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Opportunity and Challenges in Integrating Technology in English Grammar Instruction: EFL Teachers' Perceptions

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ABSTRACT

This article offers an understanding of technology integration in teaching English grammar in educational settings where English is taught as a foreign language in the Kurdistan Region of Iraq KRI. Traditional Grammar instruction requires students to memorise rules and practice repetitive drills. This approach makes students unable to use grammatical rules in real-life scenarios. Nevertheless, some new digital technologies are taking a different route and introducing more interactive, engaging, and flexible approaches. The purpose of this study is to examine the usability of these technologies, identify the challenges faced by teachers and students, and recommend feasible solutions to enhance the use of technology in teaching grammar.

The study population consists of 25 university instructors from various private and public institutions in KRI. Using semi-structured interviews, the researcher collected statistical data and personal perspectives on the use of technology in grammar instruction. The interviews were recorded, transcribed, and thematically analysed. Qualitative coding frameworks were used to extract meaningful patterns and insights. Responses were coded and classified using Excel to identify key themes related to the impact, obstacles, and instructional adaptations associated with technology. However, the research revealed a

nuanced implication: teachers are eager but under-supported, students are motivated but unevenly resourced, and institutions are ambitious but inconsistently equipped.

Key Words: English Grammar Instruction, Digital Learning Tools, Educational Technology in Kurdistan, Teacher and Student Challenges, Effectiveness of Technology.

دەرفەت و ئاستەنگەکانی بەشداریپێکردنی تەکنەلۆژیا لە فێرکردنی ڕێزمانی ئینگلیزی: تێگەیشتنی مامۆستایان بۆزمانی ئینگلیزی وەکوزمانێکی بیانی

پوختە

ئەم باسە تێڕوانینێک پێشکەش دەکات سەبارەت بەکارهێنانی تەکنەلۆژیا لە فێرکردنی ڕێزمانی ئینگلیزی لەپۆلەکانی هەرێمی کوردستانی عێراق. فێرکردنی ڕێزمان بەڕێگاکانی تەقلیدی بە شێوەیەکی ئاسایی وا لە قوتابیان دەکات یاساکانی ڕێزمان لەبەر بکەن و لە ڕێگەی مەشقی دوبارە و ڕاهێنان. ئەمەش دەبێتەهۆی ئەوەی قوتابیان نەتوانن ئەوپاسایانەبەکاربهێنن بۆقسەکردن لەژیانی ڕاستیدا. لەگەڵ ئەوەشدا، هەندێک ئامرازی دیجیتاڵی نوێ میتۆدێکی جیاواز دەگرنەبەر و ژینگەیەکی فێربونی کارلێکەر، سەرنجڕاکێشتر و نەرمتر دروست دەکەن. ئەم توێژینەوەیە بەمەبەستی دۆزینەوەی توانای بەکارهێنانی ئەم ئامرازانە و دیاریکردنی ئەو ئاستەنگانەی ڕوبەڕوی مامۆستایان و قوتابیان دەبنەوە و پێشنیارکردنی چارەسەری کرداری بۆ باشترکردن و تێکەڵکردنی تەکنەلۆژیا لە فێرکردنی ڕێزمانی ئینگلیزیدا.

لەم وتارەدا ٢٥ مامۆستابەشداریان کردوەلەزانکۆحکومی و تایبەتیەکاندا لە ناوچە جیاوازەکانی هەرێمی کوردستانی عێراق. لە ڕێگەی چاوپێکەوتنی نیمچە پێکهاتەیی، توێژەر هەم داتای ئاماری و هەم بۆچونی تاکەکەسی کۆکردوەتەوە. چاوپێکەوتنەکان تۆمار کراون، نوسراونەتەوە و شیکاریان بۆ کراوە. شێوازەکانی کۆدکردنی چۆنایەتی بەکارهێنراون بۆ جیاکردنەوەی شێواز و تێڕوانینی گرنگ. وەڵامەکان پۆلێن کراون و کۆدکراون بەبەرنامەی Excel بۆ تیشک خستنە سەر بابەتە دەرکەوتوەکان سەبارەت بە کاریگەری، ئاستەنگەکان و گونجاندنەکانی پەروەردەیی بەهۆی تەکنەلۆژیا. لەگەڵ ئەوەشدا، توێژینەوەکە چەند ئاستەنگێکی گەورە دەخاتە ڕو: ئینتەرنێتی سنوردار، پەروەردەکارانی ڕانەهێنراو، مەنهەجی توند و بەردەست نەبونی ئامرازە دیجیتاڵییەکان. لەگەڵ ئەوەشدا، توێژینەوەکە دۆخێکی ئاڵۆزی ئاشکرا کرد: مامۆستایان بە پەرۆشن بەڵام پشتگیری پێویستیان نییە، قوتابیان هاندانیان هەیە بەڵام ئاستی جیاوازی سەرچاوەیان هەیە.

