



The Use of Technology in Education to Engage English Language Learners at Class X MA Jihadul Ummah Waker

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Abstract

In the digital age, integrating technology into education has become essential, especially for language learning. This study examines how technology influences the motivation of students learning English in Class X at MA Jihadul Ummah NW Waker, a rural Islamic high school in Central Lombok, Indonesia. This study aims to analyze the impact of technological tools on student engagement, identify the types of technologies used in the classroom, explore student and teacher perceptions of technology, and examine the challenges of implementing technology in under resourced environments. A qualitative descriptive approach was used to collect data through classroom observations, semi-structured interviews with two English teachers, and field notes over a two-month period. The findings reveal that integrating digital tools, such as videos, projectors, and interactive platforms, significantly increased student engagement and transformed classroom dynamics. Even minor technological interventions sparked enthusiasm and encouraged participation, especially among typically passive students. Despite infrastructure limitations, both teachers and students responded positively to technology enhanced learning. The study concludes that the thoughtful use of technology can foster a student center environment that enhances motivation and supports English language development in rural contexts. These results underscore the importance of teacher training, accessible digital resources, and sustainable strategies for incorporating technology into language education.

Keywords: *Student Motivation; Obstacles Students Face; The Challenges of Technology Integration*

Introduction

In an era of digital revolution, incorporating technology into the learning environment is no longer a luxury, but a necessity. Rural and urban educational institutions alike are urged to adopt new approaches that align with the objectives of 21st-century learning. Traditional approaches, such as rote memorization and textbook learning, are often inadequate for meeting the evolving needs of college students, especially language novices, who are immersed in a digitally driven global environment.

Language is one of the most significant elements affecting international communication activities. Students utilize various English language skills, such as listening, speaking, and reading, writing, to demonstrate their proficiency and communicate effectively (Grabe & Stoller, 2002).

Additionally, Ahmadi (2017) stated that one important element of learning is the method instructors use in their classes to facilitate the language learning process. Based on the opinion of Becker (2000), computers are regarded as important instructional instruments in language classes, provided that teachers have they must have convenient access to computers, be sufficiently prepared, and have some freedom in the curriculum. Computer Technology is considered by many teachers to be an essential component of providing high quality education.

According to the theory of Bull and Ma (2001), technology offers unlimited resources for language learners (Harmer, 2007; Gençter, 2015). Harmer (2007) and Genç (2015) emphasized that teachers should encourage learners to find appropriate activities using computer technology to be successful in language learning. Clements and Sarama (2003) state that using suitable technology materials can be useful for learners.

In the view of Harmer (2007), computer-based language activities improve cooperative learning. The development of knowledge is strongly influenced by the age of information technology and it is also believed that technology plays an important role in the development of today's human society. Therefore, it is essential to use modern technology to support English language learning. Students need to practice listening, reading, speaking, and writing to develop their skills and experience (Ybarra & Green, 2003). A variety of tools are required to make learning languages easy and effective. New technology includes communication technologies for language education, in which personal computers play a central role (Davies & Hewer, 2012).

As explained by Tomlison (2009) and Genç Lter (2015), computer-based activities provide rapid access to information and appropriate materials for learners. They also state that internet materials motivate learners to learn more. In addition, Larsen Freeman and Anderson (2011) support the view that technology provides teaching resources and brings the learning experience to the learners' world. By using technology, many authentic materials can be provided to learners, which can be motivated to learn languages.

Technology has always been an integral part of the teaching and learning environment. It is an essential tool for teachers to facilitate learning. When discussing technology in teaching and learning, the term "integration" is often used. Since technology is part of our everyday lives, it is time to rethink the idea of integrating Technology should be embedded into teaching to support learning process. In other words, technology becomes an integral part of the learning experience, significant issue for teachers, from preparing learning experiences to the teaching and learning process (Eady & Lockyer, 2013).

