

INTERACTIVE ARTICLE COVER

Exploring the Effect of LearnEnglish Grammar Mobile App on English Language Learners Grammatical Competence

RUPKATHA JOURNAL

ON INTERDISCIPLINARY STUDIES IN HUMANITIES



ISSN 0975-2935

About the Journal

Journal DOI	https://dx.doi.org/10.21659/rupkatha
Journal Home	www.rupkatha.com
Indexed by	Scopus Web of Science: ESCI DOAJ

About the Issue

Themed issue	Volume 15, number 1, 2023 Current and Future Directions in TESOL Studies
Edited by	Dr John R. Baker
Issue DOI	https://doi.org/10.21659/rupkatha.v15n1
TOC	https://rupkatha.com/v15n1.php

About the Article

Title	Exploring the Effect of LearnEnglish Grammar Mobile App on English Language Learners Grammatical Competence	
Author/s	Nguyen Ngoc Vu ¹ , Truong Le Hai ² , Tran Ngoc Ha ³ , Bui Duc Tien ⁴	
Affiliation	^{1,3} Ho Chi Minh City University of Foreign Languages – Information Technology, ² Thoai Ngoc Hau high school for the gifted, ⁴ Ho Chi Minh City University of Education	
Author ID	¹ 0000-0002-3592-7813, ² 0000-0002-7417-2222, ³ 0000-0001-6238-5303, ⁴ 0000-0002-1782-4925	
DOI	https://doi.org/10.21659/rupkatha.v15n1.04	Pages: 1-18
Abstract	https://rupkatha.com/v15n104	
Full-text PDF	https://rupkatha.com/V15/n1/v15n104.pdf	
Article History	First Published: 30 April 2023	
Article Impact	Check Dynamic Impact	
Copyright	Aesthetics Media Services	

This Open Access article is published under a Creative Commons Attribution Non-Commercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For citation use the DOI. For commercial re-use, please contact editor@rupkatha.com.

Exploring the Effect of LearnEnglish Grammar Mobile App on English Language Learners' Grammatical Competence

Nguyen Ngoc Vu¹, Truong Le Hai², Tran Ngoc Ha³, Bui Duc Tien⁴

¹Ho Chi Minh City University of Foreign Languages – Information Technology. ORCID: 0000-0002-3592-7813. Email: vunn@hufplit.edu.vn

²Thoai Ngoc Hau high school for the gifted. ORCID: 0000-0002-7417-2222. Email: truonglehai1983@gmail.com

³Ho Chi Minh City University of Foreign Languages – Information Technology. ORCID: 0000-0001-6238-5303. Email: hatn@hufplit.edu.vn

⁴Ho Chi Minh City University of Education. ORCID: 0000-0002-1782-4925. Email: tienbd@hcmue.edu.vn

Abstract

This study aimed to explore the impact of the LearnEnglish Grammar app on the grammatical accuracy of 10th-grade students at a gifted high school. Utilizing a quasi-experimental design, the researchers randomly assigned students to either an experimental group that used the app for grammar lessons or a control group that received traditional grammar instruction. The results revealed that the LearnEnglish Grammar mobile app significantly enhanced the experimental group's grammar competence compared to the control group. Most learners demonstrated a positive attitude towards the app and expressed an interest in incorporating it into their language studies. These findings support the comprehensive integration of mobile learning in English grammar education to improve student achievement and lay the groundwork for future research on the effectiveness of mobile learning applications across various school subjects.

Key words: mobile learning, grammar competency, teaching grammar, LearningEnglish Grammar app.

Introduction

The use of technology in education is becoming increasingly important, as it is widely recognized as a crucial component for effective learning and teaching. Mobile learning, in particular, has garnered significant attention from educators both inside and outside the classroom. Numerous previous studies have emphasized the critical role of mobile learning in English language instruction.

According to Young and Laxman (2014), mobile technologies, such as mobile phone applications, can enable learners to acquire English more readily by allowing them unrestricted access to course content management systems. Suwantarathip's (2015) study on mobile learning and its impact on vocabulary development revealed that mobile learners outperformed their counterparts who learned through conventional methods. Furthermore, learners expressed positive views about learning with mobile devices. Abu Laban's (2017) research on attitudes and self-efficacy when

using mobile learning devices for college students found that learners' motivation for learning English increased, and the majority had positive attitudes towards mobile learning.

In a study by Vu (2016) to determine whether Vietnamese university students were prepared for mobile learning, the research showed that most students were ready for mobile learning due to the widespread availability of internet connections. Additionally, many students appreciated the rich multimedia content that facilitated visual learning and enhanced online interaction. Advancements in mobile technology have provided individuals with the convenience and flexibility to acquire new information at their leisure and from any location (Jumaat et al., 2018). The possibilities of mobile devices in language learning contexts are exciting, as they offer technologically improved resources (Stockwell, 2008). Baharom (2013) highlights the potential of mobile learning to bridge pedagogically designed learning contexts and support language learners, which is often challenging to achieve in traditional learning environments. Moreover, students believed that mobile learning would enhance their English language performance.

This study focuses on investigating the impact of a grammar mobile learning app on a specific group of gifted high school students in An Giang province, Vietnam, as there have been no prior studies on this topic. It aims to address the following two research questions:

- a. To what extent does the LearnEnglish Grammar mobile app improve EFL students' grammar skills?
- b. What are the learners' perceptions of the LearnEnglish Grammar mobile app in learning grammar?

Literature review

The role of grammar in second language acquisition

Rahuma (2016, p. 51) emphasizes the pivotal role of grammar in language teaching and learning. He contends that grammar is a distinct aspect of language, setting it apart from other cognitive processes and animal languages. Highly structured, grammar significantly impacts learners' communication skills, making it more comprehensible than other language components. It serves as the foundation for other linguistic features, such as pronunciation and vocabulary, linking and shaping all aspects of language.

Rahuma (2016) also highlights the importance of grammar and proposes that it should be considered as a fifth language skill, alongside listening, speaking, reading, and writing. This researcher advocates for Grammar-Based Instruction, asserting that grammar enables learners to grasp the essence of language. It teaches students that language comprises regular patterns, which facilitate communication through speaking, reading, and writing. Syntax, in particular, plays a vital role in conveying meaning.

Furthermore, learners who lack a solid understanding of grammar principles struggle to communicate effectively. Accurate grammar structures are crucial for enhancing learners' communication skills in English and other languages. A language without grammar appears

nonsensical, aimless, and lacking direction (Kiaer, 2018). Utilizing proper grammar is essential to prevent misunderstandings and ensure the smooth comprehension of speakers.

