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Integrating Information Technology in Teaching English: Enhancing Learning Outcomes

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Abstract

The integration of Information Technology (IT) into English as a Foreign Language (EFL) teaching has become increasingly significant in contemporary education. This study explores how Albanian English teachers perceive the use of digital technologies in relation to student engagement, language development, and classroom practice. The research forms part of a broader doctoral study that employed a mixed-methods design. Quantitative data were collected through an anonymous online questionnaire completed by 98 English teachers across Albania, containing 17 structured questions. To deepen interpretation of the survey findings, qualitative data were gathered through semi-structured interviews with four teachers (three secondary school teachers and one high school teacher). Findings indicate that teachers view IT as a valuable pedagogical enabler that increases motivation, supports listening, speaking, reading, and writing development, and promotes learner autonomy. However, unequal access to devices, inconsistent internet connectivity, and limited professional training remain substantial barriers. The study concludes that technology is most effective when aligned with pedagogy, supported by infrastructure, and implemented through inclusive professional development models.

Keywords: Information Technology, EFL, digital learning, teacher perceptions, Albania, language teaching

1 Introduction

The integration of Information Technology (IT) in education has become a central feature of contemporary pedagogical reform, particularly in language teaching. Within the field of English as a Foreign Language (EFL), digital technologies are increasingly recognized as key mediators of learning, enabling more interactive, adaptive, and learner-centered instructional practices. Grounded in Computer-Assisted Language Learning (CALL) and second language acquisition (SLA) theory, technology-enhanced environments are considered effective when

they provide rich input, meaningful interaction, and timely feedback that support language development (Chapelle, 2003; Hubbard, 2009).

Recent developments in mobile-assisted language learning (MALL), multimedia learning environments, and AI-supported educational tools have further expanded the possibilities for language instruction beyond traditional classroom boundaries. These technologies facilitate access to authentic language input, promote individualized learning pathways, and support collaboration among learners, thereby aligning with constructivist views of language learning as an active and socially mediated process (Kukulska-Hulme & Shield, 2008; Richards & Rodgers, 2014).

At the same time, research highlights that the pedagogical value of IT integration depends not simply on the availability of digital tools, but on how effectively they are implemented within specific educational contexts. Teacher competence, institutional support, and learners' digital literacy are critical factors that determine whether technology enhances or limits learning outcomes (Hubbard, 2009). This has led to growing interest in teachers' perceptions and classroom experiences as a key lens for understanding the real impact of technology in EFL instruction.

Recent systematic reviews further confirm the growing impact of digital technologies and mobile-assisted learning on language acquisition. Research by Zhang and Pérez-Paredes (2021) highlights the important role of mobile technologies in promoting flexibility, learner engagement, and access to authentic language resources in language education. Similarly, Li et al. (2024) emphasize that mobile-assisted language learning can strengthen learner autonomy and self-directed learning practices when appropriately integrated into instruction. In addition, Chang and Sun (2024) demonstrate that AI-supported learning environments can positively influence self-regulated learning and personalized language practice, particularly in digitally mediated EFL contexts.

Against this background, the present study investigates how English language teachers in Albania perceive the integration of IT in EFL classrooms, with a particular focus on its impact on student engagement and language skill development. It also explores the challenges teachers face in implementing digital tools effectively in their pedagogical practice.

By situating teacher experiences within the broader framework of CALL and contemporary digital learning research, this study aims to contribute empirical evidence from an underexplored context while also providing insights into how global trends in technology-enhanced language learning are interpreted and enacted at the classroom level.

2 Importance of IT Integration in EFL Teaching

Integrating Information Technology (IT) into English as a Foreign Language (EFL) instruction has been widely recognized as a transformative factor in modern language pedagogy. Research in Computer-Assisted Language Learning (CALL) consistently shows that digital technologies enhance language learning by creating more interactive, learner-centered environments that support meaningful communication and skill development (Chapelle, 2003; Hubbard, 2009; Beatty, 2013).

From a pedagogical perspective, IT integration aligns with constructivist and communicative approaches to language learning, where knowledge is actively constructed through interaction rather than passively transmitted. Digital tools such as multimedia resources, learning management systems, and mobile applications allow teachers to present language input in multiple modes, increasing comprehension and supporting diverse learner needs (Richards & Rodgers, 2014).