کلیلە وشەکان: فێرکردنی ڕێزمانی ئینگلیزی، ئامرازە دیجیتاڵییەکان بۆفێربون، تەکنەلۆژیای پەروەردەیی لە کوردستان، کێشەکانی مامۆستاو خوێندکار ، کاریگەری تەکنەلۆجیا.

1. INTRODUCTION

The nature of teaching a foreign language has undergone significant changes with the advent of modern technological tools, particularly in the context of English grammar instruction. These tools have transformed traditional classroom environments and enriched the teaching and learning experience over recent years. Some have been identified as digital tools that facilitate language learning, especiallygrammar instruction. Traditional grammar teaching often relies heavily on memorisation and repetitive drills, making it difficult for students to engage with the material. According to Rossiter (2021), such methods may lead to a theoretical understanding of grammar but not the confidence to use it effectively in real communication, leaving learners with reduced communicative competence.

In Iraqi Kurdistan Region (IKR), English is increasingly recognised as a vital language for academic and professional development, particularly in higher education institutions and the job market. However, many EFL classrooms in the region, still struggle with challenges such as limited resources, traditional teaching approaches, and inconsistent use of educational technology. Although these problems exist, teachers and universities are becoming increasingly aware of the importance of updating grammar lessons to meet global standards. Examining how technology can be effectively utilised in this socio-educational context is crucial for preparing Kurdish students for communicative competence in today's interconnected, knowledge-driven society. (Ali & Mohammadzadeh, 2022)

This research examines how specific digital tools, including grammar checkers, interactive quizzes, and computer-aided learning software, address these issues by enhancing learner engagement and the contextual applicability of grammar instruction. Software for Computer-Assisted Language Learning (CALL) enables students to engage interactively with grammatical structures through meaningful, contextualised practice, feedback, and interaction. Chapelle (2006) emphaseses proactive technological approaches, such as CALL and other technological tools, which aid in creating a dynamic and learner-centred classroom setting that involves learners and enhances retention through real-life language applications.

Statement of the Problem

In KRI, the use of technology in English grammar instruction remains a significant challenge despite its potential to improve language teaching and learning performance. Learning institutions, such as schools and universities, often lack basic technological infrastructure, including reliable internet connections and up-to-date digital tools. Many institutions continue to rely on traditional teaching methods that emphasise rote learning and memorisation, which restrict students' ability to apply grammatical rules in real-world contexts. This results in a persistent gap between students' theoretical knowledge and practical communicative competence. (Marleni, M., 2020)

The problem affects multiple stakeholders: EFL teachers, who frequently lack sufficient training in technology-enhanced pedagogy; students, who experience low motivation and limited engagement in grammar lessons; and institutions, which struggle to modernise curricula that were not originally designed to support technology-based instruction. These issues hinder the effective implementation of educational technologies that could otherwise foster interactive, student-centered learning environments. (Kessler, 2018)

Given this context, there is a clear need to investigate how technology is currently used to teach English grammar in Kurdish EFL classrooms, what barriers educators face, and how digital tools might support more effective grammar teaching. The scope of the study focuses on identifying both challenges and opportunities, aiming to inform future decisions by teachers, policymakers, and educational institutions. By understanding these dynamics, this research contributes to the development of more modern, effective, and accessible language instruction in the region.

