

# Grammar Reframing: Mobile-Based Instruction's Impact on Student Perception and Performance

Dewa Gede Agung Gana Kumara  
Universitas Pendidikan Ganesha  
[dewagana11@gmail.com](mailto:dewagana11@gmail.com)

## Abstract

*Teaching English grammar remains a significant challenge in language education, with ongoing debates about effective instructional methods. This mixed-methods study investigates the impact of Mobile-Based Instruction (MBI) on students' perceptions and performance in English grammar courses. Twenty-five intermediate-level learners participated, completing pre-tests, post-tests, questionnaires, and interviews. Quantitative results showed a 20% improvement in grammar knowledge, while qualitative data revealed increased motivation and positive attitudes toward grammar learning following the MBI intervention. These findings suggest that integrating mobile technology with traditional teaching methods enhances both understanding and engagement. This study contributes to the growing body of research on technology-enhanced language learning and offers practical insights for educators seeking to modernize grammar instruction.*

**Keywords:** EFL, Grammar mastery, Mobile-based instruction, Perception

Copyright © 2025 by Dewa Gede Agung Gana Kumara. Published by Asosiasi Pendidikan Bahasa Asing Pascasarjana Indonesia



Submitted:  
February, 15<sup>th</sup> 2025

Revised:  
May, 10<sup>th</sup> 2025

Accepted:  
May, 20<sup>th</sup> 2025

How to cite (APA 7<sup>th</sup>)

Kumara, D. G. A. G. (2025). Grammar Reframing: Mobile-Based Instruction's Impact on Student Perception and Performance, *Indonesian Journal of Foreign Language Studies*, 2(1), 1-8.

## 1. Introduction

Teaching English grammar continues to be a salient issue in language education, as evidenced by various studies that highlight the challenges and debates surrounding grammar instruction. In numerous educational settings, traditional methods like Grammar Translation Method (GTM) are still in use (Andriani et al., 2021). When considering Vygotsky and Dewey's thoughts on education, it is important to choose a teaching method that is consistent with them. We can contrast two main teaching methods: implicit and explicit instruction. In language teaching, there is a dispute as to whether adult learners should be taught the same way children learn a language. Some people believe that children only learn through implicit instruction i.e. they figure things out themselves without being told directly what to do. This begs the question of whether an implicit approach would also work for adults. Instructors who rely upon such kind of instruction offer materials to their students without explicitly stating the objectives as well as situating the topics under study. Such students are meant to come up by themselves with conclusions and interpretations while they read among others. Sometimes this kind of learning is known as non-attentional or unaware learning (Ellis, 2009). The thought here is that students will pick up rules and structure of language without being told directly. This approach is often associated with the Natural Language Acquisition Hypothesis suggested by Krashen (1981) which emphasizes unconscious learning in language acquisition. Implicit instruction emphasizes autonomy and independence of learners. On the other hand the explicit

instruction is simply about making oneself clear and direct. It involves stating the rules and features of a language to students followed by practice activities. This kind of instruction relies heavily on obvious explanations and structured drills, as well as corrective feedback whenever necessary. Ellis (2005) claims that explicit knowledge is more useful than implicit knowledge because it is broader, generalizable and practical.

Concerning contemporary approaches like CLT (Communicative Language Teaching), direct grammar instruction has continued to prove its worth by constantly stressing on grammar and vocabulary at language programs (Truong et al., 2022). Various studies have indicated that grammar instruction is significant and it plays a critical role in learning a language but still remains a subject of discussion among educators (Wali et al., 2023). Scholars have sought several ways to address the difficulties associated with teaching grammar. For example, using MOOCs (Massive Open Online Courses) has been suggested as a way that can promote better grammar through providing for more comprehensive and logical knowledge structure in students than traditional classes do (Du & Yiqun, 2022). Similarly, technology like microvideos integrated into English grammar teaching has been seen to enhance classroom efficiency and student engagement (Wang, 2022). Similarly, peer tutoring has been identified as a method for encouraging learner independence in grammatical studies especially within universities (Dewantono & Murtisari, 2023). Furthermore, there have been investigations into the attitudes and beliefs of EFL teachers concerning grammar instruction showing various inconsistencies between notions held by individuals and what actually happens in ELT class based on the CLT approach. (Badash et al., 2020). In addition, there is an emphasis on the need for more grammar teaching as it is believed to be beneficial in boosting the ability of learners to use the target language properly (Fitriyani et al., 2020). Consequently, ongoing discussions and research pertaining to English grammar teaching highlight the importance of employing effective as well as interesting strategies aimed at improving instruction on grammar and language learning outcomes.

