



Technology's Influence on English language learning: A Comprehensive Review

Salah Mahmoud Othman Mohammed
University of Benghazi, Benghazi, Libya

* Corresponding Author: **Salah Mahmoud Othman Mohammed**

Article Info

ISSN (online): 2583-8261

Volume: 04

Issue: 03

May-June 2025

Received: 10-04-2025

Accepted: 03-05-2025

Page No: 151-156

Abstract

The integration of technology in education is revolutionizing English language learning by transforming both teaching practices and student engagement. Digital tools offer enhanced access to vast information sources, enabling learners to move beyond traditional textbooks and engage in independent research. Technology fosters collaboration through virtual platforms, allowing students to participate in discussions and projects across distances, thereby promoting peer-to-peer learning. Moreover, personalized learning through performance tracking helps tailor instruction, providing targeted feedback and fostering deeper understanding. Technological advancements have also made learning more inclusive by supporting remote learners and those with disabilities. Specifically, in English language learning, interactive tools like gamified apps and multimedia platforms significantly boost motivation and engagement. These technologies support autonomous learning, cultural exchange, and flexible access to resources anytime and anywhere. Despite challenges such as technical issues and inadequate teacher training, this study emphasizes the need for strategic implementation to harness the full potential of technology in language education.

DOI: <https://doi.org/10.54660/IJSSER.2025.4.3.151-156>

Keywords: Educational technology, English language learning, Digital tools, Personalized learning

1. Introduction

The role of technology in education is going through a remarkable transformation, significantly changing how students learn and how teachers teach. Educational institutions around the world are increasingly adopting digital tools and platforms to enhance the learning experience, which will lead to a multitude of benefits and implications (Haleem *et al.*, 2022) ^[35].

Technology provides students and teachers with broad access to multiple information resources which serves as a major benefit for both groups. Through digital libraries and online databases and educational websites students and teachers can explore different subjects while accessing information that goes beyond traditional textbooks. Through expanded access students can conduct independent research which helps them broaden their perspectives and improve their understanding of multiple disciplines. (Haleem *et al.*, 2022) ^[35].

Through technology students can collaborate in learning activities which removes geographical limitations to work together from different locations; Students can use video conferencing and online platforms to create virtual spaces where they can share ideas and participate in interactive discussions while working on projects together. The virtual space creates a community atmosphere which supports peer-to-peer learning to enhance intellectual development for everyone involved (Resta & Laferrière, 2007) ^[36].

Technology personalizes learning through performance analysis which adapts instruction and delivers specific feedback to students also it improves students understanding while helping them master material and achieve effective knowledge acquisition

(Walkington, 2013) ^[1]. Technological integration in educational institutions have expanded their reach to include remote learners and students with disabilities thus creating inclusive learning environments with equal opportunities (Sung & Hwang, 2013) ^[2].

Taking the above discussion into consideration, this study aims to give a thorough overview of the different effects technology has on English Language learning. It looks at the several advantages of technological integration such as, improved motivation, individualized learning, and more access to many digital resources. Moreover, this study offers a critical assessment of the major difficulties English language learning environments encounter with technology implementation, including inadequate access, technical problems, and inadequate teacher preparation. Finally, it offers practical suggestions for teachers, institutions, and policy makers, stressing the need of good teacher training, dependable facilities, and careful planning to create more effective, inclusive, and interesting English language learning environments.

2. Benefits of technology in english language learning

Technology has strong potential to positively boost motivation among English language learners. Interactive tools such as gamified language learning apps (e.g., Duolingo), virtual reality simulation, as well as language learning platforms with interactivity, have the ability to make language learning more engaging and more enjoyable, as well as help promote learner autonomy and self-reliance (Silva, Rodrigues, & Leal, 2019; Christou, 2010) ^[3, 4]. Interactive whiteboards, multimedia materials, and internet language leaning communities can also facilitate more effective student engagement through diverse, interlinked forms of learning, allowing collaborative learning as well as cultural sharing (Reese, 2021; Harianingsih, & Jusoh, 2022) ^[40, 41].