To guide the investigation, this study seeks to answer three key questions: How effective is technology in improving the grammar skills of EFL students? What benefits do teachers and students experience when using technology for grammar teaching? And what is the best way to solve current issues regarding using technological tools in teaching English grammar?. Beyond analysing teachers' perspectives and assessing student performance, this study makes a valuable contribution to the broader academic conversation about how technology's role in education is constantly changing. Specifically, the research aims to investigate how digital tools influence EFL students' grammatical skills regarding precision, retention, and application. It also aims to identify the benefits and obstacles teachers face when using technological tools in grammar instruction. Furthermore, this research seeks

to deliver Significant and actionable recommendations for bridging the gap between the conventional approach and integrating technology in grammar lecturing.

2. LITERATURE REVIEW

The evolution of grammar teaching has undergone considerable shifts, transitioning from rigid, prescriptive approaches to more dynamic, technology-integrated methods. Historically, 18th-century grammarians such as Lindley Murray and Robert Lowth promoted accuracy and memorisation, reflecting the educational priorities of their time (Abdullayeva, 2024). However, such approaches often lacked a communicative dimension, leaving learners disengaged and poorly equipped for practical language use. While these methods were important in the past, most educators now believe they are insufficient to improve communication skills.

According to modern academics like Godwin-Jones (2010) and Mohamad F. (2009), technology has changed and enhanced grammar training. Diverse learner demands are supported by tools such as multimedia platforms and tailored courseware, which have enabled interactive feedback and individualised learning. These advancements indicate a shift toward a more comprehensive educational movement, from passive rule-based learning to active, context-based education. In addition, combining gamification, technological tools, and conventional approaches demonstrates a shift to learner-focused approaches that connect cognitive engagement, emotional aspects, and cultural relevance. Although these developments are exciting, the literature continues to reflect uncertainty about their ability to produce reliable outcomes across various educational experiences, particularly in low-resource contexts. Further research is required to investigate how technology-enhanced grammar instruction adapts to different cultural and infrastructural contexts. (Kessler, 2018)

Theoretical Foundations Supporting Technology in Grammar Instruction

Constructivism emphasises learner-centred education and advocates that students construct knowledge through experience, interaction, and self-reflection. Based on this foundational idea, students learn best when they are involved in building their understanding. It stresses learner-centred education and encourages learning through experience and communication in actual situations. However, technology is also a great

way to implement some of these constructivist strategies when teaching grammar. As Yakar et al., (2020) points out, "thinking technologies," including interactive grammar software and multimedia tools, allow personalised learning and radically change how grammar is taught and learned.

Communicative Language Teaching (CLT):

CLT is an approach that prioritizes the ability to convey and understand meaning in real-life situations. This method emphasizes interaction and communication as the primary goals of learning a language. It doesn't focus mainly on grammar rules or rote memorization.

According to the Communicative Language Teaching (CLT) theory, the teaching focus should be on improving speaking skills. CLT shifts from rote memorisation of grammar rules to promoting meaningful language use in authentic contexts. Abdullah (2015) notes that CLT helps break the dominance of traditional teacher-centered approaches, fostering active learner participation. This enables students to engage dynamically with the evolving nature of English, especially in an age where technology increasingly mediates communication.

Communicative Competence and Grammar: Dale Hymes (1972) introduced the concept of communicative competence to bridge the gap between language knowledge and its practical application in real life. Canale and Swain broadened this framework to encompass grammatical, sociolinguistic, discourse, and strategic competencies, providing a holistic perspective on effective communication in a second language. These elements have influenced contemporary language teaching, emphasising that grammar should support communication rather than be taught separately. (Sarsanbay, 2008).

Second Language Acquisition (SLA) theories, such as Krashen’s (1985) Input Hypothesis, Vygotsky's (1978) Sociocultural Theory, Swain's (1980) Output Hypothesis, and Robinson's (1995) Noticing Hypothesis, exemplify how technology can be utilised in language learning through audiovisual resources, collaboration, language production, and gamified learning apps with interactive exercises. (Bahrani, 2014)

The Emergence of Technology in Grammar Instruction:

Emerging technologies significantly impact grammar teaching by collaborating traditional methods with a dynamic, engaging, and student-centered approach. Digital tools have overcome the disadvantages of traditional grammar teaching, which often relies on memorisation and repetitive exercises, by introducing interactive and contextual learning experiences, such as digital applications and online platforms, that provide learners with immediate feedback and real-world language situations. These tools connect theoretical and grammatical knowledge with practical application, enhancing the learning experience. It goes beyond memorisation by enabling students to understand and use grammar rules in a meaningful context. (Aisyiah et al., 2024) (Omar A., 2022)

Technology in Education in Iraqi Kurdistan

The KRI is embracing technology in education to meet global demands for digital learning. The region integrates artificial intelligence and web technologies into classrooms, enhancing interactivity and personalisation for language learning. Social media is also a valuable learning tool, allowing students to practice language skills and access authentic content.