In the present moment, teaching English grammar through mobile-based instruction has been gaining momentum because of a probable promise of better learning outcomes. It is backed by research that use mobile-assisted tools in teaching grammar can have huge impact on students' motivation and engagement ultimately resulting in enhanced grammar learning skills as evidenced in Refat et al. (2020). On the other hand, Irawan & Wahyudi (2022) found out through their study that such facilitative gadgets like English Grammar Android App for students could improve their grammar accuracy and overall competency. These research findings indicate how beneficial it can be to teach grammar through a mobile interface. Moreover, integrating technology into language pedagogy reflects how the nature of language education has changed over time. This enables instructors to experiment with different novel ways of teaching grammar other than commonly practiced deductive methods in typical second or foreign language classrooms (Fithriani, 2022). The point being made here is that mobile platforms enable teachers create engaging experiences for students from diverse backgrounds who may have various learning preferences resulting into better grammatical structures among learners.

Lastly, one role played by teachers is implementing evidence-based practices in grammar instruction. Grammar teaching is better when teachers are involved in research and its related activities as shown by studies that indicated those who were closer to research had better grammatical teaching skills thereby underscoring the significance of aligning the lessons with the current pedagogical research (Hwang, 2023). Moreover, within mobile-based learning environments, examining teachers' beliefs and practices regarding grammar instruction can yield insights into effective strategies for integrating technology into grammar teaching (Hu & Liu, 2021). More dynamic and engaging English grammar lessons can be achieved through incorporating mobile-based instruction. Lessons targeted to students' needs and preferences

can be developed by using mobile applications and technology-enhanced tools which would ultimately lead to improved language acquisition and grammar proficiency.

The literature also shows that while considerable research has been done on traditional methods of teaching English grammar and debates surrounding implicit versus explicit instruction there is a need to investigate more about how mobile learning influence grammar acquisition. Previous studies have reported some positive results related to student engagement and motivation using mobile-assisted tools, but there is a lack of comprehensive research on how these tools specifically affect grammar accuracy and performance over the long term. Additionally, the relationship between students' perceptions of grammar learning and their actual performance has not been thoroughly investigated in the context of mobile-based instruction. This research aims to fill this gap by examining students' perceptions of grammar and whether a change in these perceptions can affect their grammar performance, thereby contributing to a more nuanced understanding of how mobile-based learning tools can be effectively integrated into grammar instruction to improve language learning outcomes. As a guideline, the research questions addressed in this study are:

1. What are the students' perceptions of grammar, and to what extent do these perceptions influence their grammar performance?
2. Is there any difference of students' perceptions and grammar performance taught with mobile-based instruction?

## **2. Method**

### **Research design**

The research topics mentioned earlier were explored and addressed in this study through the use of a qualitative research design. Using participant experiences and viewpoints to gain a comprehensive understanding of a phenomenon is the goal of qualitative research (Creswell & Poth, 2018). Data were collected through a combination of interviews, pre-test, post-test, and questionnaires. By integrating findings from these approaches, the study aimed to provide a comprehensive understanding of the relationship between learners' perceptions of grammar, their actual performance in grammar, and the influence of mobile-based instruction

### **Participants**

Participants in this study were 25 students of English Language Education Study Program enrolled in a Communicative English Grammar Course. The class had 4 male and 21 female students.

### **Research instrument**

The students were administered two examinations during the semester, each comprising 25 multiple-choice questions assessing their proficiency in English grammar, two open-ended questions, and 10 Likert scale questions gauging students' perception of grammar. The pre-test was administered on the second day of class, while the post-test was administered on the final day. In an effort to avoid repetition, the pre-test questions focused on material covered in class, whereas the post-test questions featured the same content but rephrased. The open-ended questions and Likert scale questions remained consistent across both tests, allowing for comparisons of the learners' perceptions regarding grammar between the pre-test and post-test administrations.