Global developments in education further reinforce this shift. The expansion of blended learning environments, mobile-assisted language learning (MALL), and online collaborative platforms has significantly extended opportunities for authentic language exposure beyond the classroom (Agnes Kukulska-Hulme & Lesley Shield, 2008; Rui Zhang & Pérez-Paredes, 2021). These tools enable learners to interact with real-life language through videos, podcasts, and digital communication spaces, thereby strengthening communicative competence and learner autonomy.

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Importantly, previous research has consistently shown that teacher perceptions play a critical role in the successful integration of technology in language classrooms. Studies indicate that teachers generally perceive IT as a powerful motivational tool that increases student engagement and participation, particularly when interactive and multimedia-based activities are used (Mark Warschauer, 1996; Glenn Stockwell, 2013). However, research also highlights that these positive perceptions are often accompanied by concerns regarding unequal access to technology, insufficient training, and the need for pedagogically sound integration rather than superficial use of digital tools (Hubbard, 2009).

These findings are strongly reflected in the present study. The participating EFL teachers in Albania similarly reported that IT integration increases student motivation, participation, and engagement in classroom activities. Teachers particularly emphasized the value of interactive platforms, digital quizzes, and multimedia content in making lessons more dynamic and inclusive. At the same time, their perceptions also revealed challenges consistent with international research, including limited access to digital infrastructure, uneven digital literacy among students, and the need for ongoing professional development.

Moreover, both global literature and the present study highlight a shared understanding that IT integration supports more personalized and flexible learning pathways. Teachers in this study observed that digital tools enable students to learn at their own pace, receive immediate feedback, and engage more independently with language content—findings that align with broader research on technology-enhanced language learning (Hubbard, 2009; Hayo Reinders & White, 2016).

Overall, the literature and teacher perceptions converge in demonstrating that IT integration is not merely a technological addition to EFL teaching, but a pedagogical shift toward more interactive, student-centered, and adaptive learning environments. The present study contributes to this body of knowledge by providing contextual evidence from Albanian EFL classrooms, reinforcing global findings while highlighting local implementation realities.

3 IT Tools for EFL Instruction

The selection of Information Technology (IT) tools in English as a Foreign Language (EFL) instruction is strongly grounded in research from Computer-Assisted Language Learning (CALL) and second language acquisition (SLA) theories, which emphasize the importance of

input richness, interaction, and multimodal learning environments (Chapelle, 2003; Hubbard, 2009). From this perspective, digital tools are not used randomly but are selected based on their ability to support specific language skills and pedagogical objectives.

Research in CALL and mobile-assisted language learning (MALL) has consistently shown that certain categories of digital tools are particularly effective because they combine interactivity, immediate feedback, and authentic language exposure (Kukulska-Hulme & Shield, 2008; Godwin-Jones, 2018). These characteristics make them especially valuable for developing the four core language skills: listening, speaking, reading, and writing, while also supporting learner autonomy and collaborative learning practices in digitally mediated environments (Thomas et al., 2013).

Listening Skills

For listening comprehension, tools such as **YouTube, BBC Learning English, TED-Ed, and Spotify podcasts** are widely used due to their provision of authentic spoken input. Studies indicate that exposure to real-life speech, varied accents, and contextualized audio significantly improves learners' listening comprehension and processing skills (Warschauer, 1996). Teachers in classroom practice often integrate these resources by assigning pre-listening prediction tasks, guided comprehension questions, and post-listening discussions to enhance understanding.

Speaking Skills

Speaking development is strongly supported through interactive platforms such as **Duolingo speaking tasks, Flip (formerly Flipgrid), Zoom breakout rooms, and Google Meet paired discussions**. These tools are considered effective because they reduce speaking anxiety and provide opportunities for repeated oral practice in low-risk environments. Research shows that computer-mediated communication increases learner confidence and fluency by allowing more time for planning and reducing immediate performance pressure (Hubbard, 2009). Teachers often use these tools for role-plays, recorded speaking tasks, and peer feedback activities.