It is evident that inadequate grammar skills impede effective conversation and obstruct presenters' abilities to articulate their ideas accurately. Uncertainty regarding appropriate language usage can cause speakers to feel hesitant and embarrassed, often obstructing communication (Subasini & Kokilavani, 2013).

2.2 Technology for teaching grammar

Bikowski (2018) suggests that various methods are available for learning grammar in context with a focus on meaning, thanks to advances in communicative language teaching (CLT) and technology. Teachers can employ synchronous technologies, such as chat, video conferencing, Twitter, or virtual learning environments, or asynchronous resources, like discussion boards, email, or blogs, in real-time. Social networking and learning have become increasingly intertwined, blurring the lines between them and even leading to the creation of learning management systems designed specifically for this purpose. Resources, including dictionaries, translators, grammar checkers, and rule handbooks, have been developed in response to students' need for self-directed learning. However, instructors may encounter pedagogical challenges when teaching students to use technology appropriately in the classroom with these tools. Innovative technologies enable teachers to adapt their instruction based on whether students are working inside or outside the classroom. A better understanding of the concepts and ideas underlying the use of technology for teaching grammar benefits teachers.

Utilizing mobile technology offers a unique approach to teaching and studying English grammar, as it allows students to engage in the learning process in a more ubiquitous and personalized manner. This method can also supplement, revitalize, or diversify traditional grammar study methods due to its digital development, adaptability, and mobility. Several studies suggest that mobile devices are suitable for facilitating social interactions and fostering opportunities for collaborative learning, which supports the growth of learning communities, offers feedback to instructors, and helps motivate students (Hashemi & Ghasemi, 2011).

Jendeya and Firwana (2015) implemented the 5E Model, Saeedi & Biri (2016) employed animated sitcoms, and Vasileiadou and Makrina (2017) used computerized educational games and grammar learning apps. Technological approaches play a significant role in teaching and learning English in second language classes, as technology provides reliable and unlimited resources for grammar instruction, enhancing learners' understanding (Abu, 2017). Computers, tablets, applications, and other software offer learners of all ages interactive, engaging, and motivating activities. These methods also assist teachers in making teaching materials more captivating and inspiring. Mahmoud and Laban (2017) assert that learners will be motivated and interested in using mobile applications while studying and practicing the language. Moreover, these applications enable learners to evaluate their understanding of specific grammar points, such as verbs, prepositions, and tenses. Mobile applications can monitor students' progress and development while providing access to fun and exciting educational mobile games like Scrabble and Boggle.

2.3 Advantages and disadvantages of mobile learning

Miangah (2012) posits that mobile learning offers learners the opportunity to engage in education both inside and outside the classroom, such as while commuting or in the schoolyard. Bachore (2015) underscores the advantages of mobile-based language learning, which include ubiquitous access to learning resources through mobile devices that connect to learning websites via wireless networks. The portability of these devices enables learners to carry learning materials with them and engage in social interaction and data exchange with their peers. Context sensitivity is another advantage, as mobile devices can gather data based on the user's current location and time. Furthermore, connectivity allows for the collection of inputs from various devices.

Alkhezzi and Al-Dousari (2016) note that mobile learning introduces new possibilities for both teachers and students, enabling greater interaction and active learning environments. In contrast to traditional face-to-face settings, mobile learning exposes learners to diverse learning modes and empowers them to be active participants in the learning process. Advancements in technology have facilitated teacher-student interaction through various media, including video, pictures, and text. Albadry (2018) identifies four significant benefits of mobile learning: portability, social interactivity, connectivity, and the integration of formal and informal learning. Farrah and Abu-Dawood (2018) suggest that mobile learning has the potential to enhance educational performance by providing flexible access to learning materials, personalized learning programs, and addressing global educational inefficiencies.

However, mobile learning also presents drawbacks, such as difficulties in reading on small screens, storage limitations, and multimedia restrictions. Some apps may not be suitable for educational purposes, and certain devices may be too costly for learners. Consequently, it is crucial for teachers to carefully select or adapt learning resources that align with their students' tools. Bachore (2015) discusses several limitations related to mobile learning in the context of language acquisition. A major drawback is that a significant number of mobile phones are not appropriate for educational use, hindering students from utilizing them for school assignments. This issue arises from both the devices' design and the lack of highly developed mobile phones. The cost of devices best suited for learning activities is also prohibitive for many learners. Therefore, instructors should consider the types of devices their students use and adapt their materials accordingly. Other constraints include small screen size, limited visual display, and reliance on networks that may be prone to disruptions.

Alkhezzi and Al-Dousari (2016) identify psychological and usability constraints of mobile learning. Psychological constraints stem from the belief that students experience a disconnect between their mobile device usage and its application for schoolwork when they are away from the traditional classroom. If learning activities are not suitably selected and organized, learners may be hesitant to participate. Concerns about the health impact of continuous mobile phone use may also deter some students from employing mobile devices. According to Albadry ((2018), mobility is the primary challenge associated with mobile-assisted teaching and learning. While mobile devices enable "anywhere, anytime" learning, this flexibility creates difficulties for traditional teaching methods as it may alter learners' work or study habits. The second issue is informality, where the casual use of mobile devices in the classroom environment may infringe on students' privacy and security, leading them to reject the use of mobile devices in school settings. Albadry

(2018) emphasizes the importance of safeguarding students' privacy and security when using mobile devices for educational purposes.

2.4 LearnEnglish Grammar mobile app

The LearnEnglish Grammar app, designed for students of all levels from beginner to advanced, has been ranked as the top iTunes Education app in 44 countries. It includes over 1,000 questions to help students strengthen and improve their English grammar skills. The program offers grammatical tasks for learners at all levels, ranging from Beginner (CEFR level A1) to Advanced (CEFR level C2). Students can begin at their appropriate level and progress to higher levels as their grammar skills improve. They can also purchase and download additional questions as their grammatical accuracy increases. Some screenshots of the app can be found in Figure 1.