### **Data Analysis**

Quantitative data from the pre-tests and post-tests were analyzed using descriptive statistics to measure changes in grammar proficiency. Likert-scale questionnaire responses were compared pre- and post-intervention to identify shifts in learners' attitudes. Qualitative data from interviews and open-ended questions were analyzed thematically to uncover patterns

and insights related to learners' perceptions and experiences with mobile-based grammar learning.

### 3. Findings and Discussion

#### Multiple choice questions

The multiple-choice questions were created to assess students' initial grammar knowledge and track their learning progress throughout the semester. Most questions were related to coursebook topics, except for question number 20 on both tests. This particular question was designed to determine if students could apply analogical reasoning to answer a question not directly covered in class. Table 1 presents the total and average grades for the pre- and post-tests, and the bar chart illustrates the improvement in students' grammar skills over the semester.

Table 1. The mean of students' improvement in grammar course

	Pre test	Post test
Total grade	285	387
Mean	12.44	16.50

The participants in this study were EFL learners, and their initial grammar knowledge varied. As shown in the table, their average grammar score was 12.44 at the beginning of the course. However, after using mobile-based instruction and familiarizing students with grammatical terms and concepts, the average score increased to 16.50 by the end of the semester. While this increase might seem modest, it demonstrates that direct, mobile-based learning can effectively improve grammatical knowledge. This suggests that students were capable of constructing correct sentences, but they struggled with understanding specific grammatical terms. For example, in question 7, nearly 63% of students incorrectly identified "gently" as an adjective. However, in question 25, when asked to choose between an adjective, adverb, or comparative form, all students correctly selected "adverb." Post-test results for similar questions improved significantly, with 85% of students answering correctly. This indicates that while students could distinguish correct from incorrect sentences, they needed better familiarity with grammar terminology. An interesting finding was that two students wrote on their pre-test sheets that they had never been explicitly taught grammar in their high schools because implicitly taught to language skills. This feedback is invaluable for teachers, providing insights that can inform the design of effective teaching materials. It helps teachers understand how to build on students' existing knowledge, adjust assignments, and identify areas where mobile-based instruction is needed.

#### Sample Question

This question was intentionally crafted to assess whether students could apply analogical reasoning to select the correct answer. The class had not covered the structure of passive causative sentences, making this question test students' ability to infer the proper grammatical structure from context. In the pre-test, the majority of students, around 79%, incorrectly chose the answer "D" (past tense), while only 21% correctly identified "B" (passive) as the right answer.

- (1) "She got her car fixed yesterday." The underlined verb is ...

a. finite

b. passive

c. intransitive

d. past tense

This pattern of incorrect responses suggested that students were likely associating the "-ed" ending of "fixed" with past tense without considering the sentence's passive construction. This indicated a gap in their understanding of grammatical structures were not covered in class. By the post-test, the results had improved significantly. Approximately 53% of students correctly selected the passive voice as the correct answer. The use of mobile-based learning tools likely provided students with additional practice and exposure to different grammatical forms, facilitating a deeper understanding. Interactive exercises, instant feedback, and the ability to revisit challenging concepts through mobile apps may have contributed to this improvement. Furthermore, it is interesting to note that the context of the verb ending "-ed" might have influenced students' choices. In the pre-test, students may have quickly associated "-ed" with the past tense without considering the passive voice. If the verb had been something like "broken" instead of "fixed," the responses might have been different, as students would have had to consider the verb's function within the sentence more carefully. This insight underscores the importance of contextualized grammar instruction and the effectiveness of mobile-based learning in helping students develop a more nuanced understanding of English grammar. By incorporating technology, teachers can provide a more engaging and effective learning experience that addresses the specific needs and challenges of EFL learners.

### Likert questions

In the second section of the questionnaire, students were presented with 10 Likert scale questions, each rated on a 5-point scale, to gauge their attitudes toward grammar before and after

the course. This analysis highlighted the most significant changes in their perceptions.

