructure, and ongoing professional development. In contrast, reported obstacles include unstable internet connections, limited mobile data, inaccuracy of certain apps compared to traditional methods, and student access limitations; some lack devices, and others fail to complete assigned tasks.

Continuing with Question 5, "How do you use technology in the assessment activities?", some teachers indicated that they link instructional content with projects, enabling students to complete tasks using tools such as Google Forms, Testmoz, YouTube, Quizizz, Eraport, Fresto, Exambro, and AI platforms like ChatGPT. In some cases, students are asked to present ideas through digital platforms, showcasing their learning in interactive ways. The next Question 6, "Why do you make these choices?", points to factors such as convenience, efficiency, enhanced student learning experiences, and alignment with curriculum objectives. The findings reveal that teachers opt for technology-enhanced assessment strategies due to their practicality, ease of use, and effectiveness in engaging students and supporting learning. One interviewee explained, "Using Fresto during assessments promotes student integrity because it prevents access to internet browsers and external apps, ensuring independent work".

Advancing the discussion, the next issue explores Question 7, "How does technology help you design the assessment?" Teachers reported that technology significantly enhances assessment design by improving efficiency, effectiveness, and convenience. Key advantages include automated scoring, time-saving functionalities, pre-designed templates, and AI-generated question development. These features allow educators to shift their focus from administrative tasks to pedagogical priorities and instructional quality. The following Question 8, "How does technology facilitate the students' English language knowledge assessment?", revealed unanimous agreement among participants that technology improves the assessment of English language proficiency. It does so by providing interactive multimedia resources, automating evaluation processes, and offering immediate feedback. These capabilities support diverse assessment formats, improve accessibility, and streamline assessment delivery, enhancing both teaching and learning effectiveness.

The next inquiry, Question 9, "How does technology facilitate the students' English language skill assessment?", found that most teachers believe technology strengthens assessment by increasing practice opportunities and improving accuracy. Additionally, it allows for personalized feedback, expanded accessibility, and the use of diverse assessment techniques. These tools support students' linguistic growth and help ensure more precise and individualized evaluation. Continuing the investigation, Question 10 "How does technology facilitate the students' English language attitude assessment?" explored the more nuanced aspect of affective learning. Teachers indicated that technology can help assess student attitudes toward English by providing accessible learning environments, improving feedback systems, and encouraging self-reflection and ethical awareness. However, while some educators view technology as beneficial for evaluating attitudes, others acknowledged limitations in assessing this domain, citing challenges in capturing affective responses accurately through digital means.

Finally, the discussion turns to Question 11, "What are the problems you've found in making ELT assessments integrated with technology?" Teachers identified several challenges in implementing technology-based ELT assessments. These include technical issues, varying levels of student digital literacy, and inequitable access to digital tools. These obstacles underline the need for reliable infrastructure, targeted professional development, and inclusive assessment practices. One teacher noted in the interview the difficulties students faced during assessments

with the Fresto platform, stating: "The Fresto assessment system is exceedingly strict, and some students became frustrated because they couldn't search for answers using other applications". This highlights the tension between maintaining academic integrity and ensuring student comfort and access.

4.2 Discussion

4.2.1 The integration of technology into the ELT lesson plan

As technology integration is an important issue in ELT lesson plans, the findings of this study can have some implications. All teacher participants reported the incorporation of technology into their ELT classroom practices. Descriptive statistical results indicated that laptops, mobile phones, and LCD projectors were used most frequently in ELT classroom practices. The use of technology in ELT lesson plans is more deep-rooted than they can think, and they know they need digital literacy skills to survive as a teacher or a student. The study results also indicate that one of the factors that leads to the technological inclusion in the ELT lesson plan is the need to increase the students' motivation and engagement. More teachers (55%) reported that they were using technology to keep learning engaging, fun, and interactive. It aligns with earlier studies, which indicate that technology in collaborative learning would enhance student motivation and promote autonomy (Kukulska-Hulme, 2007; Lee, 2022).

In addition, the results of the study demonstrated that the purpose of instructors to provide instructional support and to select assessments also affects technology integration in ELT lesson plans. Teachers primarily used technology to present information, cite examples, and show materials (45%), with others using it for evaluation. This is consistent with past research, which indicates that technology has the potential to mediate both formative and summative assessment, offer timely feedback, and support self-assessment (Chapelle & Sauro, 2017; Wu, 2014).

Nevertheless, the results of this study reveal some challenges and limitations of technology integration in the ELT lesson plans. That was until, in his recent RISE keynote, Scott Klososky pointed out three key enablers that hold technology back from transformative power: technical issues, student readiness, and a lack of time, expertise, and funding to design courses using technology (Egbert & Hanson-Smith, 2007). The results corroborate previous studies that document how technical issues, insufficient digital literacy skills, and limited access to technology impact the successful implementation of technology in language-learning environments (Kim, 2020).

At the end, these findings indicate that implementing technology integration into ELT lesson plans should be a priority. But the opportunities for enhanced engagement, instructional support, and assessment far outweigh the hurdles and limitations. Teachers and policymakers can fully realize the benefits that technology integration brings to teaching and learning by addressing challenges and limitations of technology in ELT lessons specific to their context and providing teachers with ongoing professional development as well as infrastructure support.