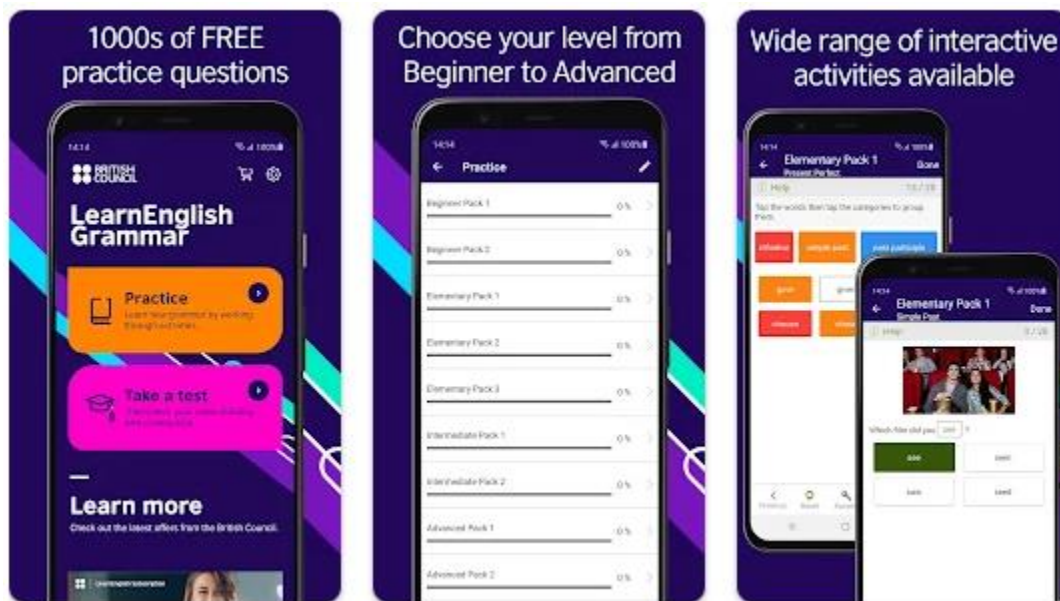


Figure 1: Screenshots of Learn English Grammar

The program contains approximately 600 grammar tasks for each level, organized into about 25 grammar themes, such as tenses, tag questions, prepositions, and conditional sentences. Each set of sample questions includes more than 20 exercises, which are diverse and encompass gap-filling, multiple-choice, and matching activities to help improve grammatical correctness. Additionally, interactive practice activities like drag-and-drop responses and word rearranging make learning enjoyable. To enhance engagement, each question incorporates text, pictures, and audio. Students can assess their comprehension by taking a test at the end of each level. The program provides "help files" for each question, offering in-app support to help users complete the activity categories. The help section is available in multiple languages. The app also features a "Test" function that allows students to track their progress. Since the app can be used offline, students can practice grammar anywhere and anytime on their smartphones without an internet connection.

Overall, the LearnEnglish Grammar program appears to be a useful tool for students seeking to improve their grammatical accuracy. However, explorations of the effect of the LearnEnglish

Grammar app on English language learners' grammatical accuracy have not been undertaken. This study is intended to address this gap in the literature.

3. Methodology

The researchers employed both quantitative and qualitative methods to collect and analyze data, which aided in addressing the research questions. Pretest and posttest were utilized to gauge students' grammar performance, while a Likert-scale questionnaire with closed-ended questions assessed students' perceptions of the app's effectiveness, usability, and satisfaction. A follow-up interview was conducted to gain a deeper understanding of students' perspectives regarding the app.

3.1 Research site

This study took place at a well-resourced high school in Long Xuyen city, Vietnam. With substantial investment in English teaching facilities and the implementation of the Ministry of Education's new English textbooks, students' learning quality has improved. Students can use smartphones in class under teacher supervision, and the app's variety of grammatical exercises, ranging from CEFR level A1 to C2, accommodate the diverse proficiency levels.

3.2 Participants

Using purposeful sampling, the study selected two comparable tenth-grade classes, 10B1 and 10B2, at a school where students have diverse interests and varying English proficiency levels. This sample consisted of 80 students who were not majoring in any subject and followed the same English curriculum, ensuring a representative and relevant data pool. However, students taking extra English classes were excluded to guarantee the study's validity. The 27 ESL students in class 10B1 constituted the experimental group (EG), while the remaining 28 students, all of whom had been studying English for seven years, formed the control group (CG). The EG comprised 15 male and 12 female students, while the CG included 10 male and 18 female students. Both groups received different instructions: the EG used the app, and the CG followed a more traditional method.

3.3 Data collection instruments

3.3.1 Grammar Pretest and Posttest

In this study, data on grammatical abilities were collected through the use of tests, employing pretest and posttest designs to compare participant groups and evaluate any changes that occurred due to treatments. Two groups were established for this study, and each group was given a pretest and posttest in writing, consisting of 40 multiple-choice questions of similar difficulty levels. The tests were adapted from a grammar test book with different levels from a high school in England to ensure content validity and reliability.

The themes and assignments for each test were carefully selected based on the grammar structures in the English textbook for grade 10 students, including English articles, relative clauses, reported speech, and conditional sentences. The assessments used as the pretest and posttest to gauge participants' English grammar proficiency were taken from a book developed as teacher resources at Birmingham High School in England. Book 1 was used, containing 9,246 grammar questions of varying difficulty levels.

The posttest was created based on the contents of the students' textbooks, and three experienced English teachers were asked to review the content to ensure its validity. To guarantee the tests' questions were equally challenging, they were meticulously examined to identify any discrepancies in task difficulty. The tests required participants to select the correct answer among four options and fill in the blank within 30 minutes.

3.3.2 Questionnaire

According to Awadh (2020), a questionnaire is a self-reported data collection tool that study participants complete. The questionnaire contains questions posed by the researcher, and respondents select answers to these questions. Johnson and Christensen (2014) note that questionnaires are effective tools for gathering information about people's beliefs, attitudes, values, opinions, and perspectives. To accompany the questionnaire, Creswell (2012) suggests a cover letter that provides background information about the study, research aims, and commitment to privacy and confidentiality.

In this study, the questionnaire used only closed-ended questions with an agreement scale, while open-ended questions will be used in another instrument, namely the interview. The questionnaire was adapted from Hussain Gamlo's (2019) study, which had a similar topic and purpose. Both studies aimed to determine the effects of LearnEnglish Grammar mobile learning app and the participants' perceptions of this app. However, the researcher adjusted the questionnaire to fit her study's objectives. The questionnaire used a five-point Likert scale with options ranging from strongly disagree (SD), disagree (D), neutral (N), agree (A), and strongly agree (SA).

3.3.3 Interview

To gather qualitative data for the study, interviews were conducted with ten students from the experimental group. The interviews were conducted using a technique that involves asking participants open-ended questions in a specific context to gain their views, experiences, and opinions. This technique was chosen because it provides information that may be difficult to obtain using other research approaches.