Blended learning models, which combine in- person and virtual education, have proven effective in improving knowledge retention and encouraging digital skills. However, challenges remain, such as infrastructural deficits in rural areas and inadequate teacher training. The COVID-19 pandemic has also accelerated the adoption of online portals, revealing weaknesses in preparation and infrastructure support. (Nawsha, 2024)

According to Salahaddin University, the use of AI tools has helped improve grammar and vocabulary. According to a study on confidence made by Tishk International University, Web tools also foster the enhancement of grammar skills, motivation, and self-confidence among learners (Ahmad, 2025). The above studies confirm the educational benefits of integrating technology into English language teaching. To tackle these challenges, we should focus on investing in ICT infrastructure, developing effective training programs for teachers, ensuring everyone has equal access to technology, and collaborating with global tech companies. Even with these hurdles, the KRI's progress shows its dedication to achieving excellence in technology. (Zheen, 2020)

Previous Studies

Several recent research studies have identified how Kurdish EFL learners are utilising AI and digital tools in an effort to master grammar and language skills. For instance, Azeez and Al Bajalani (2018) from Koya University explored how mobile-assisted language learning (MALL) aids in learning listening skills, with positive results among Kurdish learners. Similarly, Abdullah (2020) found that learners pick up more grammar and vocabulary when they study on social media sites; however, the ability to write letters in the correct order remains weaker. In the same vein, Nawe and Amin (2020) study in Erbil emphasises that integrating technology can develop student learning and motivation. Abdulazeez, Razwan and Alves (2020) also describes the use of MOOCs (Massive Open Online Courses) as significant for teaching grammar to Kurdish learners. Likewise, Ahmed et al., (2021) study reveals that many students perceive positive achievements through the use of technology in education.

A survey conducted by Van Le (2023) also validates the results from 288 EFL students. The data showed that 96% of the respondents were satisfied with using technology to aid their English learning. 91% found it easy to enter platforms. Tech tools are used in e-learning to gain a real understanding and practice writing through tools, such as Grammarly, Kahoot, and Duolingo. The involvement of these applications in grammar teaching improves students' achievements.

Nawsha (2024) at Salahaddin University found that. In contrast, AI-driven platforms help students learn grammar rules more effectively; they are most effective when utilised in conjunction with conventional classroom lessons. Similarly, Zana (2024) demonstrated in Sulaimani that mixing face-to-face classes with online sessions noticeably lifts students' overall language skills, including grammar.

The current study explores how technology is being used to teach English grammar, focusing on its impact on both students and teachers. It looks at how digital tools can support grammar learning by making lessons more engaging and helping students understand and apply rules more effectively. At the same time, the study examines the challenges teachers face when using technology in grammar instruction. By evaluating these aspects, the research aims to offer practical insights into how technology can be better integrated into English grammar teaching, especially in contexts like Kurdish EFL classrooms.

3. METHODOLOGY

Research Design

This study used a qualitative approach to explore how teachers perceive the use of technology in teaching English grammar, as well as how they assess its effectiveness, importance, and benefits. A case study method was chosen to examine this topic within a real-life teaching and learning environment. The main data was gathered through semi-structured interviews, which allowed for in-depth discussions with teachers about their personal experiences, insights, and reflections. This approach helped uncover detailed, meaningful information directly related to the focus of the research.

Instrument

The primary instrument used in this study was semi-structured interviews conducted with English language instructors to evaluate the integration of technology in teaching English grammar in the KRI. Nine specific questions were asked to the participants to explore various aspects of this integration. The interview questions were carefully designed following the guidelines of Fraenkel and Hyun (2006) to ensure reliability and validity. This included pilot testing and revising the questions for clarity and relevance to the study context. The questions emphasised teachers' perceptions and experiences regarding significance, effectiveness, challenges, and advantages of current technological tools used in grammar instruction.