Technology also offers increased accessibility, enabling students from different backgrounds of needs and preferences to engage in language learning materials and classes at all times, from anywhere, and at their own rate (Motteram, 2013) ^[39]. Technology not only boosts motivation and engagement but also transforms how language Learners access and process language instruction.

Based on the above discussion it is evident that among the many advantages of integrating technology in English language learning, two particularly significant areas stand out, the first is the ability to personalize learning to suit individual needs and pace, and the second is the extensive benefits offered by digital language learning tools. These aspects not only empower learners to take greater control over their progress but also enrich the language learning experience through diverse, interactive, and accessible resources. The next two sections describe how they make English language learning better and more interesting.

2.1 Individualized learning and self-paced progress

One of the most compelling benefits of technology in English language learning instruction is that it can promote individualized learning and self-paced instruction (Kranthi, 2017). Technology enables instructors to design personalized lesson plans and offer customized feedback to students, addressing their particular learning requirements and learning styles. Communication tools, including online discussion forums, video conferencing tools, and social media groups,

have the potential to facilitate interaction and collaboration among students and give them a chance to use their language skills in real-life contexts (Rahman & Ullah, 2016) ^[5]. Such personalized attention has the potential to maximize student involvement and success (Shemshack & Spector, 2020). Moreover, students are able to learn at their own pace, review challenging ideas, and reinforce their knowledge as required. Such convenience has the potential to improve learning efficiency, retention, and learners' confidence (Bautista, 2015) ^[7]. Online courses and mobile apps offer convenience for students with various schedules or few chances to take face-to-face classroom instruction, providing opportunities for them to learn English anywhere and anytime (Yan *et al.*, 2014) ^[8]. Language learning software provides interactive tools and resources, including grammar drills, vocabulary games, and quizzes, typically with instant feedback, that can enhance the learning experience and make it more engaging for students (Abrams, 2014) ^[9]. It is also evident that online communities and digital storytelling can be used to assist in the development of literacy, foster creativity, and offer learners a platform to express their ideas and experiences through the target language (Chun, Kern, & Smith, 2016; Alduwairaj, 2014) ^[10, 11].

2.2 Benefits of digital language learning tools

The use of digital tools, such as language learning software, online resources, and multimedia materials, is revolutionizing language learning, providing multiple advantages to both learners and teachers (Thi & Hoa, 2024) ^[12]. Digital tools have been reported to enhance different components of language proficiency, such as listening, speaking, reading, and writing (Pragasam & Sulaiman, 2023) ^[13]. A notable example is the mobile-assisted language learning (MALL) such as (Rosetta Stone) which has indeed come to the forefront, maximizing the widespread use of mobile phones to extend language learning beyond and within the classroom (Filiz & Akkilinc, 2021; Shadiev & Wang, 2022) ^[14, 15].

Moreover, Multimedia resources, including videos, audios, and interactive simulations, have the potential to provide rich and interactive learning environments that support various learning styles and increase students' engagement (Shehab, 2022) ^[16].

Internet resources, such as websites, online dictionaries, and language learning sites, provide students with exposure to a great deal of authentic material, news stories, podcasts, and videos that can expose them to real-life language use and cultural contexts. One example for the online free courses is what is called MOOCs (Massive Open Online Courses) and online video sites such as YouTube that provide language learners with the possibility of exposure to the target language and culture, and the chance to further develop their language abilities (Wang, Dostál, & Aziz, 2019; Areo, 2021). The use of multimedia, such as videos, audio, and interactive games, can also prove to be crucial in increasing learners' motivation and interest, making the learning process more engaging and dynamic (Basheer Nomass, 2013; Rizky *et al.*, 2021; Ahmadi, 2018; Aflah, 2019) ^[19, 42, 20, 21]. Numerous empirical studies have consistently demonstrated that technology usage in language acquisition can result in better learning outcomes and better results in language proficiency tests (Thi & Hoa, 2024) ^[12].

Moreover, technology can facilitate learning of specific

language skills, such as writing, through the use of web-based collaborative writing techniques and online web-based storytelling that can be capable of encouraging motivation and creativity of students (Hwang *et al.* 2016).