Reading Skills

For reading comprehension, platforms such as **Newsela, British Council Reading Zone, Google Classroom articles, and online graded readers (e.g., Oxford Reading Club)** are widely used. These tools are effective because they provide leveled texts, interactive glossaries, and comprehension checks, which support extensive reading approaches. SLA research highlights that sustained exposure to graded and authentic texts improves vocabulary acquisition and reading fluency (Chapelle, 2003). Teachers typically assign digital reading tasks followed by quizzes or collaborative summarization activities.

Writing Skills

Writing development benefits from tools such as **Google Docs, Grammarly, Microsoft Editor, and Padlet**. These platforms are particularly valued because they provide **real-time feedback, revision tracking, and collaborative writing opportunities**. Research indicates that automated feedback tools support learner autonomy and improve accuracy in grammar, vocabulary, and coherence (Hubbard, 2009). Teachers frequently use these tools for process writing tasks, peer editing, and structured essay development.

Table 1. Examples of Digital Tools and Reported Language Outcomes in EFL Instruction

Tool Type	Main Use	Reported Outcomes
YouTube / Podcasts	Listening input	Better comprehension, pronunciation
Google Docs	Writing tasks	Collaboration, editing accuracy
Kahoot / Quizizz	Review activities	Motivation, participation
Zoom / Meet	Speaking practice	Fluency, confidence
LMS Platforms	Assignment management	Organization, autonomy

Integrated Multimodal Learning

In addition to skill-specific tools, multimedia and integrated platforms such as **Edmodo, Moodle, and Canva for Education** support all four skills simultaneously by combining text, audio, visuals, and interaction. According to CALL research, multimodal environments enhance cognitive processing and deepen language acquisition by engaging multiple sensory channels (Kukulska-Hulme & Shield, 2008).

Pedagogical Rationale (Why These Tools Are Preferred)

The tools mentioned above are widely adopted in EFL education not only due to their popularity but because they have been repeatedly validated in research for their pedagogical effectiveness. Their strength lies in:

- providing **authentic language exposure**
- enabling **interactive and collaborative learning**
- offering **immediate feedback mechanisms**
- supporting **differentiated and personalized learning**
- increasing **learner autonomy and motivation**

These features explain why such tools are consistently highlighted in international CALL and MALL literature and increasingly integrated into modern EFL classrooms.

In the context of the present study conducted in Albania, English language teachers reported the use of similar categories of digital tools in their classrooms, particularly multimedia resources, online platforms, and interactive applications. Their pedagogical choices closely mirror those identified in international CALL and MALL research, especially in relation to enhancing student engagement and supporting the development of specific language skills.

Teacher perceptions in this study confirm that tools such as videos, interactive quizzes, and collaborative platforms are particularly effective in increasing student motivation and participation, which aligns with findings from Warschauer (1996) and Hubbard (2009) regarding the motivational benefits of technology-enhanced language learning. Similarly, teachers' emphasis on writing support through digital feedback tools and speaking practice through online platforms reflects broader research on the role of technology in developing productive skills.

However, the Albanian context also highlights contextual constraints that are consistent with but more pronounced than those found in international studies, particularly regarding unequal access to devices, variability in digital literacy among students, and limited institutional training opportunities. These factors influence how effectively teachers can implement the same tools identified in global research.

Overall, the convergence between international literature and the present study suggests that while the pedagogical value of IT tools in EFL teaching is well established, their classroom effectiveness is strongly shaped by local contextual conditions and teacher capacity to adapt them meaningfully.