Data was collected from 25 English language teachers holding various academic positions, including lecturers, assistant professors, and full professors. All participants had specialised in teaching English grammar for over ten years and held scientific degrees. As Cohen, Manion, and Morrison (2018) recommend, including participants with diverse academic qualifications enhances the trustworthiness of qualitative research by providing alternative perspectives. Notably, the pilot study was conducted to validate the interview questions.

The prepared interview questions explored critical aspects of technology integration in education within the KRI context, investigating different types and methods of technology use and the extent to which technology was incorporated into English grammar teaching.

Participants

This study employed purposive sampling to select participants, the study's participants were teachers who had taught grammar throughout the KRI for over a decade. The data was collected from 25 participants across 10 public and private universities. Everyone held master's and PhDs and was specialists in the English language. Their academic titles included assistant and full professor, with a focus on teaching English grammar. Given their wealth of experience, they enhanced the study's trustworthiness and rigour with their expertise.

A total of 25 interviews were conducted, which is considered sufficient for qualitative thematic analysis to reach data saturation. Qualitative research prioritizes depth and richness of data over large sample sizes, and saturation is achieved when additional interviews no longer yield new themes or insights (Guest & Johnson, 2006). In this study, participants were purposefully selected as experienced university English grammar instructors with similar professional backgrounds, which facilitated the emergence of recurring patterns within a relatively moderate sample size. Therefore, the sample size was adequate to provide meaningful, trustworthy insights into the use of technology in grammar teaching.

University instructors were chosen for this study because they typically have broader access to educational technologies, stronger institutional support, and more advanced training in grammar instruction. Their professional experience offers valuable, in-depth perspectives on how technology is applied in the teaching of grammar at the university level. Given the qualitative nature of this research, the goal was not to achieve statistical generalization, but rather to develop a deep understanding based on context-rich experiences. The insights gained may be applicable to similar higher education environments where technology is integrated into English language teaching.

Data Collection and Analysis

This study used interviews to comprehensively explore technology's role in teaching English grammar. Unstructured questions allowed teachers to discuss their experiences with specific tools, student outcomes, and institutional support. Thematic analysis was used to analyze the data and coding qualitative frameworks to extract meaningful patterns and insights. The findings contributed to academic discussions and practical improvements in technology-based language education. The analysis followed an inductive approach, allowing themes to emerge directly from the data rather than being imposed beforehand. Microsoft Excel was used to organize codes and themes. To enhance trustworthiness, the researcher engaged in peer debriefing with the academic supervisor, following Lincoln and Guba's (1988) principles of credibility.

Ethical Considerations

This study adhered to ethical principles to ensure the validity of the research and protect participants' rights. The researcher developed interview questions for instructors, ensuring relevance and respect for their knowledge. Participation was voluntary, with participants informed of the study objectives and their freedom to discontinue at any time. The data were anonymised and secured. These ethical guidelines maintained academic rigour and credibility.

4. RESULTS

This study employed interviews to comprehensively explore the role of technology in teaching English grammar. Unstructured questions allowed teachers to discuss their experiences with specific tools, student outcomes, and institutional support. Thematic analysis was conducted following Braun and Clarke's (2006) six-phase approach. First, all interviews were transcribed and read multiple times for familiarization, with initial notes taken. In the second phase, initial codes were systematically generated to identify meaningful features across the dataset. In Phase 3, the researcher searched for recurring patterns by grouping similar codes into potential themes. These themes were then reviewed and refined in Phase 4 to ensure coherence and consistency with the entire dataset. In Phase 5, each theme was clearly defined and named to capture its core meaning. Finally, in Phase 6, a detailed and coherent narrative was produced by selecting

vivid, compelling excerpts and linking them back to the research questions and relevant literature.

Here, comprehensive perspectives of participants will be presented. Various significant questions have been answered regarding the effectiveness, benefits, and challenges of collaboration among instructors, providing crucial insight into both conventional and modern methods. The data results have been condensed to convey the participants' sincere views on integrating technological tools for grammar instruction.