Solanki and Shyamlee (2012), as well as Pourhosseini Gilakjani (2017), supported the view that language teaching methods have changed due to technology. The researchers added that the application of technology helps learners study based on their interests. It also satisfies the visual and auditory senses of learners. From the perspective of Lam and Lawrence (2002) and Pourhosein, Gilakjani (2017), technology assists learners in adjusting their own learning process. Learners access a lot of information that their teachers cannot provide.

Pourhosein Gilakjani (2013) states that technology has great potential to transform existing language teaching methods. Pourhosein Gilakjani and Sabouri (2014) emphasized that learners can control their learning process and access a lot of pieces of information that their teachers cannot control. Technology plays an important role in. It promotes activities for learners and significantly affects teachers' methods of instruction. If Teachers who do not use technology in their teaching will never be able to keep up with these technologies. Therefore, it is crucial for teachers to have comprehensive knowledge of these technologies, especially when teaching language skills (Pourhosseini Gilaki, 2017; Solanki & Shyamlee, 2012).

Providing learners with knowledge and skills pertinent to computer technology promotes equity, opportunity, regardless of their background. Although learners have been born into a technologically rich world, they may not be proficient technology users (Bennett, Maton, & Kervin, (2008). Moreover, merely providing access to technology is insufficient. Meaningful development of technology base knowledge is important for all learners to maximize their learning potential (OECD, 2010). (OECD, 2010). In this review paper, the researcher will discuss some significant issues pertinent to the use of technology in teaching and learning English language skills. The issues are as follows: issues are defined, Definition of technology, Use of technology in the classroom, Previous studies on using technology to improve English language learning skills and recommendations for using technology.

In addition to computers, other technical tools can be used for language learning. Each tool has certain advantages and can be applied to one of the four language skills: speaking, listening, reading, and writing. However, students need to be familiar with computers and the internet and be able to operate these tools to successfully use these techniques. Technology's impact on language teaching and learning is growing, as is the role of technology in the classroom. In other words, effective teacher and technology utilization can lead to positive learning outcomes (Sharma, 2009).

Using technology for English language learning presents opportunities for motivation, engagement, and adaptation. These options range from gamified applications and AI-powered pronunciation aids to interactive whiteboards and online dictionaries. By accommodating diverse learning techniques, providing immediate feedback, and encouraging collaboration, this technology can transform passive learners into active participants when used correctly.

Besides that, the importance of English proficiency in Indonesia cannot be overstated. It is increasingly seen as a necessary skill for accessing global expertise, better training options, and more promising career opportunities. Therefore, identifying ways to make English instruction more effective and interesting to students, especially those attending underfunded rural universities, is both pedagogical and socially crucial.

Almost every aspect of life, including education, has been transformed by the digital age. One of the most significant changes brought about by technological advancements is in the field of language learning. As an international language, English is crucial to industry, academia, and worldwide communication. Incorporating historical context into English language instruction simplifies the learning process and creates an engaging, inspiring learning environment. An important component of learning a second language is motivation. Gardner and Lambert (2021) assert that learner motivation dictates the effort put into language acquisition exercises. Similarly, Deci and Ryan (2020) argue that sustained engagement requires intrinsic motivation, or the desire that originates within an individual. Staying highly motivated in classes where English is taught as a second language can be difficult. Students may struggle with conventional, textbook-centered teaching techniques or feel disconnected from the language.

This study was conducted in Class X at MA Jihadul Ummah NW Waker, a rural senior high school located in Central Lombok, Indonesia. The study examined three main issues in English learning: student motivation, obstacles students face, and the challenges of technology integration. The study examined how tools such as LCD projectors, educational videos, and interactive apps can boost motivation. It also explored students' challenges and the limitations of digital infrastructure in under-resourced schools.

Literature Review

1. Student Motivation in Learning English through Technology

Student motivation is widely recognized as a critical factor in the successful acquisition of a second or foreign language. In recent years, technology has emerged as a powerful tool for enhancing motivation, particularly among English as a Foreign Language (EFL) learners. A 2025 study on multimodal teaching emphasized that students' motivation and comprehension improve significantly when they engage with content that involves multiple senses, such as visual, auditory, and interactive media (ScienceDirect, 2025).