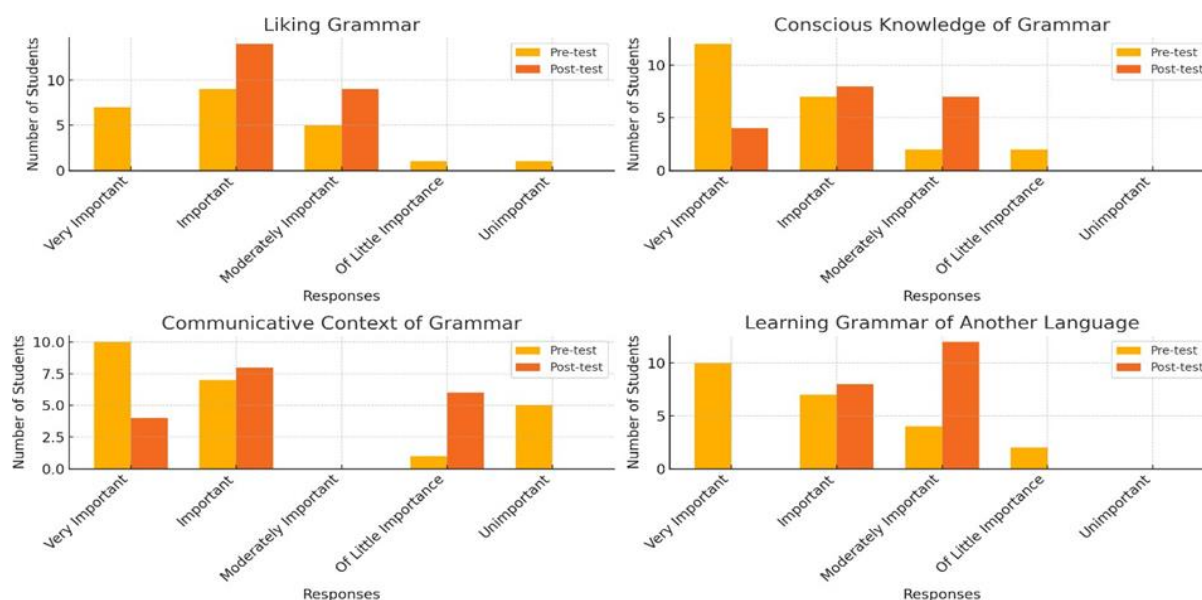


Figure 1. Likert scale responses before and after course about liking grammar, conscious knowledge of grammar, communicative context of grammar, and learning grammar of another language

Question 1: Liking Grammar Initially, when asked if they liked grammar, the responses varied: 7 students found it "very important," 9 rated it as "important," 5 indicated it was "moderately important," 1 considered it "of little importance," and 1 student deemed it "unimportant." These responses, gathered on the second day of the semester, likely reflect

their initial emotions towards grammar, possibly influenced by limited prior exposure to grammar- focused classes. By the end of the course, attitudes had shifted: no students selected "very important," 14 chose "important," and 9 marked it as "moderately important," with no one considering it of little or no importance. This shift suggests students' extreme views softened, converging towards a more moderate appreciation of grammar. Question 2: Conscious Knowledge of Grammar, the second question assessed the importance of conscious knowledge of grammar. Pre-test responses were distributed as follows: 12 students chose "very important," 7 picked "important," 2 indicated "moderately important," and 2 selected "of little importance." Post- questionnaire results showed a shift to 4 "very important," 8 "important," and 7 "moderately important." This change indicates an increased awareness and appreciation for conscious grammar knowledge over the semester. Question 3: Communicative Context of Grammar, when asked about the importance of grammar in a communicative context, 10 students initially found it "very important," 7 rated it "important," 1 selected "of little importance," and 5 considered it "unimportant." After the course, these views changed to 4 for "very important," 8 for "important," and 6 for "of little importance." This shift highlights a nuanced understanding of grammar's role in communication. Question 4: Learning Grammar of Another Language, regarding the role of learning another language's grammar to improve their own, 10 students initially rated it as "very important," 7 as "important," 4 as "moderately important," and 2 as "unimportant." Post- questionnaire responses showed 8 choosing "important" and 12 "moderately important," reflecting a moderated view and recognition of shared challenges in learning grammar across language.

