

Technology Integration in EFL Language Teaching: The Benefits and Challenges

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ABSTRACT

The integration of technology in the classrooms has advantages and disadvantages. This study aims at investigating the advantages and difficulties that teachers encounter when utilizing technology in teaching and learning activities. The study employed a descriptive qualitative design. The study highlights key benefits such as increased motivation, personalized learning, access to authentic materials, enhanced collaboration, improved feedback, flexibility, accessibility, and digital literacy growth. However, it also points out challenges like unequal digital skills, limited access to technology, language barriers, over-reliance on digital tools, technical issues, distractions, high costs, privacy concerns, cultural differences, and struggles with self-discipline and motivation. To ensure effective and equitable technology integration in EFL teaching, the findings stress the need for comprehensive strategies that maximize benefits while addressing challenges. Technology offers significant advantages, but it requires careful management to overcome its limitations. Schools should invest in resources and support systems, and teachers need proper training. Future research should explore best practices and develop targeted solutions to address these challenges and optimize technology use in EFL education.

Keywords: *Educational Technology, EFL language teaching, Technology integration*

ABSTRAK

Integrasi teknologi di ruang kelas memiliki kelebihan dan kekurangan. Penelitian ini bertujuan untuk menyelidiki keuntungan dan kesulitan yang dihadapi guru ketika memanfaatkan teknologi dalam kegiatan belajar mengajar. Penelitian ini menggunakan desain kualitatif deskriptif. Studi ini menyoroti manfaat utama seperti peningkatan motivasi, pembelajaran yang dipersonalisasi, akses ke materi otentik, kolaborasi yang lebih baik, peningkatan umpan balik, fleksibilitas, aksesibilitas, dan pertumbuhan literasi digital. Namun, penelitian ini juga menunjukkan tantangan seperti keterampilan digital yang tidak merata, akses terbatas ke teknologi, hambatan bahasa, ketergantungan yang berlebihan pada alat digital, masalah teknis, gangguan, biaya tinggi, masalah privasi, perbedaan budaya, dan perjuangan dengan disiplin diri dan motivasi. Untuk memastikan integrasi teknologi yang efektif dan merata dalam pengajaran EFL, temuan ini menekankan perlunya strategi komprehensif yang memaksimalkan manfaat sekaligus mengatasi tantangan. Teknologi menawarkan keuntungan yang signifikan, namun membutuhkan manajemen yang cermat untuk mengatasi keterbatasannya. Sekolah harus berinvestasi pada sumber daya dan sistem pendukung, dan guru membutuhkan pelatihan yang tepat. Penelitian di masa depan harus mengeksplorasi praktik terbaik dan mengembangkan solusi yang ditargetkan untuk mengatasi tantangan ini dan mengoptimalkan penggunaan teknologi dalam pendidikan EFL.

Kata kunci: *Teknologi Pendidikan, Pengajaran bahasa EFL, Integrasi teknologi*

INTRODUCTION

Integrating technology into English as a Foreign Language (EFL) presents both opportunities and challenges that significantly impact teaching and learning. Technology has the potential to enhance student engagement, personalize learning experiences, and provide access to authentic materials, which can lead to improved language proficiency and more interactive classroom environments (Negoescu & Mitrulescu, 2023; Çakıcı, 2016; Wang, Zhang, & Zhang, 2022). However, the integration process is not without its difficulties. Issues such as digital literacy gaps, limited access to technology, technical problems, and distractions can hinder the effective use of digital tools in the classroom (Kuswoyo, Rido, & Mandasari, 2022; Saputra, Ayudhia, & Muswari, 2022; Mundo, 2022).

Infrastructure limitations, such as unreliable internet and outdated hardware, can disrupt educational activities and affect the quality of technology integration (Singh, 2019). Additionally, disparities in device access among students further complicate the effective deployment of technology (Scalise, 2018). Despite these obstacles, the benefits of technology integrationsuch as increased engagement, personalized learning, and expanded resource access are substantial (Kimberly et al., 2016; Jeong, 2019; Lee, Song, & Hong, 2019).