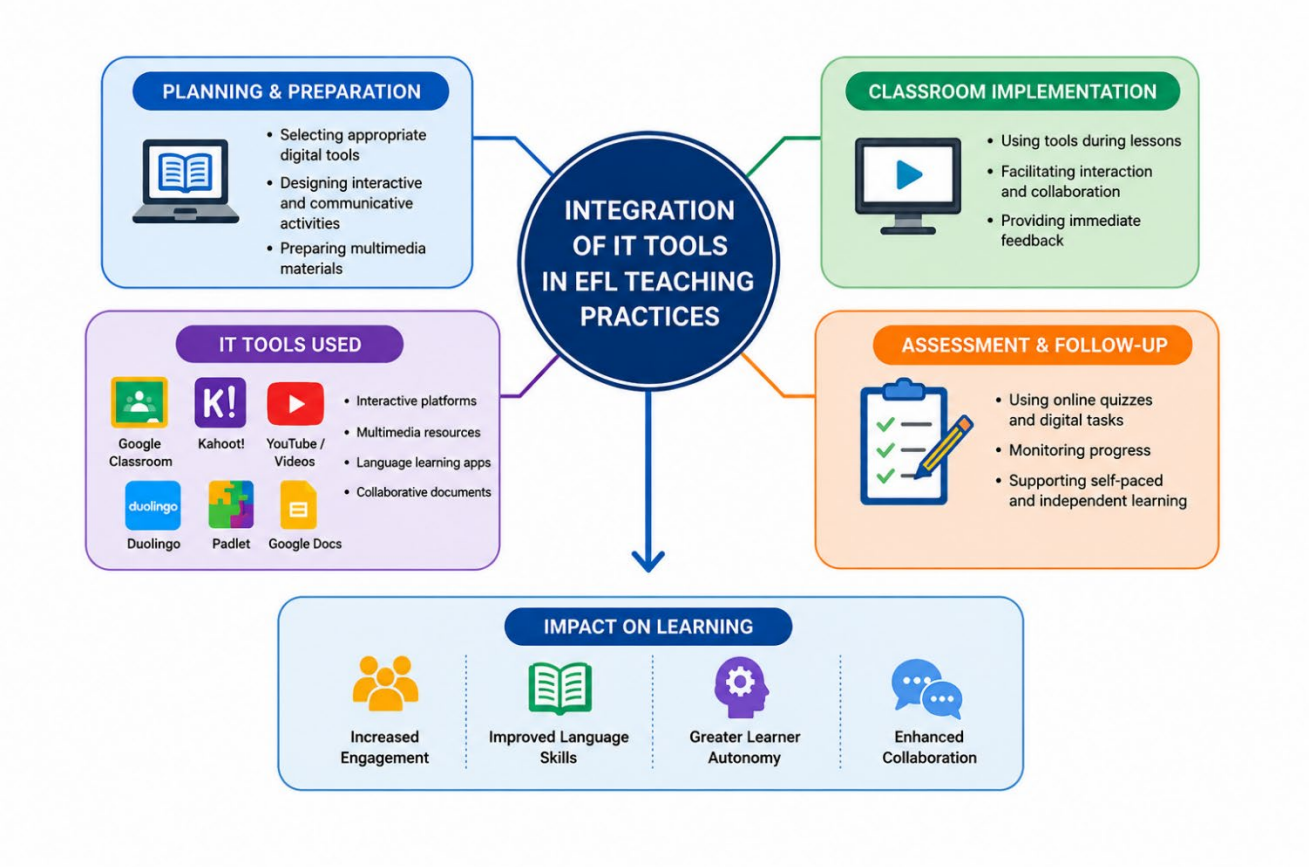


Figure 1. Integration of IT Tools into EFL Teaching Practices

4 Methodology and Results

4.1 Research Design

This paper draws on a broader doctoral mixed-methods study examining ICT integration in foreign language teaching in Albania. The present conference paper primarily reports the qualitative strand, supported by contextual quantitative survey data.

4.2 Quantitative Phase

An anonymous online questionnaire consisting of 17 questions was distributed to English teachers across Albania. A total of **98 teachers** completed the questionnaire. The survey explored technology use, perceived benefits, barriers, digital confidence, and instructional practices.

4.3 Qualitative Phase

To deepen understanding of the survey findings, semi-structured interviews were conducted with **four teachers**: three from secondary schools and one from a high school. Participants were purposively selected based on willingness to participate and relevance to the research topic.

No age data were collected in order to preserve anonymity and encourage open participation. Interviews focused on:

- digital tools used in teaching;
- perceived effects on student engagement;
- influence on language skills;
- challenges in implementation; and
- professional development needs.

4.4 Ethical Considerations

Participation was voluntary. All questionnaire responses were anonymous, and interviewees were assigned pseudonyms (Teacher 1–4). Participants were informed of the academic purpose of the research and their right to withdraw.