Technology also facilitates immediate assessment and provision of feedback so that learners are able to check their progress and identify areas for improvement (Thi & Hoa, 2024) ^[12]. Furthermore, technology-based language learning can assist students in acquiring essential digital literacy skills, which are expanding in significance nowadays, and improve general motivation to learn (Jiang, Wang, & Weng, 2022; Shadiev & Wang, 2022; Aysu, 2020) ^[22, 15, 23]. From the perspective of the teacher, technology can also make them more productive because it performs a portion of the workload, including grading and feedback, and as a result allowing them to concentrate more on the facilitation of learning and designing enjoyable learning experiences (Wang, Dostál, & Aziz, 2019) ^[17]. Empirical studies consistently prove the beneficial effect of technology on language learning outcomes and attitudes of students (Wang, Dostál, & Aziz, 2019) ^[17].

Numerous case studies and real-world examples demonstrate the effectiveness of technology in enhancing English language learning outcomes (Thi & Hoa, 2024) ^[12]. For instance, Wikis (a website that allows collaborative editing and content creation by users) have been shown to be effective tools for facilitating collaborative writing projects, allowing students to work together to create and edit texts (Jiang, Wang, & Weng, 2022) ^[22]. Also, the use of YouTube clips and other online video resources can significantly enhance listening comprehension skills by exposing learners to authentic speech patterns, diverse accents, and real-world communication scenarios (Rahman & Ullah, 2016) ^[5].

Technology has also been shown to improve student participation and overall language skills in English language learning classrooms (Gunuç & Babacan, 2017; Bilyj, 2019) ^[24]. Moreover, research indicates that technology can have a positive impact on student attitudes and motivation, making language learning more enjoyable and engaging (Alduwairaj, 2014; Shehab, 2022; Areo, 2021) ^[11]. While the advantages of integrating technology in English language learning instruction are substantial and well-documented, it is also important to be aware of the challenges that come with its implementation. Despite the positive impact on learner engagement, motivation, and skill development, educators and institutions may face various obstacles that can hinder effective technology integration.

3. Technology integration challenges in english language learning

Despite numerous benefits, technology integration in English language learning has some obstacles. Among the most pressing concerns is the limited access to computers and reliable internet connectivity, particularly in poorly equipped learning settings (Mohamed, 2022; Riasati, Allahyar, & Tan, 2012) ^[26]. Technical problems, such as software bugs, hardware malfunctions, and network interruptions, can also disrupt the learning process and lead to frustration among both teachers and students (Alamri, 2021) ^[26].

Another problem is that most of the English language learning instructors are not adequately trained and are not given sufficient professional development in the correct use of technology instructional tools, which may hinder them

from effectively integrating technology into teaching (Riasati, Allahyar, & Tan, 2012; Alamri, 2021) ^[26, 28]. Additionally, there might be some students who have negative attitudes towards technology or have had little previous exposure to the use of digital resources, and this can lead to discomfort and other obstacles to its effective adoption (Alamri, 2021) ^[28]. Adding to that, there are some logistical issues, for instance, inadequate time to plan lessons and develop curricula, and a challenge to locate suitable and quality digital resources, are also main issues to English language teachers (Rintaningrum, 2023; Mohamed, 2022) ^[29, 26].

Many institutions lack sufficient facilities and infrastructure needed for technology integration. This includes inadequate accessibility to both hardware and software and an unequal availability of relevant technology across educational institutions (Areo, 2021) ^[11]. Low bandwidth and unstable internet connectivity are also reported as issues. Furthermore, there is often a lack of technical support for teachers when using technology (Shadiev & Wang, 2022) ^[15]. The cost of acquiring and maintaining technology is when using technology, especially in online settings, students may be tempted by distractions and engage in non-class-related activities, often referred to as *cyberslacking* (Stockwell & Wang, 2023) ^[30]. This can lead to pedagogical limitations and classroom disruption if not managed effectively. Some students may also lack the necessary digital skills or prior training in using technology for learning activities. They might experience confusion with platform layouts or face incompatibilities and connectivity issues with their devices (Pragasam & Sulaiman, 2023) ^[13]. Given these challenges, it becomes clear that addressing the human factor especially the readiness of educators is essential for the successful integration of technology in English language learning classrooms. One of the most effective ways to overcome many of the obstacles mentioned above is through targeting teacher training and continuous professional development.