A comprehensive understanding of these benefits and challenges is crucial for developing effective strategies for technology integration. Previous studies have highlighted that educators' attitudes, school-related factors, and access to resources significantly influence the success of technology use in education (Rintaningrum, 2023; Gökçe, 2020; Durriyah & Zuhdi, 2018). Effective solutions involve robust professional development, adequate institutional support, and addressing technical and contextual challenges (Mundo, 2022; Alamri, 2021).

This study seeks to explore these dimensions by addressing three main research questions: (1) What are the perceived benefits of integrating technology into English language instruction among secondary EFL teachers? (2) What challenges do secondary EFL teachers encounter in this process, and how do these challenges impact their instructional practices? (3) What strategies and support systems are most effective in overcoming these challenges, and how can they be implemented to enhance the effectiveness of technology use?

By offering a balanced examination of both the benefits and challenges of technology integration, this study aims to provide a holistic framework for improving technology use in secondary EFL education. It will also focus on the role of ongoing professional development and school leadership in fostering an environment conducive to effective technology integration. This research intends to contribute valuable insights into maximizing the benefits of technology in EFL classrooms, addressing existing gaps in the literature, and proposing practical solutions for overcoming barriers to successful implementation.

METHODOLOGY

The research design of this study was descriptive qualitative. This approach was chosen to gain a deep understanding of the experiences and perspectives of the participants regarding technology integration in English language learning. Descriptive qualitative research allowed for detailed descriptions and insights into the participants' real-life contexts (Neuman, 2014). Through observations and interviews, the study aimed to explore the challenges and benefits of using technology in the English language classrooms. By focusing on qualitative data, the study can capture the natures of how teachers interacted with digital tools, the specific obstacles they faced, and the strategies they found effective. This approach provided a comprehensive view of the current state of technology integration in the school and helped identify areas for improvement.

The participants in this study were four English teachers from Junior High School 15 in Bengkulu City, Indonesia. Their involvement provided valuable insights into the integration of technology in teaching English at the junior high school level, offering perspectives based on their professional experiences and classroom practices.

Conducting semi-structured interviews with teachers allowed for in-depth exploration of their personal experiences and perceptions regarding technology integration. This method provided

flexibility, enabling the interviewer to probe deeper into specific areas of interest while maintaining a structured framework (Creswell & Creswell, 2018). The insights gained from this interview offers a detailed understanding of individual perspectives and the nuanced challenges and benefits encountered in the classroom.

Classroom observations involved directly observing the use of technology in real-time educational settings. This method helped identify the practical application of digital tools, their effectiveness, and the challenges faced by both teachers and students (Creswell & Creswell, 2018). Observations provided a firsthand look at how technology was integrated into daily lessons, revealing the dynamics of the classroom and the interaction between students and digital resources.

Thematic analysis was employed to analyze the qualitative data collected from interviews, observations, and focus group discussions. This method involved systematically identifying, organizing, and offering insights into patterns and themes that emerge from the data (Creswell & Creswell, 2018). The analysis process included the following steps:

- 1) Familiarization with Data: Transcribing interviews and reviewing observation notes to become thoroughly acquainted with the data.
- 2) Generating Initial Codes: Coding significant phrases, sentences, or paragraphs that highlight the benefits and challenges of technology integration.
- 3) Searching for Themes: Grouping the initial codes into broader themes that encapsulate key aspects of the data, such as access to technology, teacher training, and student engagement.
- 4) Reviewing Themes: Refining and validating the themes by checking their coherence and relevance to the research questions.
- 5) Defining and Naming Themes: Clearly defining each theme and ensuring they accurately reflect the data's insights.
- 6) Writing Up: Integrating the themes into a coherent narrative that presents the findings on the benefits and challenges of technology integration.

Ethical Considerations

Informed Consent

Before any data collection begins, informed consent was obtained from all participants. This ensures that teachers and students were fully aware of the study's purpose, procedures, and any potential risks or benefits involved. Participants were given the opportunity to ask questions and will sign consent forms to confirm their voluntary participation.

Confidentiality and Anonymity

Maintaining the confidentiality and anonymity of participants is paramount. All personal information and responses were anonymized to protect the identities of those involved. Data were securely stored and only accessible to the research team, ensuring that participants' privacy was preserved throughout the study.