4.5 Data Analysis and Rigor

Interview data were analyzed using thematic analysis involving repeated reading, initial coding, category development, and theme refinement. Analytical memos were used during coding to strengthen reflexivity and consistency. Survey findings were used for triangulation, enabling comparison between broader teacher trends and in-depth interview perceptions.

The study is grounded in an interpretivist paradigm, which assumes that meaning is socially constructed and best understood through participants' lived experiences. In this context, teachers are viewed as key informants whose perceptions provide valuable insights into how digital tools are understood, adapted, and implemented in real classroom settings.

The thematic analysis of interview data generated four interrelated themes that explain how Information Technology (IT) influences English as a Foreign Language (EFL) learning outcomes in the Albanian context. Rather than treating findings as isolated categories, this section integrates teachers' experiences with interpretive analysis grounded in Computer-Assisted Language Learning (CALL), mobile-assisted language learning (MALL), and second language acquisition (SLA) theory (Chapelle, 2003; Hubbard, 2009).

Theme 1: Affective Learning Outcomes – Engagement, Motivation, and Reduced Anxiety

Teachers consistently described increased student engagement as the most visible outcome of IT integration. Digital tools such as quizzes, videos, and interactive platforms were reported to transform classroom dynamics by increasing attention, participation, and willingness to speak.

One teacher explained:

> *"When I use interactive platforms like quizzes or videos, students are much more active. Even those who are usually quiet participate more."* (Teacher 3)

Another added:

> *"Students are more focused when technology is used. They enjoy the lesson more and are willing to participate."* (Teacher 1)

From an interpretive perspective, these perceptions align with CALL research which argues that technology enhances language learning by reducing affective barriers such as anxiety and fear of error (Warschauer, 1996). The teachers' accounts suggest that digital environments shift classroom interaction from teacher-centered instruction to more emotionally safe, student-centered participation.

This indicates that engagement is not merely behavioral participation but also an affective outcome shaped by increased motivation and confidence — a key condition for successful language acquisition in SLA theory.

Theme 2: Linguistic Learning Outcomes – Development of Core Language Skills

Teachers strongly emphasized improvements in listening comprehension, vocabulary acquisition, and writing accuracy as direct outcomes of IT integration. Exposure to authentic materials and immediate feedback were identified as key mechanisms driving these improvements.

One participant noted:

> *"Digital tools help students especially with listening and vocabulary. They are exposed to real English, not just textbook examples."* (Teacher 4)

Another explained writing development:

> *"Students can immediately see their mistakes and correct them. This makes them more independent in writing tasks."* (Teacher 2)

These findings reflect SLA principles of input quality and feedback, where exposure to authentic language and opportunities for revision are essential for development (Chapelle, 2003). Teachers' perceptions suggest that listening and vocabulary growth are primarily supported through multimodal input (videos, audio, podcasts), while writing improves through iterative revision enabled by digital tools such as Google Docs and Grammarly.

Importantly, speaking and reading development were also implicitly supported through interaction-based platforms and digital texts, reinforcing the idea that IT enables integrated skill development rather than isolated skill practice.

Theme 3: Learner Autonomy and Collaborative Knowledge Construction

Teachers also reported that IT integration promotes learner autonomy and collaboration, shifting students toward more independent and socially interactive learning behaviors.

As one teacher stated:

> *"Students can immediately see their mistakes and correct them. This makes them more independent in writing tasks."* (Teacher 1)

Another highlighted collaboration:

> *"Digital platforms also help students work together and share ideas more easily."* (Teacher 3)

These perceptions align with sociocultural theory, which views learning as a socially mediated process, and with CALL literature emphasizing learner autonomy as a key outcome of digital learning environments (Hubbard, 2009; Kukulska-Hulme & Shield, 2008).

In practice, teachers described students engaging in peer feedback, collaborative writing, and shared online discussions — indicating that IT tools not only support individual learning but also expand opportunities for negotiated meaning-making and interaction, both of which are central to language development.