Technological tools used for grammar instruction:

The Participant's perspectives reveal a diverse range of technology used in teaching English grammar, including POE and Chat GPT, blended methods, Learning Management Systems, platforms like Moodle or Google Classroom, grammar apps like Grammarly, Quizlet, and Duolingo, multimedia tools like videos, podcasts, PowerPoint presentations, online collaboration tools like Padlet, and virtual whiteboards. University participants also use websites, AI tools, and YouTube links. Some focus on traditional methods, such as interactive lessons, written exercises, and real-life examples, while others utilise tools like PowerPoint and Microsoft Word. Selecting suitable technology tools is crucial for effectively teaching EFL students' grammatical competence in terms of accuracy, retention, and use. The results demonstrated that digital tools, such as Grammarly, Kahoot, and Quizlet, have a discernible impact on students' grammatical accuracy through automated feedback and error recognition.

The Impact of Technology on Instructors' Approach to Teaching English Grammar

Technology has significantly impacted the way university teachers teach English grammar, shifting from traditional methods to more interactive, student-centred approaches. Platforms like Kahoot and Quizlet have made teaching more accessible and engaging, offering benefits like improved engagement, instant feedback, and real-world exposure to authentic language. However, some instructors have noted limited changes, relying on books and technology. Some participants have reported

increased efficiency in preparation and delivery, making lectures easier and improving students' understanding. Most participants acknowledge that technology has reshaped

grammar instruction by making it more interactive, accessible, and responsive to students' needs.

Technology is playing a significant role in replacing or supplementing traditional teaching methods.

The Participants believed that technology cannot replace traditional teaching due to its lack of face-to-face interaction, emotional support, and human adaptability. While technology offers accessibility, personalisation, and efficiency, it lacks essential human interaction and emotional support. Participants advocate for integration rather than replacement, stating that students need guided instruction and that the lecturer's role is vital. Blended learning, where technology can handle certain situations, is suggested as a practical approach. While technology can provide emotional support, it cannot replace traditional methods of emotional support. Some participants suggest combining both methods, while others believe technology can enhance teaching. Most of them see technology as complementary rather than alternative.

Barriers faced by teachers while using technology.

Various obstacles were raised to using technology in grammar instruction, as many participants noted, such as unstable online access, a lack of digital devices, and learner resistance. Most participants concentrate on reducing student engagement and declining critical thinking by over-reliance on tech tools. Specific tools often ineffective, especially when addressing complex challenges. Additionally, misalignment between teaching objectives and digital tools, as well as over-ambitious assumptions, complicate the situation. As a result, educators and learners highlight the need for improved infrastructure and resources.

Benefits of using technology in teaching English grammar.

Several of the participants explain the benefits of integrating technology in learning grammar, such as higher student motivation, increased accessibility, individualised instruction, and enhanced interactivity. Duolingo, among other apps and visual resources such as pictures, helps students improve their comprehension of abstract grammar rules. Online games also contribute to the creation of a motivating and engaging learning environment. Furthermore, computer tools with functionalities such as automatic error

correction for grammar and punctuation provide instant feedback, enabling more accurate assessment and continuous improvement.

The government supports teachers by offering training, resources, and policy support.

The government is a vital resource for teachers struggling with technology when teaching grammar. Some leading solutions are investing in modern tools and digital infrastructure, providing professional development and training for teachers, offering free internet access and technical tools, and developing technology integration policies. Furthermore, institutional rearrangement and structural planning are other considerations. Participants have suggested reducing class sizes, incorporating student participation, hiring IT specialists, and using international libraries. The government can enhance it with funding, technology, laws, infrastructure, and capacity development.

Students' feedback regarding the use of technology in grammar instruction.

Students have appreciated using technology to learn grammar, and a majority perceive it as fun and easy to utilise. Some students are accustomed to traditional methods for complex material. Students' knowledge of technology and learning styles shape their response to using technology. Educators emphasise the importance of blending traditional and electronic methods, choosing level-appropriate resources, and adding human teachers for emotional resonance and tailored understanding. Some prefer traditional practice, and still others opt for technology that is interactive, age-appropriate, and augmented with traditional pedagogy.