4.2.2 The integration of technology into ELT classroom activities

Technology integration into ELT is complex, and the learning process has shifted (Chapelle, 2006; Egbert & Hanson-Smith, 2007). This study investigated one aspect of this integration in ELT classrooms, in this case, the devices, software, and social media that teachers used to enhance engaging and effective learning. The study provides insights into the strengths and weaknesses of technology-mediated instructional practices in ELT. The results also revealed that teachers who participated in research adopted technology to use in EFL teaching methodologies. They include smartboards, LCD projectors, laptops, and mobile phones. Teaching tools like YouTube, Canva, Quizizz, and Kahoot. It also makes use of social media, such as Instagram, TikTok, and WhatsApp.

There are both benefits and limitations to integrating technology into ELT classroom activities. The findings indicate several significant advantages of using technology in ELT,

including expanded interaction, instructional support, effective assessment, and personalized learning. Experts note that technology promotes innovation and creativity and can foster a more engaging, enjoyable, and interactive learning experience (Kern, 2006; Lee, 2022). Up to 55% of teachers reported these positive impacts. Additionally, meta-cognitive strategies are employed to support cognitive processing and promote reflective learning, helping students become more self-directed in their learning (Levy & Stockwell, 2013; Wu, 2014). To support this, technology provides cybernetic components, such as explanations, illustrations, and materials, which facilitate instructional support, reported by 45% of participants. It also underpins assessment and evaluation processes (e.g., pronunciation, grammar correction, and vocabulary acquisition) (Bax, 2003; Chapelle & Sauro, 2017). It can also deliver personalized learning experiences that cater to varied learning approaches and needs (Benson, 2017; Kukulska-Hulme, 2007).

Despite their advantages, the study also acknowledges several obstacles and limitations. First, there are technical challenges, including internet connectivity issues and device compatibility (Egbert & Hanson-Smith, 2007; Kim, 2020). Second, student preparedness is a concern, as some learners lack the necessary digital literacy skills, which hinders the effective integration of technology (Andrei, 2017; Kern, 2006). Third, there are resource constraints, such as limited availability of devices, unstable internet connections, and insufficient access to learning applications (Bax, 2003; Fu et al., 2022).

In short, this study shows the importance of technology introduction integrated into ELT classroom practices. Despite challenges, the advantages of increased engagement, instructional support, and collaborative learning experiences far outweigh the disadvantages. To fully harness the power of technology-enhanced instruction, teachers and policymakers need to work to overcome the identified challenges and limitations.

4.2.3 The integration of technology into ELT assessment

The results of this work show the importance of technology provision in ELT. The data reveal that technology evaluates a range of language skills, from pronunciation and grammar to vocabulary, reading, writing, and speaking. The majority of teachers (65%) said they used technology to offer immediate feedback, encourage self-assessment, and enable peer assessment. It is found that the main driving force for technology integration in ELT assessment is a need for increased efficiency, accuracy, and reliability. Web-based information assessment tools like quizzes, tests, and exams help teachers automate grading, cut down paperwork, and save time (Chapelle & Sauro, 2017). In addition to this, technology-based assessment tools also instantaneously feedback, which helps students monitor their progress, identify areas needing improvement, and learn self-assessment skills (Wu, 2014).

Moreover, the research results show that the improvement of functioning with technology in the assessment of English Language Teaching increases student engagement and motivation. Gamification, game-based exercises, simulations, interactive quizzes, and other tech-based assessment tools make for a more enjoyable, interactive, and challenging assessment (Lee, 2022). This aligns with past studies showing that tech-based assessment can boost student motivation and decrease anxiety and anxiety behavior, leading to healthier attitudes toward assessments (Kim, 2020).

However, the findings of the study indicated multiple challenges and limitations of using technology in ELT assessment among teachers. Major hurdles to effective technology integration in assessment included technical issues such as connectivity, compatibility, and glitches. Furthermore, Egbert and Hanson-Smith (2007) noted that some teachers are concerned about the reliability and validity of technology-based assessment tools and being able to guard against cheating and academic dishonesty.

In summary, the results of this study highlight the critical role of technology integration in ELT assessment. Despite its challenges and limitations, it certainly has more advantages, such as improved efficiency and feedback, and increased engagement with students. Overall, for technology to be integrated into ELT assessment, potential challenges and limitations must be addressed by educators and policymakers, and continuous support and training for teachers and

infrastructure development should be provided to maximize potential conclusions within these frameworks.

5. CONCLUSION

In conclusion, the present study highlights the importance of technology integration for lesson planning, classroom engagement, and assessment methods in the field of English Language Teaching. Obstacles remain concerning connectivity and compatibility, lack of technological competency among educators, insufficient training and support, distractions by students, technology malfunctions, as well as lack of patience, leading to improper use of technology. Moreover, institutional obstacles, such as constrained resources, deficient infrastructure, and a lack of institutional backing, can hinder technological integration. Nonetheless, the advantages of heightened student engagement, instructional assistance, personalized learning experiences, augmented efficiency, and superior assessment feedback surpass the disadvantages. To optimize the integration of technology in ELT lesson plans, classroom practices, and assessments, teachers and policymakers must confront the highlighted issues, offer continuous support and training for instructors, and invest in infrastructure development. The benefits of heightened efficiency, augmented pupil engagement, and superior feedback surpass the disadvantages.

The study has several shortcomings, including the limited sample used and the absence of further quantitative research. More samples would make the results more comprehensive and credible. The sample can be expanded in scope so that it is more diverse, not only in the scope of the Central Java region, but also throughout Indonesia. Meanwhile, the type of quantitative research in question can be in the form of quasi-experimental research to determine the effect of technology integration in ELT on improving students' English skills.

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