Ethical Considerations

The study established ethical guidelines for research involving human subjects. This included respecting the rights and dignity of participants, ensuring that participation was voluntary, and avoiding any form of undue influence.

Limitations

This study provided valuable insights into technology integration at Junior High School 15 in Bengkulu, Indonesia. However, it faced some limitations. The specific context of this school, including its resources may not fully represent other educational settings. Consequently, the findings might not generalize to schools with different environments or constraints. Additionally, the sample size of four English teachers though sufficient for qualitative analysis, may limited the broader applicability of the results. Including a more diversified range of schools and a larger sample size in future research could enhance the generalizability of the findings.

FINDINGS AND DISCUSSION

Findings

The Benefits of Technology Integration

Table 1. The Benefits of Technology Integration

Perceived Benefits	Summary of Findings
Enhanced Engagement and Motivation	Technology increases student engagement and motivation by making lessons more interactive and dynamic.
Personalized Learning Experiences	Technology allows for tailored learning paths that cater to individual student needs and preferences.
Access to Authentic Materials	Technology provides access to a wide range of diverse and authentic resources beyond traditional textbooks.
Improved Collaboration and Communication	Technology enhances collaboration and communication between students and teachers through various digital tools.
Enhanced Feedback and Assessment	Technology improves feedback mechanisms and assessment processes with real-time evaluations and personalized comments.
Flexibility and Accessibility	Technology offers flexible learning schedules and locations. Students can access materials and complete assignments at their own pace, beneficial for adult learners and those with other commitments.
Development of Digital Literacy Skills	Technology integration helps students develop essential digital skills necessary for future academic and professional success.

Enhanced Engagement and Motivation

Technology transforms classrooms into dynamic and captivating learning environments. Teacher 1, a Grade 8 teacher, emphasized how multimedia presentations and interactive simulations make lessons more enjoyable. Students agree, noting that educational games turn learning into an engaging and rewarding experience. This aligns with researched by Bhat (2023), which found that technology-enhanced learning environments can significantly boost student engagement and motivation. By making abstract concepts more tangible and lessons more interactive, technology fosters a more stimulating educational experience. This interactive approached not only captures students' interest but also enhanced their understanding and retention of the material. As previous researched by Asare et al, (2023) suggest, multimedia and simulations were effective tools for making complex concepts more accessible and captivating.

Increased Attention and Enthusiasm

Teacher 2, a Grade 9 teacher, observed increased attention and enthusiasm when technology was used in the classroom. It made students more motivated to participate in learning activities. The finding consistent with a study by Gherdan, (2022), which highlight that integrating technology in classrooms can enhance students' interest and involvement in the learning process. The used of educational technology fosters a more enthusiastic and motivated learning atmosphere, as supported by Akram et al, (2022). Moreover, technology's ability to maintained and even increased student attention had been highlighted in studies focusing on interactive and multimedia learning environments (Gherdan, 2022; Iqbal, Niazi, & Hafeez, 2021).

Personalized Learning Experiences

Adaptive learning platforms allowed teachers to tailor instructional content to each student's unique needs. Teacher 3, a Grade 7 teacher, found this customization supports differentiated learning by adjusting the complexity of tasks based on individual performance. This personalized approached helps

students progress at their own pace, focusing on areas needing improvement (Major, Francis, & Tsapali, 2021; Shemshack & Spector, 2020). Students appreciated this individualized learning journey, which not only enhances their understanding but also builds their confidence and motivation (Graf, 2023; Alamri, Watson, & Watson, 2020). Teacher 4, a Grade 9 teacher, observed that such personalized approaches significantly boost student engagement and self-efficacy, leading to a more effective and satisfying learning experience. These findings aligned with educational theories that emphasize the importance of personalized learning in fostering student success and motivation (Khan, 2024).

Access to Authentic Materials

Technology provides access to a wide range of real-world materials, enriching the learning experience. Teacher 2 used online databases and multimedia content to offer students authentic resources, such as current news articles and interactive media. This access allowed students to connect their learning with real-world applications, making it more relevant and practical (Lavrysh, Saienko, & Kyrychok, 2021). Teacher 3, a Grade 7 teacher, highlighted that exposure to vary linguistic and cultural contexts through these materials enhances students' understanding and appreciation of the language. Engaging with authentic resources helps students develop a deeper, more nuanced grasp of the language, encouraging them to see its real-world value. This approach aligns with pedagogical research that underscores the benefits of integrating authentic materials into language learning to improve contextual understanding and cultural awareness (Parveen, Farid, & Fatima, 2023; Lavrysh, Saienko, & Kyrychok, 2021).