5. DISCUSSION

This chapter analyses the impact of digital technologies on teaching English grammar in the Kurdistan Region. It focuses on the benefits and challenges of technology, implementation problems, and the practical, pedagogical, and institutional implications of using technology in grammar teaching, balancing findings with relevant literature and educational theories.

Research Question 1: How effective is technology in improving the grammar skills of EFL students?

The role of technology is to facilitate the acquisition of grammar by EFL students. The results show that when technology is carefully integrated into teaching, it significantly enhances grammatical proficiency. This efficacy is evident in three interrelated domains: application, retention, and precision. Instructors expressed that grammar applications and technological tools, such as Grammarly, Kahoot, and NoRedInk, help provide instant feedback, enabling students to self-correct in real-time. This fosters a more productive correction cycle, which is particularly beneficial for learners' accuracy in language skills, especially speaking and writing (Al Bataineh, 2019). Participant Number Twenty-three supported this by stating that students are more motivated when they receive "instant feedback." Participant Number Five noted that gamified grammar apps and interactive quizzes enable students

Retention of grammatical rules has improved due to technology, making learning more engaging, varied, and spaced out. Teachers noted that contextual and repetitive exposure helped embed grammar rules in long-term memory (Bikowski, 2018; Ali, 2020). An increased number of participants emphasised the effectiveness of technology in real-life scenarios, such as Participant Number Twelve, who confirmed that students who use tech tools are "more active in applying rules in real-life contexts," demonstrating not just memory but understanding and use.

A key area where technology proved especially beneficial was precision, the ability to transfer grammatical knowledge to real-world communication. Collaborative tools, such as Google Docs, interaction with AI chatbots, and gamified sentence-building tasks encouraged learners to use grammar in functional, expressive, and communicative ways, aligning with contemporary SLA theory and showing that grammar instruction becomes more effective when embedded in authentic language use (Blake, 2013; Chapelle, 2006).

This study supports the findings of many others regarding the role of technology in helping students learn grammar, particularly those learning English as a foreign language. The improvements we saw in students' accuracy and ability to remember and use grammar were similar to those reported by Alqahtani (2019) and Summerhays (2024). They demonstrated that tools like Grammarly and NoRedInk can help students correct their own work and improve their grammar.

Based on teacher experiences and empirical evidence, technology is one of the most effective tools for enhancing grammar skills in EFL students. Technology helps teachers develop accuracy, retention, and real-world applications, clearly implementing its pedagogy when integrated with meaningful contexts and communicative activities.

Research Question 2: What Benefits Do Teachers and Students Experience When Using Technology for Grammar Teaching?

The research focuses on the advantages of employing technology in grammar instruction, encompassing both pedagogical and motivational benefits, as well as cognitive and affective benefits. Teachers can save time using digital tools like Zoom, Google Forms, K12 Online, and grammar-specific apps to make teaching more effective and adaptable. One of the Participants stated that students are satisfied when they have lessons in their hands, and visual aids help them understand abstract grammar concepts. Differentiated training is another advantage, as teachers can modify grammar classes to meet the needs of each student, promoting inclusion and advancing student development.

Using technology in the classroom can significantly help students perform better and feel more motivated. With online resources, they can practice grammar anytime and anywhere, which supports their learning beyond just school hours. This flexible approach encourages them to take charge of their own education and build lasting skills (Bikowski, 2018). Self-directed and independent learning is another significant benefit, as access to educational platforms enables students to apply grammatical rules in real-world situations.

The capacity to use differentiated training was viewed as a significant advantage. Depending on the activity being done at a certain moment, teachers would be able to adapt grammar lessons according to the ability level of each student, helping to maintain inclusivity and develop their learning (Cutter, 2023). Teachers of adolescents mentioned that, through the use of various digital resources, they could effectively facilitate the teaching of grammar with visual aids, thereby better serving mixed-ability groups.

This research supports a broad spectrum of literature on the many advantages of technology in grammar training. Ali (2020) and Bikowski (2018) found that digital

technologies improve pedagogy and learner autonomy by sing teaching, providing visual reinforcement, and offering interactive grammar practice. Teachers' ability to adapt lessons for mixed-ability learners mirrors Cutter's (2023) emphasis on differentiated instruction as a key outcome of technology integration. The students' increased motivation and engagement reported here are consistent with the findings of Marleni, M. (2020), who emphasised the importance of immediate feedback in reinforcing grammar accuracy.