Immersive technologies, such as virtual reality (VR) and augmented reality (AR), have shown promise in boosting learner motivation. These tools offer contextual, real-life experiences that make language learning more meaningful and enjoyable, particularly for vocabulary and listening skills (Frontiers in Education, 2025).

Another 2024 study found that students using interactive platforms, such as game-based learning apps and online quizzes, demonstrate higher intrinsic motivation and classroom engagement, especially when activities are personalized or gamified (West Science Journal, 2024). These tools encourage student autonomy, reduce anxiety, and foster a positive learning environment.

2. Student Obstacles to Using Technology for Learning

Despite its potential, many students, particularly those in rural areas, face significant barriers to using technology for learning. A 2023 systematic review revealed that students in disadvantaged or rural settings often lack access to devices, stable internet connections, and technological training. This limits their ability to fully participate in digital learning environments (ResearchGate, 2023).

Moreover, digital literacy remains a major issue. Many students are unfamiliar with the basic functions of digital tools, especially for academic purposes. Without sufficient guidance, students may become frustrated, anxious, or disengaged when interacting with educational technologies. A 2024 study on urban-rural teacher disparities emphasized that digital gaps are technical and pedagogical. Students in under-resourced areas are often not taught how to learn with digital tools (ScienceDirect, 2024).

These obstacles hinder students' ability to reap the benefits of technology-enhanced learning, underscoring the necessity of targeted interventions that encompass training, support, and access to fundamental infrastructure.

3. Challenges in Implementing Technology in Rural Schools

Rural schools face unique and often systemic challenges when it comes to integrating technology into the learning environment. A key challenge is inadequate infrastructure, including limited access to electricity, poor internet connectivity, and outdated or insufficient digital equipment (Trucano, 2025; ResearchGate, 2023).

Additionally, teacher readiness and training are significant concerns. Many rural schools lack ongoing professional development in digital pedagogy for teachers, which makes it difficult to implement technology effectively. As Pelgrum (2024) and others have pointed out, the presence of technology alone is insufficient to bring meaningful change in instructional quality without proper training and support.

Funding is another critical issue. Schools in rural or marginalized communities often have limited budgets, which prevents them from maintaining equipment, purchasing new tools, or subscribing to educational platforms. A 2025 global education report confirmed that budget inequality continues to widen the digital divide between urban and rural education systems (UNESCO, 2025).

Method

This research employed a qualitative approach with a case study design. The study examined the use of technology in English language teaching in Class X at the MA Jihadul Ummah NW Walker school. The study aimed to provide a detailed description of how technology is applied in the teaching and learning process, as well as its effect on students' motivation to learn English. The researcher sought to understand this phenomenon within the real-life context of a rural school with limited digital infrastructure.

Data was collected using the informant method with non-probability sampling techniques, specifically snowball sampling technique was applied to collect the data from English teachers and subsequent participants identify based on recommendations from previous informants until data saturation was reached.

Data were gathered through three primary techniques: observation, in-depth interviews, and field documentation. Direct observation was carried out during classroom activities to see how technology tools, such as LCD projectors, educational videos, and interactive applications, were used. After observations were completed, interviews were conducted with two English teachers and several tenth-grade students to explore their perspectives on the effectiveness of technology in the learning process. Documentation included photos, activity notes, and learning materials relevant to the study.

The data analysis process consisted of four stages: (1) data collection, (2) data reduction, (3) data display, and (4) drawing conclusions. First, the researcher collected data from various relevant sources. Next, the data were reduced by selecting the most important and relevant information. Third, the reduced data were presented in the form of descriptive narratives and interview quotes. Finally, conclusions were drawn based on the findings and connected to relevant theories on learning, motivation, and technology use in education.