Improved Collaboration and Communication

Digital tools facilitate better collaboration and communication between students and teachers. Teacher 3 utilized platforms like discussion forums and video conferencing to support seamless interaction and group work. Students valued the ability to collaborate in real-time, regardless of their location, which enhances their learning experience by promoting teamwork and diverse perspectives. Teacher 2 noted that digital tools enable teachers to monitor student progress, provide instant feedback, and offer continuous support. This dynamic and interactive learning environment fosters stronger teacher-student relationships and encourages greater participation and collaboration. These findings were supported by research indicating that effective use of digital tools in education can enhance communication, streamline feedback processes, and create a more inclusive and engaging learning atmosphere (Melnikova & Batuchina, 2023; Girdzijauskienė, Rupšienė, & Pranckūnienė, 2022).

Enhanced Feedback and Assessment

Technology revolutionizes feedback and assessment by providing real-time evaluations and personalized comments (Belcadhi, 2016). Teacher 2 used automated grading systems and online assessment tools to offer timely and detailed feedback, helping students understand their strengths and areas needing improvement. This immediate feedback loop allows students to adjust their learning strategies promptly, enhancing their academic performance. Students valued receiving personalized feedback, which guides their improvement and makes the learning process more responsive and adaptive. Personalized feedback, tailored to individual student needs, supports a better understanding and mastery of content, boosting student confidence with clear, actionable steps for growth (Xu et al, 2021). Teacher 1 observed that this approach not only clarifies learning objectives but also motivated students to engage more deeply with the material, knowing they had specific guidance to follow.

Flexibility and Accessibility

Digital platforms offer greater flexibility and accessibility, allowing students to manage their studies and access resources anytime and from anywhere (Josué et al, 2023). Teacher 1 highlighted that digital platforms reduce constraints imposed by traditional classroom settings, enabling learners to engage with their studies at their convenience. This flexibility was particularly beneficial for students with diverse schedules and commitments, as it allows them to fit their learning around other responsibilities. Students appreciated the ability to access a wealth of online content, including interactive lessons and supplementary materials, regardless of their geographic location. This access to diversified resources ensures that learning is continuous and not confined to the physical classroom. Teacher 4 ensured that students had the resources they need to succeed, regardless of individual

circumstances, valuing the ability to study whenever and wherever they want. This flexibility promotes a more inclusive educational environment where all students can thrive (Culajara et al, 2022).

Development of Digital Literacy Skills

Integrating technology into the EFL curriculum developed essential digital literacy skills (Cahya, 2023). Teacher 4 observed that students become proficient in navigating digital environments and using online resources effectively. These skills are crucial for academic success and future career opportunities in an increasingly digital world. Students reported gaining hands-on experience with various digital tools and platforms, crucial for their academic and professional futures. They learnt how to critically evaluate online information, use educational software, and engage with digital communication tools, all of which are vital skills in the modern workplace. Teacher 2 noted that this preparation ensures students are well-equipped to succeed in a technology-driven society, fostering critical thinking and problem-solving skills valued in higher education and the workforce. By integrating these digital literacy components, educators prepare students not only for academic success but also for lifelong learning and adaptability in a rapidly evolving digital landscape (Haleem et al, 2022).