4. The importance of teacher training and professional development

Effective teacher training and professional development are crucial for the successful integration of technology in English language learning (Mohamed, 2022) ^[26]. Teachers need to enhance their technological competence and develop the pedagogical skills necessary to effectively use technology to support student learning (Riasati, Allahyar, & Tan, 2012) ^[27]. Effective training programs should be continuous, practical, and collaborative, offering teachers opportunities to experiment with different technologies, share best practices, and receive ongoing support as they integrate technology into their teaching (Serag, 2016; Sinha, 2022) ^[31, 32].

Teachers need training to use technology well in English classes. It's really important for them to learn how to use computers and online tools effectively (Abunowara, 2014) ^[33]. This training helps them feel more confident and teach better. Because technology changes so fast, teachers need to keep learning new things throughout their careers. It's not just about using the technology; it's about knowing *how* and *why* to use it to help students learn best. Teachers are the key to making technology work in the classroom (Zhang, 2022) ^[34]. Good technology training for teachers should start even before they begin teaching and continue regularly. It needs to be useful and practical, showing teachers how to connect

technology to their lessons (Abunowara, 2014) ^[33]. They also need support and chances to learn from other teachers. When educational institutions support teachers with training and the right tools, and when teachers are involved in choosing what they learn, they're more likely to use technology in ways that really help students succeed (Palopo, 2025) ^[45].

Once teachers are equipped with the necessary training and ongoing support, the next step is to focus on how technology can be integrated into English language learning instruction in meaningful and effective ways. Implementing well-planned strategies ensures that technological tools are not just present in the classroom, but are used with the purpose to enhance language learning outcomes.

5. Conclusion and Recommendations

We can conclude that technology has profoundly reshaped English language learning, offering numerous benefits that enhance the educational experience. It significantly boosts learner motivation through interactive tools, gamified applications, and virtual reality simulations, while also increasing accessibility to learning materials and fostering self-paced progress. Digital tools, such as language learning software, online resources, and multimedia content, have revolutionized proficiency development across all language skills and provide immediate assessment and feedback. However, the effective integration of technology is not without its challenges. These include limited access to reliable internet and hardware, technical issues, and crucially, inadequate teacher training and professional development. Addressing these obstacles, particularly through continuous, practical, and collaborative training programs for educators, is crucial. Empowering teachers with the necessary technological competence and pedagogical skills is the key to applying technology's full potential, ensuring a more engaging, inclusive, and effective English language learning environment.

In addition, this paper can provide significant recommendations for language learning and teaching in general, it provides an overview of how educators, institutions, and policymakers can work together to turn the potential of educational technology into effective, everyday practice in English language learning classrooms. Therefore, I summarize these recommendations in the following points:

▪ Embracing Technology as a Core Educational Tool:

Teachers have to consider technology as a fundamental tool for improving teaching and learning. Moving beyond just application to produce interesting and successful learning experiences, this includes combining digital resources into everyday lessons and activities. The emphasis should be on the learners; technology should be used to customize instruction to meet personal needs and preferences.

▪ Balancing Digital and Traditional Methods**:

Teachers must integrate digital tools with traditional teaching methods to ensure that technology supports language learning objectives. By establishing clear guidelines and expectations for students' use of technology, teachers can help them improve their language skills in speaking, listening, reading, and writing. Language learning would be more aided by developing interactive, group-based online tasks based on successful pedagogical theories.

▪ Continuous Professional Development and Collaboration**:

To successfully incorporate technology into their teaching

practices, educators must collaborate and learn continuously. Teachers can make better use of digital tools by keeping up with emerging technologies and collaborating with tech specialists and other educators. In and out of the English language classroom, this cooperative approach guarantees fair and effective technology use.