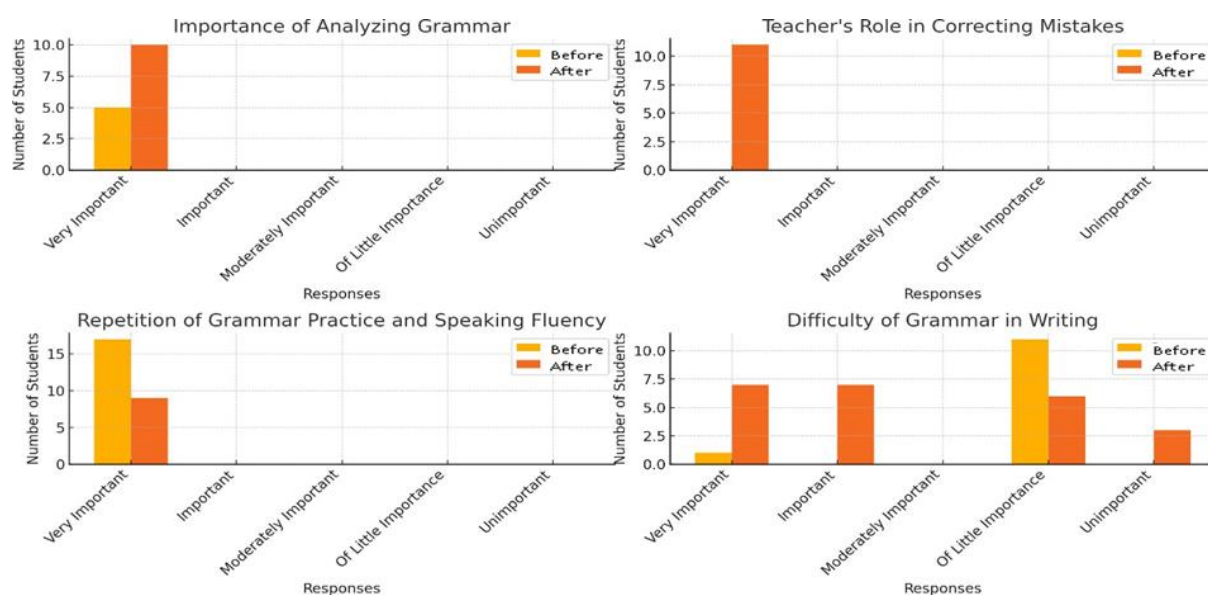


Figure 2. Likert scale responses before and after course about importance of analyzing grammar, teacher's role in correcting mistake, repetition of grammar practice and speaking fluency, difficult of grammar in writing

Question 5: Importance of Analyzing Grammar, the importance of analyzing grammar saw significant change, doubling from 5 in the pre-test to 10 in the post-test, indicating increased appreciation for grammatical analysis. Question 6: Teacher's Role in Correcting Mistakes, on whether teachers should correct students' mistakes unless they interrupt communication, no students found it "very important" initially, but this number rose to 11 in the post-questionnaire. This suggests heightened awareness of the importance of grammar correction. Questions 7: Repetition of Grammar Practice and Speaking Fluency, students' perceptions of the necessity for repeated grammar practice and its importance for speaking fluently were high initially, with 17 marking it "very important." Post- course results showed



a more moderate view, with 9 still finding it "very important" and increased responses for "important." Question 8: Difficulty of Grammar in Writing, when asked if grammar was the most difficult aspect of writing, only one student initially rated it as "very important," and 11 found it "of little importance." By the post- course, 7 students rated it as "very important," 7 as "important," 6 as "of little importance," and 3 as "unimportant." This suggests the course helped build confidence in using grammar for writing.

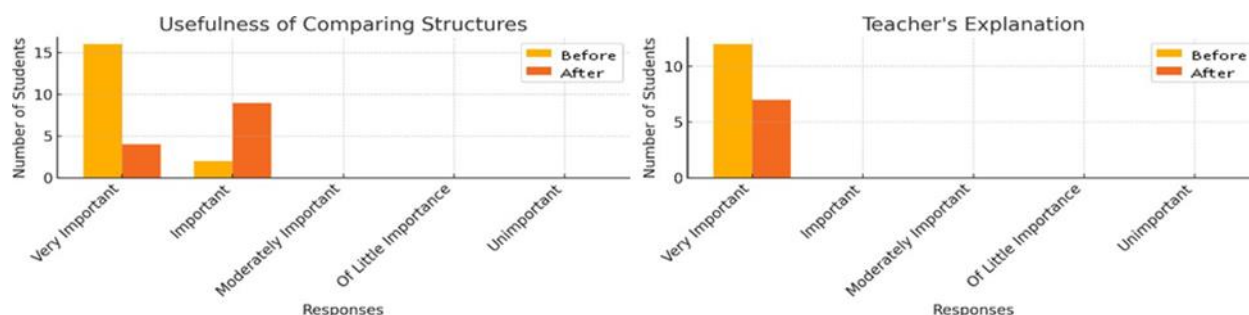


Figure 3. Likert scale responses before and after course about usefulness of comparing structure and teacher's explanation