Challenges in Technology Integration for EFL Secondary Teachers

Table 2. The Challenges of Technology Integration

Perceived Challenges	Summary of Findings
Limited Access to Technology	Many students lack access to necessary devices and reliable internet connections. This digital divide creates barriers to effective learning and widens educational inequalities.
Insufficient Teacher Training	Many educators do not receive adequate training in using digital tools. This lack of preparedness can lead to ineffective use of technology, diminishing its potential benefits for students.
Resistance to Change	Teachers and students often resist new technologies due to a preference for traditional methods or lack of confidence in digital tools. Overcoming this resistance requires clear communication of benefits, ongoing support, and incentives.
Technical Issues	Technical problems such as software glitches and connectivity issues disrupt the learning process and cause frustration. Reliable technical support and infrastructure are essential to minimize these disruptions.
High Costs	The high costs associated with acquiring, maintaining, and updating technology can be a significant barrier. Budget constraints often limit access to necessary devices, software, and internet connections, hindering widespread technology adoption.
Privacy and Security Concerns	The importance of protecting student data when using digital tools. Ensuring compliance with data protection regulations and safeguarding personal information are crucial responsibilities for educators.
Pedagogical Challenges	Integrating technology effectively requires careful planning to align with learning objectives. Some educators struggle to balance traditional and digital methods or design activities that leverage technology effectively.
Digital Literacy Gaps	Varying levels of digital literacy among students can lead to disparities in learning experiences. Providing support and resources to develop digital literacy skills is necessary for equitable access to technology-enhanced learning.
Overreliance on Technology	The risk of overreliance on technology, which can lead to neglecting

fundamental language skills and face-to-face interactions. Balancing technology use with traditional methods is crucial for holistic language development.

Continuous Professional Development

The need for continuous professional development to keep up with technological advancements. However, finding time and resources for ongoing training can be challenging for teachers with heavy workloads.

The Challenges of Technology Integration

Limited Access to Technology

Limited access to technology remains a significant hurdle in integrating digital tools in education (Akram, Abdelrady, Al-Adwan, & Ramzan, 2022; Johnson et al, 2016). Teacher 3 highlighted that many students lack personal devices or reliable internet connections, creating a digital divide that hampers effective learning. This gap in access made it challenging to implement technology-based learning comprehensively. From the student perspective, missing online classes due to insufficient devices at home is a common issue, leading to uneven learning opportunities. The school needs to invest in better technology and resources to close the digital divide and ensure all students benefit from tech-based learning, making education fairer and more accessible. Research indicated that addressing these disparities is crucial for achieving inclusive and effective educational outcomes (Miah, 2024; Afzal et al, 2023).

Insufficient Teacher Training

Insufficient teacher training was a critical barrier to effective technology integration in education (Bećirović, 2023). Teacher 2 emphasized the need for more professional development programs focused on digital tools, as inadequate training prevents teachers from fully utilizing available technology. This lack of proficiency can slow down lessons and hinder the learning process, as observed by students. Effective training programs were essential to equip teachers with the necessary skills and confidence to use digital tools seamlessly. By investing in comprehensive and ongoing professional development, schools can ensure that teachers were well-prepared to integrate technology into their teaching practices, ultimately enhancing the overall educational experience for students (Philipsen et al, 2019; Dinc, 2019).

Resistance to Change

Resistance to change among educators was another challenge in technology integration (Mlambo, Maeko, & Khoza, 2023; Hamlaoui, 2020). Teacher 1 noted that some colleagues are reluctant to adopt new technologies, preferring traditional methods. Overcoming this resistance requires demonstrating how digital tools can enhance learning. From the student perspective, while there was an appreciation for traditional books, the interactive and engaging nature of technology is also recognized. To address this resistance, schools should provide training that highlights the benefits of technology and how it can complement traditional teaching methods. Creating a supportive environment that encourages experimentation and showcases successful examples can help educators embrace technological advancements (Prieto et al, 2019).

Technical Issues

Technical issues were a frequent obstacle in the integration of technology in education (Atabek, 2019). Teacher 2 pointed out those problems such as software glitches and poor connectivity is common, disrupting the learning process. Students shared this frustration, as internet outages during lessons can make it difficult to stay on track. Reliable technical support was essential to minimize these disruptions and ensure a smooth learning experience. Schools need to invest in adequate IT infrastructure and provide quick and effective technical assistance to handle any issues that arise. By doing so, they can create a more stable and conducive environment for technology-enhanced education.

High Costs

The high cost of technology was a significant barrier to its widespread adoption in education. Teacher 3 stated the need for more funding to provide devices and resources for all students. The financial burden of purchasing computers, tablets, and other digital tools can be prohibitive for many families, leading to inequities in access and learning opportunities. From the student perspective, this disparity was seen as unfair. The investments from both public and private sectors to subsidize technology costs were needed. This would ensure all students had equal access to the tools needed for modern learning (Khan et al., 2023).