Theme 4: Contextual Constraints and Conditional Effectiveness of IT Integration

Despite positive outcomes, teachers consistently emphasized that the effectiveness of IT integration is conditional upon contextual and pedagogical factors.

The most frequently mentioned constraint was unequal access to technology:

> *"Not all students have the same access to devices or internet, which makes it difficult to use technology equally in class."* (Teacher 2)

Another critical issue was insufficient training:

> *"We are expected to use technology, but we are not always trained on how to use it effectively in teaching."* (Teacher 4)

Teachers also stressed pedagogical design:

> *"Sometimes technology distracts students if it is not used properly. It requires careful planning."* (Teacher 1*)*

These findings reinforce CALL research which argues that technology alone does not improve learning outcomes; rather, effectiveness depends on pedagogical integration, teacher competence, and institutional support (Hubbard, 2009). In this sense, teachers in the Albanian context act as both facilitators and mediators of technology use, and their capacity directly shapes learning effectiveness.

Across all themes, a clear pattern emerges: IT integration influences EFL learning outcomes through interconnected affective, linguistic, and socio-collaborative dimensions. Teacher perceptions strongly align with international CALL and SLA literature, confirming that digital tools enhance engagement, improve language competencies, and foster autonomy.

However, the findings also demonstrate that these outcomes are not automatic. They are contingent upon contextual conditions such as infrastructure, training, and pedagogical decision-making. This reinforces a key principle in technology-enhanced language learning: effectiveness is not determined by the tools themselves, but by how they are pedagogically implemented within specific educational contexts.

5 Discussion

The findings of this study provide strong evidence that Information Technology (IT) integration plays a significant role in enhancing English as a Foreign Language (EFL) learning outcomes in the Albanian context. However, rather than functioning as a direct causal factor, IT operates as a pedagogical enabler that influences learning through multiple interconnected dimensions, including engagement, linguistic development, and learner autonomy.

In relation to affective outcomes, the study confirms that digital tools contribute to increased student motivation, participation, and reduced classroom anxiety. This supports established perspectives in Computer-Assisted Language Learning (CALL), which argue that technology-enhanced environments can lower affective barriers and promote more confident language use (Warschauer, 1996). Importantly, the findings suggest that engagement is not merely a surface-level behavioral response, but a deeper motivational shift that creates conditions for more sustained language learning.

Regarding linguistic development, the results indicate that IT integration supports improvement in core language skills, particularly vocabulary acquisition, listening comprehension, and writing accuracy. This aligns with second language acquisition (SLA) theory, which emphasizes the importance of rich input, repetition, feedback, and meaningful exposure to authentic language (Chapelle, 2003). The teachers' perceptions suggest that digital tools operationalize these principles in practice by providing learners with multimodal input and immediate corrective feedback, thereby bridging the gap between theory and classroom application.

Furthermore, the findings highlight a shift toward more student-centered and autonomous learning environments. This reflects constructivist and sociocultural learning theories, which view learning as an active, socially mediated process rather than passive knowledge transmission. Through digital platforms, learners engage in collaborative tasks, peer feedback, and self-paced learning, indicating a redistribution of responsibility from teacher to learner. In this sense, IT integration not only supports language acquisition but also reshapes classroom roles and learning dynamics.

At the same time, the study underscores that the effectiveness of IT integration is highly context-dependent. Structural constraints such as unequal access to technology, limited digital literacy, and insufficient teacher training significantly influence implementation quality. These findings reinforce critical perspectives in CALL research, which caution that technological tools alone do not guarantee improved learning outcomes; rather, their effectiveness depends on pedagogical design, teacher competence, and institutional support (Hubbard, 2009).

Overall, this study contributes to existing literature by providing empirical evidence from the Albanian EFL context, confirming global findings while highlighting local implementation challenges. It demonstrates that IT integration is most effective when it is pedagogically intentional, contextually supported, and aligned with learning objectives rather than used as a purely technical addition to classroom practice.

5.1 Practical Implications

The findings of this study highlight several practical implications for improving the integration of Information Technology in EFL teaching in Albania. First, professional development programs should focus not only on technical training, but also on the pedagogical use of digital tools in language teaching. Teachers require continuous support in designing interactive activities, managing digital classrooms, and selecting appropriate technologies that enhance communication and language practice.