Semi-structured interviews with purposive sampling were employed, as they allowed for both flexibility and control. Each interview lasted between 5 to 10 minutes, and the questions were prepared ahead of time to cover as many aspects of the LearnEnglish Grammar app as possible. The questions were designed to generate long answers and eliminate potential bias.

Participants were chosen based on their demographic features, such as gender and English proficiency. Before the interview process began, a consent letter and a cover letter outlining the study's nature and aims were provided. The participants were asked questions about their use of the LearnEnglish Grammar app, the difficulties they faced in adopting the app, and their

recommendations or comments regarding the app. The interview questions were aligned with the questionnaire to show what the students were thinking when they completed them.

At the start of each interview, the interviewer thanked the participants for their time and involvement in the study. The research aims and significance were also discussed, as well as ethical aspects, such as the participants' right to resign from the study. The interviews were recorded and safely preserved for analysis.

4. Findings and discussion

4.1 Grammar Pretest and Posttest

4.1.1 Independent sample t-test of pretests results.

The Normal Q-Q Plot was used to analyze the pre-test scores of CG and EG, in order to confirm that the underlying population followed a normal distribution. Figure 1 depicts a fairly straight line, which suggests that the scores were normally distributed.

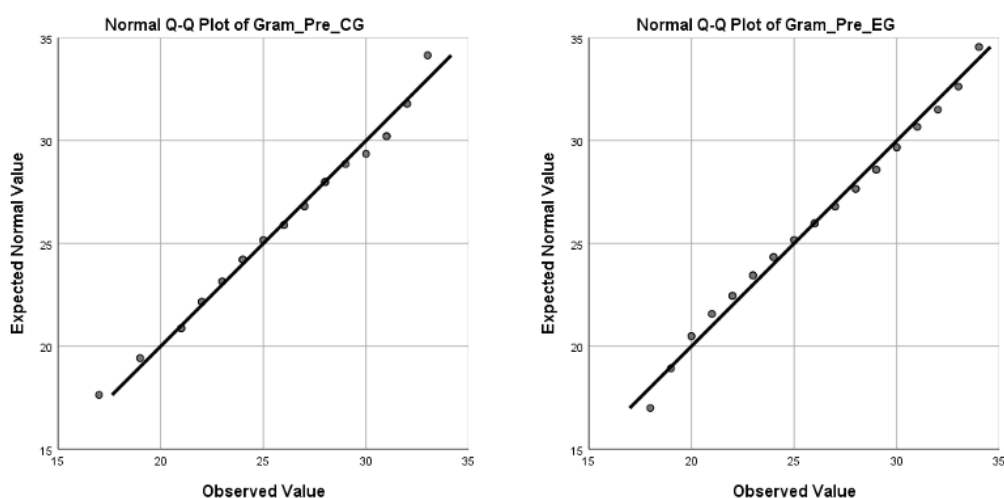


Figure 1: Normal Q-Q plots for pretest results of the control and experimental group

After ensuring the reliability of the grammar pretest scores, the mean scores of the Control Group (CG) and Experimental Group (EG) pretests were calculated. Table 1 shows that the mean score for the EG pretests is 25.89, while the mean score for the CG pretests is 25.78. These values have only a minor difference between them. The mean score of the EG ($M = 25.78$, $SD = 4.397$, $n = 27$) is slightly lower than the mean score of the CG ($M = 25.89$, $SD = 4.104$, $n = 28$).

To determine if there was a significant difference between the two groups, an independent samples t -test was conducted, and the results are shown in Table 1. The Levene's test for equality of variances produced a Sig. value of .626, which is greater than .05, indicating that the variances are equal between the two groups. Therefore, it is reasonable to conclude that the prerequisites for equal variance were met.

The t -test for equality of means produced a Sig. (2-tailed) value of .920, which is also greater than .05. This indicates that there is no substantial difference between the means of the EG and CG

before the treatment. In other words, the grammar performance of the two groups was comparable before the treatment, and they can be considered to be the same.

Table 1. Results of *t*-test and Descriptive Statistics for Grammar Pretest by Group

	Group						95% CI for Mean Difference	t	df
	CG			EG					
	M	SD	n	M	SD	n			
Grammar Pretest	25.78	4.40	27	25.89	4.10	28	-2.41, 2.18	-.100	53

4.1.2 Independent sample *t*-test of posttests results.

The normality test was applied to analyze the distribution of post-test scores for both CG and EG, similar to the pre-test analysis. The Q-Q Plot showed that the data from each group was linear. Therefore, it was concluded that both groups had a normal distribution of post-test scores, making the independent sample *t*-test an appropriate statistical method for analysis.

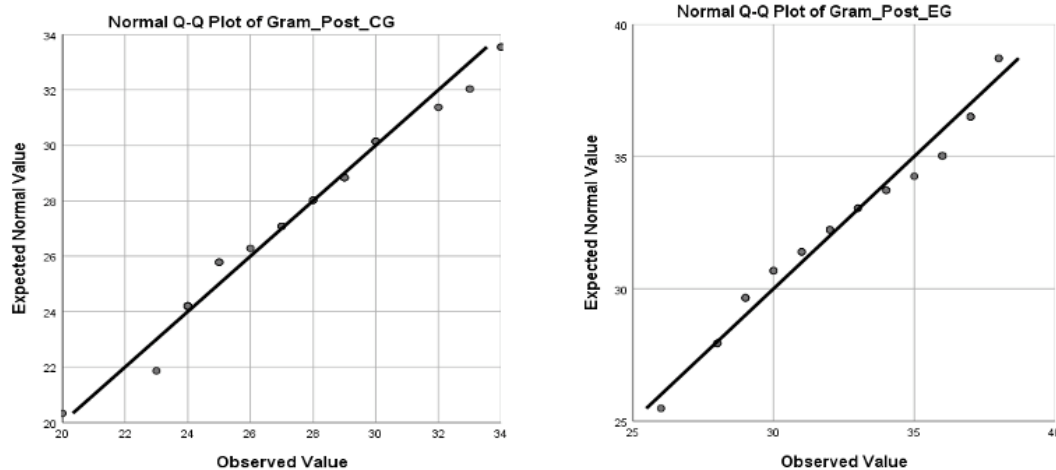


Figure 2: Normal Q-Q plots for posttest results of the control and experimental group

A descriptive analysis was conducted on the posttest scores of the experimental group (EG) and control group (CG). The results revealed that the posttest mean score for EG ($M = 31.19$, $SD = 3.514$) was significantly higher than that of CG ($M = 27.39$, $SD = 3.510$), as indicated in table 2. To determine the statistical significance of this difference, an independent samples *t*-test was performed. The analysis confirmed that there was indeed a statistically significant difference

10 | A descriptive analysis was conducted on the posttest scores of the experimental group (EG) and control group (CG). The results revealed that the posttest mean score for EG (M = 31.19, SD = 3.514) was significantly higher than that of CG (M = 27.39, SD = 3.

between the posttest means of the two groups, indicating that the grammar performance of both groups had changed after the treatment, with the performance of the EG being notably superior. The results showed that the Sig. value in table 2 was higher than .05, indicating that equal variances could be assumed. Additionally, the Sig. (2-tailed) value was .00, which is less than .05, indicating a statistically significant difference between the posttest means of CG and EG. Overall, the treatment had a positive impact on the grammar performance of both groups, but particularly for the EG.