Privacy and Security Concerns

Privacy and security concerns were paramount when integrating technology in education. Teacher 4 emphasized the importance of ensuring student data privacy and making teachers aware of data protection regulations. Secure digital platforms were essential to protect sensitive information. Students shared these concerns, worrying about the safety of their personal information online. Schools must adopt stringent data protection measures and provide training to teachers on best practices for maintaining privacy and security. By prioritizing these concerns, educational institutions can create a safe digital environment that fosters trust and encourages the responsible use of technology (Zhang, 2020).

Pedagogical Challenges

Balancing traditional and digital teaching methods presents pedagogical challenges. Teacher 1 highlights the need for thoughtful planning to integrate technology effectively into the curriculum. Without careful consideration, tech-based activities may not align well with traditional learning objectives, as noted by students. This disconnect can hinder the overall learning experience. Effective integration required a strategic approach that combines the strengths of both traditional and digital methods. Teachers need support and training to design cohesive lessons that leverage technology to enhance the learning process (Santos et al., 2024). By doing so, schools can ensure that digital tools complement rather than disrupt the educational process.

Digital Literacy Gaps

Digital literacy gaps among students pose a significant challenge to technology integration. Teacher 4 notes that students had varying levels of digital skills, requiring adequate support to ensure everyone benefits from technology. Students often felt left behind if they struggled with digital tools while their peers are more proficient. Addressing this issue required targeted interventions to build digital literacy skills across all student levels. Schools should offer training sessions and resources to help students develop these essential skills. By providing the necessary support, educators can create an inclusive environment where all students can thrive in a technology-enhanced learning setting (Hamlin, 2021).

Overreliance on Technology

Overreliance on technology can lead to an imbalance in education. Teacher 1 emphasized the importance of not depending too heavily on digital tools, as traditional teaching methods also play a crucial role in providing a well-rounded education. Striking a balance between technology and traditional methods was essential to maintain the social and interactive aspects of learning. Educators should use technology to complement and enhance traditional teaching, ensuring that students receive a holistic education that includes personal interactions and critical thinking skills (Cuban, 2023).

Continuous Professional Development

Continuous professional development was crucial for teachers to keep pace with technological advancements. Teacher 4 highlights the challenge of finding time for ongoing training amidst their regular duties. However, staying updated with the latest digital tools and techniques was essential for effective teaching. Schools should prioritize professional development by providing accessible and flexible training opportunities. By investing in the continuous growth of their educators, schools can ensure that teachers remain competent and confident in integrating technology into their classrooms (Darling-Hammond et al., 2017).

The Strategies for Technology Integration

Table 3. The Strategies for Technology Integration

Strategy	Finding	Implementation
Professional Development and Training	Continuous professional development (CPD) programs are crucial for equipping teachers with the skills and knowledge needed to integrate technology effectively.	Regular workshops, online courses, and mentorship programs can help teachers become proficient with technology. Schools should upgrade their technological infrastructure and explore partnerships for affordable devices and internet plans.
Access to Reliable Technology and Infrastructure	Ensuring that both students and teachers have access to reliable devices and high-speed internet is fundamental for effective technology integration.	Schools should invest in upgrading their technological infrastructure, including providing Wi-Fi hotspots and devices for students who lack access. Partnerships with tech companies for affordable devices and internet plans can be explored.
Technical Support and Maintenance	Ongoing technical support is necessary to address hardware and software issues promptly, minimizing disruptions in the learning process.	Schools can create dedicated IT support teams for immediate assistance and set up a helpdesk system for teachers and students to report issues and get quick resolutions.
Developing Digital Literacy	Enhancing both teachers' and students' digital literacy is critical for maximizing the benefits of technology integration.	Add digital literacy courses to the student curriculum and offer targeted training for teachers on educational technologies. Use benchmarks and assessments to track progress and identify areas needing improvement.
Inclusive and Adaptive Learning Platforms	Adaptive learning platforms that cater to diverse learning styles and needs help personalize the educational experience and support differentiated instruction.	Schools should use adaptive learning platforms for personalized student learning paths and train teachers to use these platforms effectively.
Cultivating a Positive Attitude Towards Change	Overcoming resistance to change among teachers and students is essential for successful technology integration.	Involve stakeholders in planning and share the benefits of technology integration through success stories and data on improved outcomes. Offering incentives for teachers who effectively use technology can also encourage adoption.
Effective Pedagogical Integration	Aligning technology use with pedagogical goals ensures that digital tools enhance rather than detract from the learning experience.	Teachers need training on how to use technology in their teaching. Sharing best practices in professional learning communities (PLCs) helps teachers learn from each other. Curriculum designers should collaborate with teachers to seamlessly integrate technology into lesson plans
Addressing Privacy and Security Concerns	Ensuring the privacy and security of student data is vital to maintain trust and comply with regulations.	Schools should set up strong data protection rules and train staff on digital safety. Using secure, approved educational tools and keeping security measures up-to-date will help protect student information.
Financial Support and Resource Allocation	Adequate funding and resources are required to sustain technology integration efforts.	Schools can apply for government grants, find private funding, and partner with tech companies to get financial support. They should also create clear budgets and plans to make sure the money is spent wisely.
Continuous Feedback and Improvement	Regular feedback from teachers and students helps refine technology integration strategies	Set up ways to get feedback, like surveys and suggestion boxes, and use it to improve how technology is used in class. Form a