To ensure the validity of the data, the researcher applied triangulation techniques by comparing results from interviews, observations, and documentation to obtain credible, reliable, and scientifically accountable findings.

Findings and discussion

This study examined the integration of technology in English teaching at Class X of the MA Jihadul Ummah NW Walker school, with a focus on its impact on student motivation, learning obstacles, and classroom challenges. Through classroom observations, teacher and student interviews, and documentation, the study revealed that, despite the infrastructural limitations typical of rural settings, technology played a transformative role.

1. Student Motivation

Integrating technology increased students' motivation and engagement. Tools such as LCD projectors, short educational videos, and interactive language applications like Quizizz and Duolingo made learning more enjoyable and comprehensible. Students responded more actively to lessons that included visual and auditory elements, showing enhanced attention and participation.

These findings align with Harmer's (2007) argument that technology-supported lessons increase learner focus and interaction. Similarly, Ushioda (2022) emphasized that learners are more motivated when they have autonomy over their learning, which technology enables. Gardner and Lambert (2021) distinguished between instrumental and integrative motivation, both of which were stimulated by technology through access to real-world contexts and goal-oriented learning.

Gamified learning experiences, as described by Munday (2023), promote competition, recognition, and persistence, all of which were observed in this study. The motivational impact was particularly strong for students who were disengaged in traditional, textbook-centered environments.

2. Student Obstacles

Although technology sparked interest, several obstacles at the student level were noted. The most critical was digital illiteracy. Many students were unfamiliar with operating digital tools independently. Additionally, students lacked access to personal devices and had limited opportunities to use the internet outside of school.

These findings align with those of Bennett, Maton, and Kervin (2008), who argue that digital natives do not always possess functional digital skills. According to Deci and Ryan's (2020) self-determination theory, unmet needs for competence can reduce intrinsic motivation. In this case, students' inability to comfortably navigate tools hindered their confidence and, in some cases, their willingness to engage.

Furthermore, peer support and collaborative learning, important in collectivist cultures such as Indonesia (Ushioda, 2022), were not fully realized due to unequal access to technology. Some stud.

3. Institutional Challenges

At the school level, inadequate infrastructure posed significant barriers to implementation. There was only one LCD projector available, internet access was unreliable, and some classrooms lacked electricity. Teachers also mentioned receiving limited training and support for effectively integrating digital tools.

These conditions echo the concerns of Pourhosein Gilakjani (2017), who emphasized that providing technology alone is insufficient without the pedagogical capacity to utilize it effectively. According to Eady and Lockyer (2013), effective integration requires teacher training and institutional readiness, both of which were lacking in this context.

Additionally, Becker (2000) emphasized the importance of curriculum flexibility and teacher autonomy for successfully implementing digital methods. In this study, although the teachers demonstrated creativity, a lack of institutional support limited the scalability of their innovations.

Conclusion

This study concludes that integrating technology into English language instruction at MA Jihadul Ummah NW Walker can significantly increase student motivation, engagement, and interaction in the classroom. Simple yet effective tools, such as projectors, educational videos, and interactive apps, contributed to a more dynamic, student-centered learning environment. Students were more motivated and engaged, particularly when lessons incorporated multimedia and gamified elements.

However, despite these positive outcomes, several challenges were evident. Students often struggled with limited digital literacy and lacked access to personal devices or stable internet outside of school. Institutional issues, such as inadequate infrastructure and limited teacher training, also constrained the full implementation of technology in teaching.

In essence, technology alone is not a solution; it must be paired with strong pedagogical planning, adequate resources, and continuous teacher development. With thoughtful integration, even minimal technology can meaningfully impact rural educational settings. Therefore, greater support from stakeholders is necessary to ensure that all students, regardless of their geographic location, can benefit from modern learning tools and practices.