Table 2. Results of t-test and Descriptive Statistics for Grammar Posttest by Group

	Group						95% CI for Mean Difference	t	df
	CG			EG					
	M	SD	n	M	SD	n			
Grammar Posttest	27.39	3.51	27	31.19	3.54	28	1.89, 5.70	3.98*	53

* p < .05.

The following graph, Figure 3, depicts the improvement.

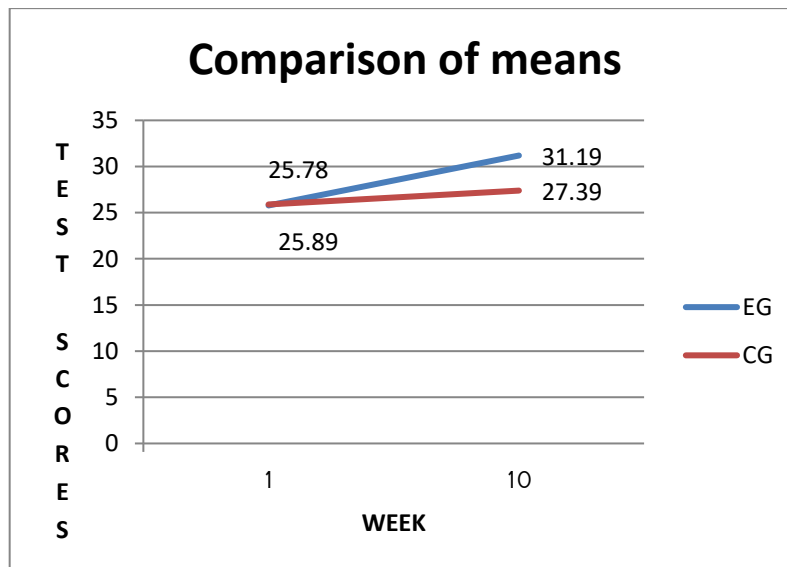


Figure 3: Comparison of means of pretest and posttest scores

4.2 Questionnaire

4.2.1 Students’ perceived effectiveness of the LearnEnglish Grammar app.

As depicted in Figure 4, the majority of participants expressed a positive perception regarding the app's effectiveness in enhancing their grammar skills, with over 80% of students either agreeing or strongly agreeing. From the responses to question 5, it was observed that students not only found the app beneficial for improving their grammatical competence, but also that most of them found the app useful in assessing their grammar proficiency through the available tests. Moreover, the responses to questions 5-8 indicated that a significant proportion of students (at least 70%) agreed or strongly agreed that the app improved their motivation, made classes more enjoyable, and boosted their confidence in taking tests. In particular, after using the app, they became more involved in grammar instruction (question 8). When asked about their sense of independence while studying with the app, only around 15% of students disagreed or remained neutral, implying that the majority of them gained independence while learning through the program (question 9). Consequently, almost 75% of students stated that the app helped alleviate their anxiety when learning grammar (question 10). Lastly, nearly 90% of students agreed or strongly agreed with the statement that the app was a highly motivating and enjoyable way to learn grammar, emphasizing its value.

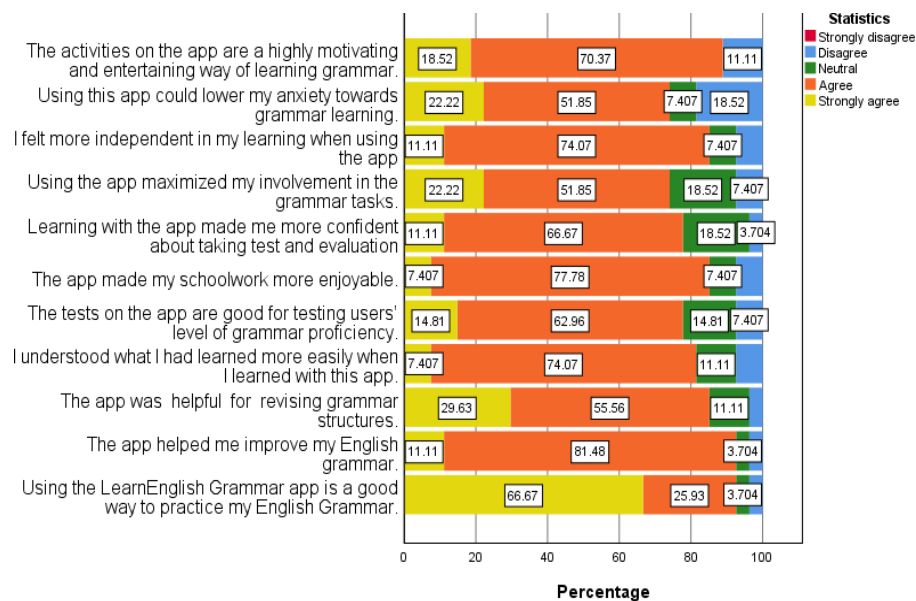


Figure 4: Students’ perceived effectiveness of the LearnEnglish Grammar app.

4.2.2 Students’ perceived usability of the LearnEnglish Grammar app.

The data presented in Figure 5 indicates that the majority of students hold a positive view regarding the usability of the app for learning grammar. Specifically, around 88% of students agreed with item 12, which suggests that they feel they can practice grammar tasks at their convenience. In terms of technical issues, only 7.4% of students expressed dissatisfaction with the app's ease of use (as per items 13 and 14). Interestingly, nearly 90% of students reported that they did not require technical assistance when operating the app (item 14). Furthermore, a high

12 | A descriptive analysis was conducted on the posttest scores of the experimental group (EG) and control group (CG). The results revealed that the posttest mean score for EG (M = 31.19, SD = 3.514) was significantly higher than that of CG (M = 27.39, SD = 3).

percentage of students found the activities and instructions on the app to be clear and easy to understand (items 15 and 16). It is not surprising that only a small minority of students disagreed with the statement that the app is easy to learn (item 17). Lastly, almost 85% of students stated that they felt confident using the app.