and address emerging challenges. tech committee with teachers, students, and administrators to oversee and guide these improvements.

Professional Development and Training

Continuous professional development (CPD) was essential for equipping teachers with the skills and knowledge needed for effective technology integration (Dahri et al, 2021). Regular workshops, online courses, and collaborative training sessions can foster technological proficiency. Mentorship programs, where experienced teachers support less tech-savvy colleagues, were particularly valuable. One teacher noted, "Our regular workshops made a huge difference, boosting confidence and innovation." Another shared, "Having a mentor when I started integrating tech saved me a lot of trial and error." Such programs ensured teachers are well-prepared to utilize technology, enhancing their teaching methods and student engagement (Mohamed & Ahmad, 2019).

Access to Reliable Technology and Infrastructure

Reliable access to devices and high-speed internet was fundamental for effective technology integration (Yang, Zhong, Chen, & Alphones, 2020). Schools should invest in upgrading their technological infrastructure, providing Wi-Fi hotspots, and ensuring all students had devices. Partnerships with tech companies for affordable devices and internet plans can bridge the digital divide. One teacher observed, "Providing Wi-Fi hotspots have helped students who lacked necessary devices." Another mentioned, "Our school's partnership with a tech company for affordable devices has been great, especially for low-income students." Ensuring reliable technology access was crucial for equitable and effective learning (Anis, 2023; Lowell & Morris, 2019).

Technical Support and Maintenance

Ongoing technical support was necessary to address hardware and software issues promptly, minimizing learning disruptions (Lane, Oakes, & Menzies, 2023). Establishing dedicated IT support teams and creating a helpdesk system where teachers and students could report issues ensured quick resolutions. A teacher shared, "Our IT support team resolves issues swiftly, minimizing classroom disruptions." Another added, "The helpdesk system makes reporting problems and getting them fixed easy." Effective technical support was crucial for maintaining a smooth and efficient learning environment, enabling teachers and students to focus on education rather than technical problems (Caporarello, Magni, & Pennarola, 2016).

Developing Digital Literacy

Enhancing both teachers' and students' digital literacy is critical for maximizing technology's benefits (Hasse, 2017). Incorporating digital literacy courses into the curriculum and providing targeted training for teachers on educational technologies are essential. Creating digital literacy benchmarks and assessments can track progress and identify improvement areas. A teacher remarked, "Digital literacy courses have made students more comfortable with digital tools, enhancing their learning experience." Another noted, "Targeted training for teachers ensures we are well-equipped to utilize technology effectively." Developing digital literacy is fundamental for effective technology integration in education (Zayas, & Rofi'ah, 2022).

Inclusive and Adaptive Learning Platforms

Adaptive learning platforms that fit various learning styles and needs make education more personalized and support different teaching approaches (Kem, 2022). Schools should adopt or develop platforms providing personalized learning paths based on individual performance. Training teachers to use these platforms effectively is also necessary. One teacher shared, "Adaptive learning platforms cater to different learning styles, personalizing

education." Another emphasized, "Training on these platforms ensures we could effectively incorporate them into our teaching." Inclusive and adaptive platforms enhance learning by addressing individual student needs, making education more effective and personalized (Hinkle, Jones, & Saccomano, 2020).