Question 9: Usefulness of Comparing Structures, regarding the usefulness of comparing and contrasting structures, 16 students initially found it "very important," and only 2 "important." Post- questionnaire, these views shifted significantly, with 4 rating it "very important" and 9 "important." Question 10: Teacher's Explanation, the importance of the teacher's explanation in understanding grammar decreased from 12 students finding it "very important" in the pre-test to 7 in the post-questionnaire. The Post-questionnaire results indicate that students gained metalinguistic awareness, not only of English grammar but also of other languages' grammar, enhancing their understanding of their own language.

### Open-ended questions

The study demonstrates how mobile-based instruction significantly influences EFL learners' perceptions of language learning and proficiency. Through open-ended questions, students reflected on their concepts of "learning" and "knowing" a language before and after the grammar course, highlighting the impact of mobile-based instruction. Initially, students associated "learning" with grammar rules, syntax, and vocabulary, emphasizing foundational linguistic elements. One student explained, "For me, learning a language means picking up grammar rules, sentence structure, and vocabulary," indicating how their understanding was shaped by the course content delivered through mobile devices.

In contrast, they viewed "knowing" a language as fluency in speaking and writing without errors, influenced by interactive exercises and feedback facilitated by mobile apps. Another student noted, "I think knowing a language is about being able to speak and write fluently without making mistakes," reflecting the practical application of language skills supported by technology. Nearly 80% of students identified fluency and accurate writing as crucial aspects of "knowing" a language, with mobile-based learning tools aiding their proficiency development. One student emphasized, "Fluency and writing correctly are really important for truly knowing a language," indicating how technology enhanced their language practice and assessment. Some students linked "knowing" to understanding the meaning and semantics of the language, with mobile-based resources facilitating deeper comprehension beyond structural aspects. As one student expressed, "To me, understanding the meaning behind words is what knowing a language is all about," showcasing the role of interactive content in broadening their linguistic understanding.

Moreover, students highlighted the significance of cultural understanding in language proficiency, with mobile-based platforms integrating cultural contexts into their learning experience. "I think understanding the culture is a big part of being good at a language," one student noted, reflecting on how technology-supported activities explored cultural nuances. Post-questionnaire responses revealed insights into learning a language's culture and customs, showing a broader awareness developed during the course with the aid of mobile-based instructional materials. "I've learned that learning a language means also learning about its culture and traditions," a student reflected, illustrating how technology facilitated exploration beyond language mechanics. This cultural perspective became relevant as students compared English with other languages, leveraging technology to explore connections between language use and cultural practices. "When I compare English with other languages, it helps me understand how language and culture are connected," remarked another student, highlighting the role of mobile-based resources in fostering cultural competence. A notable shift observed in post-questionnaire responses was a more balanced view of language acquisition, shaped by the diverse learning opportunities provided through mobile-based instruction. Students moved from strict definitions focused solely on vocabulary, grammar, and slang to a nuanced understanding aligned with everyday language use. "I realized we should focus on how people actually use the language every day, not just vocabulary and grammar," one student explained, reflecting on interactive and contextualized learning experiences facilitated by mobile technology.

This shift was evident in their use of technical terms such as learning the function, analyzing language, morphology, and phonetics, indicating enhanced linguistic awareness compared to the pre-test phase, supported by mobile-based tools that enabled deeper exploration of language structures. The study underscores how mobile-based instruction shapes EFL learners' perceptions of language learning and proficiency by providing interactive and engaging learning experiences that integrate cultural contexts and practical communicative skills. This nuanced perspective highlights the transformative role of technology-enhanced language education in promoting comprehensive language acquisition among students.