▪ Institutional Support and Infrastructure**:

Setting the financial and institutional bases required for technology integration in language programs relies heavily on policymakers and institutions. This includes making sure there is a consistent technological infrastructure with fast internet and appropriate software, as well as investing in extensive teacher training programs and regular professional development opportunities.

▪ Creating Collaborative Spaces and Support Systems**:

To solve problems and come together with a common goal, educators, tech specialists, and legislators must create channels for communication and cooperation. Schools should create blended learning programs that integrate technology-based instruction with in-person instruction, and they should guarantee ongoing technical support to handle any problems that may come up.

▪ Measurable Goals and Adaptive Strategies**:

Strong plans for integrating technology must be created by policymakers and educational institutions, with precise goals and ways to measure success. In order to prepare students for the modern world, it is essential to rethink traditional teaching methods and provide consistent resources as the role of technology in education grows. Students in the English language learning community will eventually find digital learning more accessible and efficient if training programs, workshops, and technical support are made available to teachers.

6. References

1. Abrams SS. Gamified vocabulary: Online resources and enriched language learning. *Journal of Adolescent and Adult Literacy*. 2014;58(1):49–58.
2. Abunowara A. Using technology in EFL/ESL classroom. *International Journal of Humanities and Cultural Studies*. 2014;1(2):7–23.
3. Aflah MN. Integrating technology in basic English class. *ETERNAL (English, Teaching, Learning, and Research Journal)*. 2019;5(2):195–203.
4. Ahmadi MR. The use of technology in English language learning: A literature review. *International Journal of Research in English Education*. 2018;3(2):115–25.
5. Alamri B. Challenges of implementing technology in ESL writing classrooms: A case study. *English Language Teaching*. 2021;14(12):36–42.
6. Altavilla J. How technology affects instruction for English learners. *Phi Delta Kappan*. 2020;102(1):18–23.
7. Pragasam JA, Sulaiman NA. Integrating technology in ESL reading classroom: Accounting pupils' perspectives. *SSRN Electronic Journal*. 2023;Special Issue:324–42.
8. Areo KG. The role of media technology in teaching and learning the English language in this era of insecurity and Covid-19 pandemic: Challenges and prospects. *Zaria Journal of Educational Studies*. 2021;21(1):39–48.
9. Aysu S. The use of technology and its effects on language learning motivation. *Journal of Language Research*. 2020;4(1):86–100.