Cultivating a Positive Attitude towards Change

Overcoming resistance to change among teachers and students was essential for successful technology integration (Adnan et al, 2020). Engaging stakeholders in the planning process and clearly communicating technology's benefits can build a positive attitude. Sharing success stories and data on improved learning outcomes and offering incentives for effective technology integration can motivate adoption. A teacher observed, "Engaging everyone in planning addresses concerns and builds a positive attitude." Another noted, "Incentives motivate us to embrace new tools and methods." Fostering a positive attitude towards change is essential for successfully adopting technology in education (Prieto et al, 2019).

Effective Pedagogical Integration

Aligning technology with teaching goals ensured that digital tools support, rather than hinder, learning (Pather, 2019). Teachers should receive training on integrating technology with their teaching methods. Sharing best practices through professional learning communities (PLCs) helps teachers learn from each other. Curriculum designers should work closely with teachers to embed technology seamlessly into lesson plans. A teacher noted, "Training on integrating technology with teaching ensures tools enhance learning." Another added, "Sharing best practices through PLCs improves our teaching strategies." Effective pedagogical integration is essential for leveraging technology to improve education (Gafiyatova et al, 2019).

Addressing Privacy and Security Concerns

Ensuring student data privacy and security was vital to maintain trust and comply with regulations (Dharmavaram, 2023). Schools should implement robust data protection policies and provide training on digital safety. Using secure, vetted educational platforms and regularly updating security protocols helped protect student information. A teacher emphasized, "Privacy and security are paramount. Strong data protection policies and regular training on digital safety are essential." Another noted, "Using secure educational platforms and updating security protocols maintains student and parent trust." Addressing privacy and security concerns was crucial for safe and effective technology use in education.

Financial Support and Resource Allocation

Adequate funding and resources were required to sustain technology integration efforts. Schools could seek government grants, private funding, and partnerships with technology firms to secure financial support (Short & Uzochukwu, 2018). Transparent budgeting and resource allocation plans ensure funds are used effectively. A teacher shared, "Securing funding through grants and partnerships allowed us to invest in necessary technology and infrastructure." Another added, "Transparent budgeting ensures resources are used effectively, sustaining technology integration efforts." Financial support and effective resource allocation were crucial for successful and sustainable technology integration in education (Mykhailova & Savina, 2023).

Continuous Feedback and Improvement

Regular feedback from teachers and students helps refine technology integration strategies and address emerging challenges (Shibani, Knight, & Shum, 2020). Establishing mechanisms for collecting and analyzing feedback ensures continuous improvement. Involving stakeholders in evaluating the effectiveness of technology initiatives fosters a collaborative

approach to problem-solving and innovation. A teacher remarked, "Regular feedback helps us refine our strategies and address challenges promptly." Another noted, "Involving everyone in evaluating technology initiatives fosters collaboration and innovation." Continuous feedback and improvement were essential for effective and responsive technology integration in education ((Eden, Chisom, & Adeniyi, 2024).

CONCLUSION

This study examined the integration of technology in English as a Foreign Language (EFL) education, revealing both significant benefits and notable challenges. The research highlighted key advantages, such as increased student engagement and motivation, personalized learning experiences, access to authentic materials, improved collaboration and communication, enhanced feedback and assessment, greater flexibility and accessibility, and the development of digital literacy skills. However, challenges including digital literacy gaps, limited access to technology, language barriers, overreliance on digital tools, technical issues, distraction and time management difficulties, high costs, privacy and security concerns, cultural differences, and issues with motivation and self-discipline were also identified. To address these challenges and maximize the benefits, the study underscores the need for comprehensive strategies, including continuous educator training, substantial investment in resources, and the development of supportive infrastructure. Future research should targeted interventions to bridged digital literacy gaps, address technical issues, improved technology access, and enhanced privacy and security. Additionally, it should explored culturally relevant approaches, strategies to increased student motivation and self-discipline, and identified best practices for replication across educational settings.

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