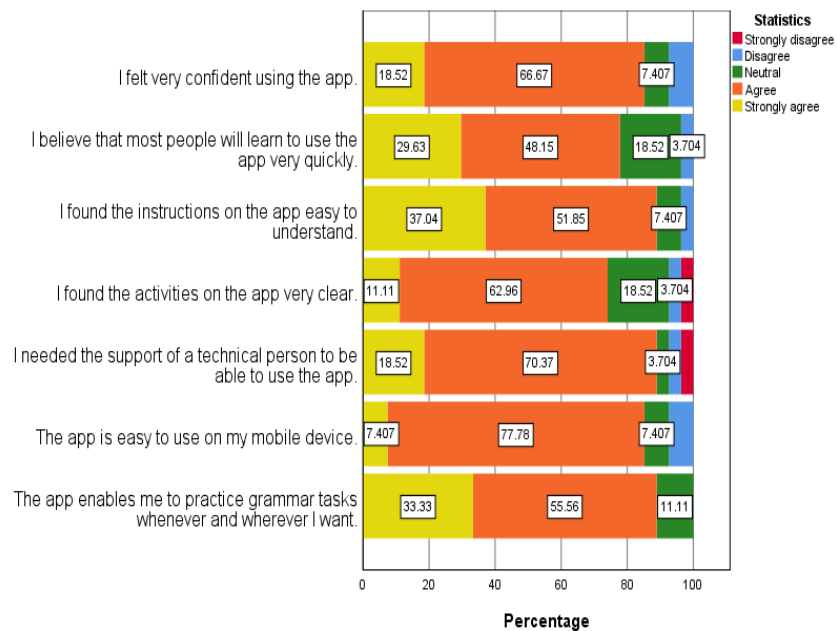


Figure 5: Students' perceived usability of the LearnEnglish Grammar app.

4.2.3 Students' perceived satisfaction with the LearnEnglish Grammar app.

According to Figure 6, over 80% of students showed a willingness to download the app for studying grammar and reported enjoying using it for learning. Furthermore, in response to questions 21 and 22, the majority of students expressed a desire to use the app more frequently as they found it more enjoyable and interesting than traditional pen and paper methods (over 90%). A negligible percentage of students (3.7%) expressed dissatisfaction with the app's organization. So, the app's activities motivated students to study more and produce better work. When asked about item 26, around 20% of students considered the app to be time-consuming due to its advantages. Finally, more than 80% of students indicated that they would continue to use the app and recommend it to others in the future (item 26, 27).

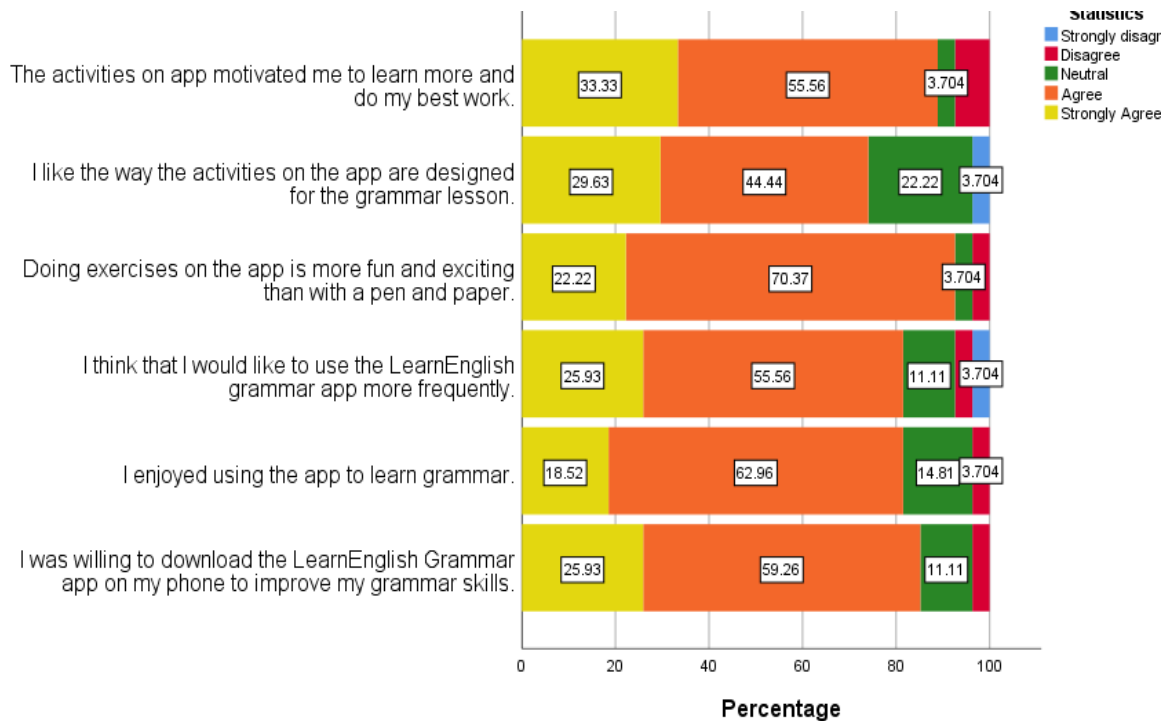


Figure 6: Students' perceived satisfaction with the LearnEnglish Grammar app

4.3 Interview

4.3.1 Students' evaluation of learning English grammar with LearnEnglish Grammar app.

When asked for their thoughts on the LearnEnglish Grammar app, all of the respondents had positive feedback. They expressed that the app has the potential to enhance and refine their grammar skills. Overall, they share the same view that the app is an excellent resource, offering grammar practice at various levels, from basic to advanced. They unanimously agreed that mobile technology provides a high level of informative content and visibility when learning English grammar. As an example, one respondent said: *"I believe that the LearnEnglish Grammar app would be a useful and instructive tool for me to use in order to improve my grammar ability. It covers a range of grammatical subjects and includes a number of interactive exercises."* (R1)

Creating innovative methods for teaching and mastering foreign languages, particularly grammatical competence, is a crucial aspect of modern education. With mobile apps for learning other languages already prevalent in classrooms, students can benefit from using them to learn English grammar in a more engaging and effective manner. A significant feature of this app is its ability to automatically employ current teaching approaches, helping students build the communication skills and language grammar patterns necessary to excel in school. Another student, respondent 10, shares a similar perspective on the app, stating that it not only saves time for teachers and students but also significantly enhances the grammar learning process by providing instant assessment of a student's knowledge level. Moreover, this mobile software offers the ability to customize study topics and activities to best suit the student's needs: *"As far as grammar study goes, LearnEnglish Grammar, in my view, is an excellent tool for all learners since it offers various packs for different levels, ranging from beginner to advance."* (R10)

- 14 | A descriptive analysis was conducted on the posttest scores of the experimental group (EG) and control group (CG). The results revealed that the posttest mean score for EG (M = 31.19, SD = 3.514) was significantly higher than that of CG (M = 27.39, SD = 3).