References

- Ahmadi, M. R. (2017). The impact of motivation on English language learning. *International Journal of Research in English Education*, 2(1), 10–17.
- Becker, H. J. (2000). Findings from the teaching, learning, and computing survey: Is Larry Cuban right? *Education Policy Analysis Archives*, 8(51), 1–31. <https://doi.org/10.14507/epaa.v8n51.2000>.
- Bennett, S., Maton, K., & Kervin, L. (2008). The ‘digital natives’ debate: A critical review of the evidence. *British Journal of Educational Technology*, 39(5), 775–786. <https://doi.org/10.1111/j.1467-8535.2007.00793.x>.
- Bull, G., & Ma, J. (2001). A look at technology’s role in professional development of teachers. *The Journal*, 28(9), 28–31.
- Clements, D. H., & Sarama, J. (2003). Strip mining for gold: Research and policy in educational technology. *AACE Journal*, 11(1), 7–69.
- Davies, G., & Hewer, S. (2012). *Introduction to new technologies and how they can contribute to language learning and teaching*. ICT4LT. <http://www.ict4lt.org>.
- Deci, E. L., & Ryan, R. M. (2020). *Intrinsic motivation and self-determination in human behavior*. Springer.
- Dörnyei, Z. (2021). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (pp. 9–42). Multilingual Matters.
- Eady, M. J., & Lockyer, L. (2013). Tools for learning: Technology and teaching strategies. In M. Keppell, K. Souter, & M. Riddle (Eds.), *Physical and virtual learning spaces in higher education* (pp. 141–153). IGI Global.
- Gardner, R. C., & Lambert, W. E. (2021). *Attitudes and motivation in second language learning*. Newbury House.
- Genç, G. (2015). The effect of technology on learner autonomy in EFL reading classrooms. *Procedia - Social and Behavioral Sciences*, 199, 58–64.
- Grabe, W., & Stoller, F. L. (2002). *Teaching and researching reading*. Longman.
- Harmer, J. (2007). *The practice of English language teaching* (4th ed.). Pearson Education Limited.
- Lam, Y., & Lawrence, G. (2002). Teacher-student role redefinition during a computer-based second language project. *Computer Assisted Language Learning*, 15(3), 295–315.
- Larsen-Freeman, D., & Anderson, M. (2011). *Techniques and principles in language teaching* (3rd ed.). Oxford University Press.
- Munday, P. (2023). The case for using Duolingo as part of the language classroom experience. *RIED. Revista Iberoamericana de Educación a Distancia*, 19(1), 83–101.
- OECD. (2010). *Are the new millennium learners making the grade? Technology use and educational performance in PISA 2006*. OECD Publishing. <https://doi.org/10.1787/9789264076044-en>.

- Pourhosein Gilakjani, A. (2013). Factors contributing to teachers' use of computer technology in the classroom. *Universal Journal of Educational Research*, 1(3), 262–267.
- Pourhosein Gilakjani, A., & Sabouri, N. B. (2014). Role of Iranian EFL teachers' beliefs about grammar in teaching writing. *English Language Teaching*, 7(2), 139–148.
- Pourhosseini Gilakjani, A. (2017). A review of the literature on the integration of technology into the learning and teaching of English language skills. *International Journal of English Linguistics*, 7(5), 95–106.
- Sharma, P. (2009). Controversies in using technology in language teaching. *Modern English Teacher*, 18(2), 38–40.
- Solanki, D. S., & Shyamlee, S. D. (2012). Use of technology in English language teaching and learning: An analysis. In *Proceedings of the International Conference on Language, Medias and Culture* (Vol. 33, pp. 150–156). IACSIT Press.
- Tomlinson, B. (2009). *Developing materials for language teaching*. Bloomsbury.
- Ushioda, E. (2022). Language learning motivation, self and identity: Current theoretical perspectives. *Computer Assisted Language Learning*, 24(3), 199–210.
- Ybarra, R., & Green, T. (2003). Using technology to help ESL/EFL students develop language skills. *The Internet TESL Journal*, 9(3). <http://iteslj.org>

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