In conclusion, the benefits of adopting technology for language instruction are multifaceted. For teachers, it provides more flexible and resource-efficient instruction. It encourages increased motivation, self-assurance, customisation, and independence in grammar learning for students. These benefits, supported by empirical data and instructor observation, highlight how educational technology may revolutionise EFL grammar instruction.

Research Question 3: What is the Best Way to Solve Current Issues Regarding Using Technological Tools in Teaching English Grammar?

Even with changes in education technology, research shows that instructors still struggle with integrating new technology into their grammar lessons. The most significant issue is inconsistent infrastructure, which can quietly undermine learning. Schools frequently lack the right technology or training to utilise existing resources, causing teachers to become frustrated when they attempt to innovate and resort to patchwork solutions.

Participants in the study emphasised the importance of robust internet access, reliable internet lines, and monthly internet cards and laptops to minimise reliance on personal equipment. However, not all teachers feel comfortable using technology, and a significant execution gap is created by a lack of training or access to a stable internet connection.

Teachers were also concerned about student preparedness in shifting to tech-based learning, with digital literacy issues being a central problem. Students may be unsure of how to operate with apps, reject digital tools, and cling to traditional methods. This readiness deficit limits the effectiveness of even the finest tools if students are unprepared or lack the inclination to use them effectively.

Several factors contributed to technology's underwhelming performance in some cases, such as inadequate scaffolding to motivate learner engagement in independent grammar drills, struggles with time management and prioritisation, and technological tools not embedded in a meaningful pedagogical framework that aligns learning activities with cognitive development and context-sensitive instruction.

The difficulties and suggestions noted in this study align with an expanding corpus of global research that highlights the necessity of a comprehensive, context-sensitive strategy for incorporating technology into grammar training. Combining EdTech and traditional teaching methods supports Krashen's (1982) assertion that relevant input, combined with specific grammar instruction, improves results, particularly for students who struggle with the fundamentals. The study's emphasis on collaborative teacher development aligns with the innovation-driven education theories advanced by Dooly and Sadler (2016). The study recommends three areas of action to enhance technology-assisted grammar instruction:

Curriculum flexibility, infrastructural improvement, teacher training and support, practical hands-on training sessions, ongoing professional development, and investment in digital infrastructure are recommended. As part of curriculum reform, teachers should be able to change lesson plans and add online activities. For technology deployment to be effective, teachers need to collaborate. Technology and traditional teaching may help pupils with structure and flexibility by improving their grammar. The deductive technique is used for students with trouble learning basic rules.

Furthermore, any proposed solution must be context sensitive. What works in one school or city might not work elsewhere due to differences in resources, student needs, or local culture. Solutions must, therefore, be flexible, scalable, and inclusive.

CONCLUSION

This article evaluated the potential of technology in education in the IKR, specifically in teaching English grammar. The findings confirm that modern technological tools have reshaped grammar instruction, revealing their transformative potential and ongoing limitations. The results of this study demonstrate that technological tools have a significant impact on enhancing grammatical accuracy and learner engagement through AI-powered platforms, grammar applications, and blended learning methods. However, these benefits are limited by a lack of infrastructure, instructor training, and institutional support. Most teachers who responded to the survey said they favour using technology in grammar lessons, but its effectiveness and practical implementation remain uncertain on how well it works or how extensively it can be utilised, depending on the school's resources and preparation.

In the next phase of research, three principal directions must be addressed: digital infrastructure at universities and schools, ongoing teacher training, and curriculum revision incorporating flexible learning approaches and student-centred approaches. Additional research is necessary to identify the long-term impact and results of specific technologies on grammar learning outcomes, as well as to prepare culturally adapted materials for Kurdish students. To optimise the utilisation of technology in language education across the region, collaboration among stakeholders, educators, and scholars is essential. This study contributes valuable insights into the challenges and opportunities of integrating technology in EFL grammar instruction, offering a foundation for informed policy-making and practical strategies that can enhance teaching and learning in similar educational contexts.

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