In general, it can be inferred that students had a positive perspective of the app's usage. They deemed the app entertaining and beneficial for practicing, revising, and enhancing their grammatical abilities.

4.3.2 The roles of the LearnEnglish Grammar app in increasing students' motivation for learning grammar.

During the discussion on the app's role in motivating students to learn grammar, when asked, "Do you think the app increases your motivation for learning English grammar?", all respondents agreed that the app does indeed aid in boosting their motivation. One respondent put it this way: *"The program has effectively encouraged me to study English grammar courses since I have spent a significant amount of time, about 1-2 hours each day doing these lessons, something I had previously barely done. I made use of the app as much as I could at home and found it to be very helpful."* (R6).

The mobile learning app provides students with a platform to extend their learning beyond the classroom by facilitating interactions with one another. Mobile learning is an excellent means for students to broaden their knowledge, satisfy their curiosity, and enrich their learning experiences. With this software, students become more engaged and motivated, leading to improved outcomes. Therefore, it can be concluded that this software could become a necessary tool for both students and educators. Another student added: *"Yes, without a doubt, studying using this app encourages me to improve my command of the English language's grammar. Because it is a mobile application, I can learn whenever and wherever I want, and I am not required to be in a classroom to do so."* (R10)

Personalization is a critical element of specialized language mobile applications. As mobile phones have become a crucial aspect of the daily lives of today's youth, they provide a suitable channel for delivering alerts and reminders for completing educational assignments. Furthermore, a fascinating aspect of this mobile application is the availability of various options to motivate students to complete their required educational tasks. Based on the respondents' statements, it is evident that they believe the app has a beneficial effect on their grammar learning. The data collected from the interviews also indicates that the app indeed enhances their motivation to learn English grammar lessons and helps them become more engaged and motivated.

4.3.2 What students like most about the app.

When asked, "What do you like most about this app?", respondents gave various answers. One of them specified that *"I like how it organizes the themes and levels so that users are aware of where they are in the learning process and can rationally understand what they need to do to improve themselves."* (R2)

This app provides a range of language tests for users with different levels of competence, featuring questions of varying difficulty. Likewise, another respondent remarked: *"I believe the design of the app is minimalist, which is fashionable right now, and as a result, young learners are more likely to trust and choose to study English Grammar as a result."* (R5)

The app offers diverse exercises and quizzes, in addition to study materials, which enable students to evaluate their knowledge (such as multiple-choice questions and matching exercises). The app presents information in a manner that stimulates students to improve their scores, encouraging them to strive for better results. Another aspect of the app that the third respondent appreciated was also mentioned: "*What I enjoy about this program is that it is completely free, and I can use it to study English from anywhere in the world as long as I have access to my phone and an Internet connection.*" (R8)

To sum up the respondents' feedback on the app, the key features that they found enjoyable were the diverse range of exercises for different levels, the use of graphics, sounds, and interactive activities, the creation of an engaging and inspiring learning environment, and the app's user-friendly and portable design. Above all, the software has been instrumental in improving users' motivation and enhancing their grammatical learning.

5. Conclusion

The primary objective of this investigation was to explore the ramifications of incorporating the LearnEnglish Grammar application into students' grammar instruction, while also evaluating their perspectives on its usage. Although the findings indicate that the students utilizing the app both within and beyond the classroom displayed enhanced grammatical proficiency compared to their counterparts receiving conventional instruction, it is essential to acknowledge the limitations of this study. For instance, the sample size, duration of the study, and potential biases in student self-reporting may have influenced the results. Consequently, further research is recommended to corroborate the findings, with a particular emphasis on longitudinal studies and diverse educational contexts.

The positive outcomes of this research suggest that mobile learning applications hold promise in fostering an engaging and efficacious environment for English language instruction. This has potential implications for educational theory, research, and practice, as it highlights the need for the integration of technology into language teaching methodologies. However, it is imperative to consider both teacher-student and student-student interactions when incorporating applications into the classroom, as the majority of students value these interactions throughout the educational process.

Students' affirmative attitudes towards the LearnEnglish Grammar app demonstrate its potential usability, effectiveness, and enjoyability as a tool for grammar acquisition. They recognized the advantages of employing mobile applications for EFL study, such as the convenience of accessing educational resources anytime and anywhere. Nevertheless, despite the app's widespread appeal among students, the successful implementation of mobile learning apps necessitates careful consideration of possible challenges and distractions.

Furthermore, this investigation suggests that the app's perceived utility may encourage its continued use in the future, prompting educators to recommend suitable mobile learning applications for both grammar and other skill sets. Students underscored the significance of maintaining teacher-student contact and advocated for a balanced approach between app usage and personal interaction. As the app appeared to boost learner motivation, it is crucial for

- 16 | A descriptive analysis was conducted on the posttest scores of the experimental group (EG) and control group (CG). The results revealed that the posttest mean score for EG (M = 31.19, SD = 3.514) was significantly higher than that of CG (M = 27.39, SD = 3).

educators to incorporate engaging tasks throughout the learning process. Additionally, considering that the app may be utilized both inside and outside of the school setting, teachers should establish a structured evaluation system for assessing student assignments, particularly with regard to homework.

Declaration of Conflicts of Interests

The author declares no potential conflicts of interest.