10. Nomass BB. The impact of using technology in teaching English as a second language. *English Language and Literature Studies*. 2013;3(1):111–6.
11. Bautista RG. Optimizing classroom instruction through self-paced learning prototype. *Journal of Technology and Science Education*. 2015;5(3):184–93.
12. Bilyj O. Mediation of technology on ESL language and literacy development. *Master of Teaching Research Journal*. 2019;2(2):22–30.
13. Christou C. Virtual reality in education. *Affective, Interactive and Cognitive Methods for E-Learning Design*. 2010;12(1):228–43.
14. Chun D, Kern R, Smith B. Technology in language use, language teaching, and language learning. *The Modern Language Journal*. 2016;100(S1):64–80.
15. Filiz R, Akkilinc. The impact of using technology in the ESL classroom. *Psychology and Education*. 2021;58(5):50–62.
16. Gunuç S, Babacan N. Technology integration in English language teaching and learner. *The Journal of Teaching English for Specific and Academic Purposes*. 2017;5(2):349–58.
17. Haleem A, Javaid M, Qadri MA, Suman R. Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*. 2022;3(3):275–85.
18. Harianingsih I, Jusoh Z. A review of studies on cooperative learning in language classroom seen from students' attitudes. *International Journal of English and Applied Linguistics*. 2022;2(1):62–74.
19. Jalbert J, Wentworth H. The use of technology in the ESL classroom: A discussion. *TESL Ontario*. 2022;23(4):10–17.
20. Jiang Y, Wang Q, Weng Z. The influence of technology in educating English language learners at-risk or with disabilities: A systematic review. *CEPS Journal*. 2022;12(4):53–74.
21. Kranthi K. Technology Enhanced Language Learning (TELL). *International Journal of Business and Management Invention*. 2017;6(2):30–3.
22. Kumar T, Shet JP, Parwez MA. Technology-integration experiences in ELT classrooms as an effective tool: A theoretical study. *Journal for Educators, Teachers and Trainers*. 2022;13(1):110–8.
23. Mohamed RHTM. Impact of using technology in teaching English language. *مجلة العلوم التربوية و النفسية*. 2022;6(6):177–91.
24. Alduwairej M. Attitudes towards the use of technology among the college students who study English as a second language (ESL) [dissertation]. 2016. Available from: ProQuest Dissertations.
25. Motteram G. The benefits of new technology in language learning. *British Council*. 2013. Available from: <https://www.britishcouncil.org/voices-magazine/the-benefits-new-technology-language-learning>
26. Pragasam J, Sulaiman N. Integrating technology in ESL reading classroom: Accounting pupils' perspectives. *Arab World English Journal*. 2023;23(4):324–42.
27. Rahman R, Ullah S. Impact of technology use on English language teaching at the undergraduate level in Bangladesh. *The Journal of EFL Education and Research*. 2016; Available from: <https://www.researchgate.net/publication/305655991>
28. Reese A. The effects of technology on student engagement and academic success [Internet]. 2021 [cited 2025 May 28]. Available from: https://nwcommons.nwciowa.edu/cgi/viewcontent.cgi?article=1297&context=education_masters
29. Resta P, Laferrière T. Technology in support of collaborative learning. *Educational Psychology Review*. 2007;19(1):65–83.
30. Riasati M, Allahyar N, Tan KE. Technology in language education: Benefits and barriers. *Journal of Education and Practice*. 2012;3(5):25–30.
31. Rintaningrum R. Technology integration in English language teaching and learning: Benefits and challenges. *Cogent Education*. 2023;10(1):1–15.
32. Rizky A, Prayudi, Karunia A, Rezki N, Putra D, Ocatviano T, Ihsan M. The use of technology in English teaching & learning progress. *Jurnal Riset dan Inovasi Pembelajaran*. 2021;1(2):102–11.
33. Serag A. Technology usage versus technology integration in ESL classrooms: Drivers and barriers [master's thesis]. Cairo: The American University in Cairo; 2016 [cited 2025 May 28]. Available from: <https://fount.aucegypt.edu/capstone/24>
34. Shadiev R, Wang X. A review of research on technology-supported language learning and 21st century skills. *Frontiers in Psychology*. 2022;13:Article 62.
35. Shehab H. The effect of technology on learning English as a second language. *International Journal of Social Science and Humanities Research*. 2022;10(4):474–81.
36. Shemshack A, Spector JM. A systematic literature review of personalized learning terms. *Smart Learning Environments*. 2020;7(1):1–15.
37. Silva RJR da, Rodrigues RG, Leal CTP. Gamification in management education: A systematic literature review. *BAR - Brazilian Administration Review*. 2019;16(2):1–19.
38. Sinha KK. Role of modern technology in teaching and learning the English language in Indian educational institutions. *Indonesian Journal of English Language Studies*. 2022;8(2):19–30.
39. Stockwell G, Wang Y. Exploring the challenges of technology in language teaching in the aftermath of the pandemic. *RELC Journal*. 2023;54(2):474–82.
40. Sung HY, Hwang GJ. A collaborative game-based learning approach to improving students' learning performance in science courses. *Computers and Education*. 2013;63:43–51.
41. Thi N, Hoa M. Applying technology in teaching English at university level. *International Journal of Social Science Exceptional Research*. 2024; Available from: [provide accurate link or journal page if known].
42. Walkington CA. Using adaptive learning technologies to personalize instruction to student interests: The impact of relevant contexts on performance and learning outcomes. *Journal of Educational Psychology*. 2013;105(4):932–45.
43. Yan G, Rawat DB, Shi H, Alnusair A. Developing and applying smartphone apps in online courses. *Journal of Information Systems Education*. 2014;25(2):149–59.
44. Zhang W. The role of technology-based education and teacher professional development in English as a foreign language classes. *Frontiers in Psychology*.