Second, schools and educational institutions should strengthen digital infrastructure by ensuring reliable internet access, functional classroom equipment, and access to digital devices. Differences in technological resources across schools continue to influence the quality and consistency of IT integration.

Finally, greater attention should be given to equitable access to technology. Policymakers and schools should consider inclusive strategies such as low-bandwidth platforms, offline learning materials, and shared digital resources to support students who may face technological or economic limitations. Addressing these factors can contribute to more effective, inclusive, and sustainable integration of technology in EFL education.

6 Conclusion

This study demonstrates that Information Technology (IT) integration plays a significant role in enhancing English as a Foreign Language (EFL) learning by influencing multiple dimensions of the learning process, including student engagement, language skill development, and learner autonomy. Rather than functioning as a standalone instructional tool, IT operates as a pedagogical enabler that reshapes classroom interaction, increases learner motivation, and facilitates more meaningful engagement with authentic language input.

The findings, derived from both questionnaire data and teacher interviews, align with established perspectives in Computer-Assisted Language Learning (CALL) and second language acquisition (SLA), which emphasize the importance of multimodal input, interaction, and feedback in supporting effective language learning. In this sense, the study reinforces the

idea that technology enhances learning outcomes when it is pedagogically integrated rather than used as a purely technical supplement.

At the same time, the study highlights that the effectiveness of IT integration is not automatic but context-dependent. Challenges related to unequal access to digital resources, limited digital literacy, differences in school infrastructure, and insufficient teacher training continue to influence implementation quality. These constraints underline the need for sustained institutional support, equitable access strategies, and continuous professional development to ensure effective and inclusive use of technology in EFL classrooms.

Overall, this study contributes to the growing body of research on technology-enhanced language learning by providing empirical evidence from the Albanian EFL context. It confirms international findings while also highlighting local implementation realities, thereby offering both theoretical and practical insights for educators, curriculum designers, and policymakers seeking to improve foreign language teaching in the digital age.

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References

Beatty, K. (2013). *Teaching and researching computer-assisted language learning* (2nd ed.). Routledge. https://doi.org/10.4324/9781315833774

Chang, W.-L., & Sun, J. C.-Y. (2024). Evaluating AI's impact on self-regulated language learning: A systematic review. *System, 126*, 103484. https://doi.org/10.1016/j.system.2024.103484

Chapelle, C. A. (2003). *English language learning and technology*. John Benjamins Publishing. https://doi.org/10.1075/lllt.7

Godwin-Jones, R. (2018). Using mobile technology to develop language skills and cultural understanding. *Language Learning & Technology, 22*(3), 1-17. https://doi.org/10.64152/10125/44651

Hubbard, P. (2009). *Computer-assisted language learning: Critical concepts in linguistics*. Routledge.

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL, 20*(3), 271-289. https://doi.org/10.1017/S0958344008000335

Li, Y., Wang, X., & Gao, Y. (2024). Self-directed learning in mobile-assisted language learning: A systematic review. *Frontiers in Education, 9*, 1463721. https://doi.org/10.3389/feduc.2024.1463721

Reinders, H., & White, C. (2016). 20 years of autonomy and technology: How far have we come and where to next? *Language Learning & Technology, 20*(2), 143-154. https://doi.org/10.64152/10125/44466

Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press. https://doi.org/10.1017/9781009024532

Stockwell, G. (2013). Technology and motivation in English-language teaching and learning. In E. Ushioda (Ed.), *International perspectives on motivation* (pp. 156-175). Palgrave Macmillan. https://doi.org/10.1057/9781137000873_9

Thomas, M., Reinders, H., & Warschauer, M. (2013). *Contemporary computer-assisted language learning*. Bloomsbury Academic.

Warschauer, M. (1996). Computer-assisted language learning: An introduction. In S. Fotos (Ed.), *Multimedia language teaching* (pp. 3-20). Logos International.

Zhang, R., & Pérez-Paredes, P. (2021). The roles of mobile technologies in language learning: A systematic review. *Education and Information Technologies, 26*, 7305-7328. https://doi.org/10.1007/s10639-021-10649-2