References

- Albadry, H. (2018). *Using mobile technology to foster autonomy among language learners* [Unpublished doctoral dissertation]. Newcastle University, UK. <http://theses.ncl.ac.uk/jspui/handle/10443/4112>
- Aljaber, A. A. M. (2021). *The reality of using smartphone applications for learning in higher education of Saudi Arabia* [Unpublished doctoral dissertation]. University of Glasgow, UK. <https://theses.gla.ac.uk/81974/7/2020Aljaberphd.pdf>
- Alkhezzi, F., & Al-Dousari, W. (2016). The impact of mobile learning on ESP learners' performance. *Journal of Educators Online*, 13(2), 73–101. <https://doi.org/10.9743/JEO.2016.2.4>
- Bachore, M. M. (2015). Language learning through mobile technologies: An opportunity for language learners and teachers. *Journal of Education and Practice*, 6(31), 50–53.
- Bikowski, D. (2018). Technology for teaching grammar. In *The TESOL Encyclopedia of English Language Teaching* (Vol. 6, pp. 1–7). <https://doi.org/10.1002/9781118784235.eelt0441>
- Farrah, M. A., & Abu-Dawood, A. K. (2018). Using mobile phone applications in teaching and learning process. *International Journal of Research in English Education*, 3(2), 48–68. <https://doi.org/10.29252/ijree.3.2.48>
- Hashemi, M., & Ghasemi, B. (2011). Using mobile phones in language learning/teaching. *Procedia - Social and Behavioral Sciences*, 15, 2947–2951. <https://doi.org/10.1016/j.sbspro.2011.04.220>
- Hussain Gamlo, N. (2019). The benefits of integrating the Learn English Grammar application into the Saudi EFL pre-intermediate preparatory year classroom. *International Journal of English Language Education*, 7(1), 19. <https://doi.org/10.5296/ijele.v7i1.14310>
- Jendeya, M. H., & Firwana, S. S. (2015). *The impact of 5E model on developing tenth graders' English grammar learning and their attitudes towards English* [Unpublished master's thesis]. University of Islamic, Gaza.
- Jumaat, N. F., Tasir, Z., Lah, N. H. C., & Ashari, Z. M. (2018). Students' preferences of m-learning applications in higher education: A review. *Advanced Science Letters*, 24(4), 2858–2861. <https://doi.org/10.1166/asl.2018.11078>
- Kiaer, J. (2018). Grammar matters. In *The Routledge Course in Korean Translation*. <https://doi.org/10.4324/9781315618210-3>
- Kleinsasser, R. C., & Silverman, D. (1997). Interpreting qualitative data: Methods for analysing talk, text, and interaction. *The Modern Language Journal*, 81(1), 136. <https://doi.org/10.2307/329190>

- Miangah, T. M. (2012). Mobile-assisted language learning. *International Journal of Distributed and Parallel Systems*, 3(1), 309–319. <https://doi.org/10.5121/ijdps.2012.3126>
- Rahuma, F. (2016). *A study into teaching English grammar with reference to Tripoli University* [Unpublished doctoral dissertation]. Liverpool John Moores University, UK. <https://researchonline.ljmu.ac.uk/id/eprint/4795/1/Fadwa%20Rahuma%20%20PhD%20%202016.pdf>
- Sabahi, A. (2019). Enhancing the accuracy of the use of verb tenses by Iranian intermediate EFL students through MALL: The case of English Grammar Ultimate software app. *Journal of Foreign Language Teaching and Translation Studies*, 4(1), 89–104. <https://doi.org/10.22034/efl.2019.225388.1029>
- Saeedi, Z., & Biri, A. (2016). The application of technology in teaching grammar to EFL learners. *Teaching English with Technology*, 16(2), 18–39.
- Stockwell, G. (2008). Usage patterns of mobile learning. *ReCALL*, 20(3), 253–270.
- Store, A., Learn, E. G., Apps, A. M., & Learn, E. G. (2016). eLearning mobile app for Android and iOS "English Grammar Learn & Test." *Database Systems Journal*, 7(2), 10–18.
- Subasini, & Kokilavani. (2013). Significance of grammar in technical English. *International Journal of English Literature and Culture*, 1(3), 56–58. <https://doi.org/10.14662/IJELC2013.022>
- Suwantarathip, O. (2015). Using mobile-assisted exercises to support students' learning. *The Turkish Online Journal of Educational Technology*, 14(1), 163–171.
- Vasileiadou, I., & Makrina, Z. (2017). Using online computer games in the ELT classroom: A case study. *English Language Teaching*, 10(12), 134. <https://doi.org/10.5539/elt.v10n12p134>
- Vu, N. N. (2016). Mobile learning in language teaching context of Vietnam: An evaluation of students' readiness. *Journal of Science, HCMC University of Education*, 7(85), 16–27. <http://www.vjol.info/index.php/sphcm/article/viewFile/24861/21273>
- Yasargil, M. G., Cushing, H., & Apuzzo, M. L. J. (1999). Summa cum laude. *Neurosurgery*, 45(5), 975–976. <https://doi.org/10.1097/00006123-199911000-00001>
- Young, S., & Laxman, K. (2014). Teacher perspectives on the use of mobile devices to improve learner engagement and motivation. *International Journal of Mobile Learning and Organisation*, 8(2), 112–129. <https://doi.org/10.1504/IJMLO.2014.062348>

Nguyen Ngoc Vu is an associate professor of Linguistics at Ho Chi Minh City University of Foreign Languages – Information Technology (HUFLIT), Vietnam, and chairman of STESOL, a TESOL organization set up by the Association of Vietnamese Universities and Colleges. His research interests include computational linguistics, teaching English to speakers of other languages, and computer-assisted language learning.

Truong Le Hai teaches English at Thoai Ngoc Hau high school for the gifted, in Vietnam. She teaches courses in language skills for K-12 students. Her research interests include second language acquisition and educational technology.

Bui Duc Tien has been a lecturer at Ho Chi Minh City University of Education, Vietnam, since 2012. He holds an MA in applied linguistics and a BA in English language teaching. His responsibilities include lecturing and supervising the internship of pre-service translators and interpreters. He is

18 | A descriptive analysis was conducted on the posttest scores of the experimental group (EG) and control group (CG). The results revealed that the posttest mean score for EG (M = 31.19, SD = 3.514) was significantly higher than that of CG (M = 27.39, SD = 3).

also a freelance trainer of TESOL programs. His research interests include material development and curriculum design, ESP for adults, and exam-oriented English programs (e.g., IELTS).

Tran Ngoc Ha is an EFL lecturer and a deputy head of the section of English for non-major students of the Faculty of Foreign Languages at Ho Chi Minh City University of Foreign Languages - Information Technology (HUFLIT) and has been a Microsoft Innovative Educator Expert since 2021. Her research interests focus on TESOL and computer-assisted language learning.