The findings of this study demonstrate a significant improvement in EFL learners' grammar knowledge following mobile-based grammar instruction, with average test scores increasing from 12.44 in the pre-test to 16.50 in the post-test. This improvement aligns with recent research by Kukulska-Hulme (2020) and Chen & Hsu (2021), who emphasize that mobile learning environments offer flexible, personalized, and context-rich opportunities that enhance language retention and understanding. Notably, while students initially struggled with grammatical terminology—such as confusing adverbs and adjectives—they showed marked improvement in distinguishing correct from incorrect sentence structures after the intervention. This supports Ellis's (2017) argument that explicit grammar instruction combined with meaningful practice fosters both declarative and procedural knowledge. Furthermore, the study's inclusion of analogical reasoning tasks, such as identifying passive causative constructions not directly taught in class, revealed that mobile-based learning helped students develop inferencing skills and a deeper understanding of grammar beyond rote memorization, echoing Godwin-Jones's (2018) findings on the benefits of contextualized grammar instruction through technology.

#### **4. Conclusion and suggestion**

Mobile-based grammar instruction facilitated a deeper understanding of syntax, comparisons of English grammar with other languages, and improved sentence analysis skills among foreign language learners. It fostered critical thinking and heightened awareness of



morphosyntactic structures, enhancing overall linguistic performance. The study underscores the positive impact of mobile-based instruction on grammar proficiency and perceptions, highlighting the potential of technology-enhanced education. By addressing grammatical terminology challenges and integrating cultural and communicative aspects, teachers can create more effective and engaging learning experiences. The findings emphasize the importance of a balanced approach that combines technology with essential teacher contributions, paving the way for holistic and comprehensive language education.

## References

- Andriani, A., Yuniar, V., & Abdullah, F. (2021). Teaching English grammar in an Indonesian junior high school. *Al-Ishlah: Jurnal Pendidikan*, 13(2), 1046-1056. <https://doi.org/10.35445/alishlah.v13i2.956>
- Badash, M., Harel, E., Carmel, R., & Waldman, T. (2020). Beliefs versus declared practices of English as a foreign language (EFL) teachers regarding teaching grammar. *World Journal of English Language*, 10(1), 49. <https://doi.org/10.5430/wjel.v10n1p49>
- Busbus, S., Pelila, J., Tabag, L., Bannawi, A., Copete, J., & Bonilla, F. (2021). The focus of grammar in international examinations. *Journal of Language Education and Educational Technology (JLEET)*, 6(2), 72. <https://doi.org/10.33772/jleet.v6i2.20578>
- Chen, C.-M., & Chung, C.-J. (2008). Personalized mobile English vocabulary learning system based on item response theory and learning memory cycle. *Computers & Education*, 51(2), 624–645. <https://doi.org/10.1016/j.compedu.2007.06.011>
- Dewantono, S., & Murtisari, E. (2023). Perceived effects of peer teaching: Does it enhance learner autonomy in grammar learning? *LLT Journal: A Journal on Language and Language Teaching*, 26(1), 346-364. <https://doi.org/10.24071/llt.v26i1.5333>
- Du, M., & Yiqun, Q. (2022). Application of massive open online course to grammar teaching for English majors based on deep learning. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.755043>
- Ellis, R. (2005). Measuring implicit and explicit knowledge of a second language: A psychometric study. *Studies in Second Language Acquisition*, 27(2), 141-172.
- Ellis, R. (2009). Implicit and explicit learning, knowledge and instruction. In R. Ellis et al. (Eds.), *Implicit and explicit knowledge in second language learning, testing and teaching* (pp. 3-25). Multilingual Matters.
- Ellis, R. (2017). *Grammar teaching—Practice or consciousness-raising?* In *The Cambridge Handbook of Language Learning* (pp. 123-145). Cambridge University Press.
- Fithriani, R. (2022). Communicative game-based learning in EFL grammar class: Suggested activities and students' perception. *JEELS (Journal of English Education and Linguistics Studies)*, 5(2), 171-188. <https://doi.org/10.30762/jeels.v5i2.509>
- Fitriyani, A., Warni, S., & Kaniadewi, N. (2020). English as a foreign language teachers' beliefs about grammar teaching in classroom. *ELLTER Journal*, 1(1), 12-24. <https://doi.org/10.22236/ellter-j.v1i1.4910>
- Hwang, H. (2023). Is evidence-based L2 pedagogy achievable? The research–practice dialogue in grammar instruction. *Modern Language Journal*, 107(3), 734-755. <https://doi.org/10.1111/modl.12864>

- Irawan, R., & Wahyudi, U. (2022). Using the Tsanawiyah English grammar Android application to improve grammar accuracy and build Islamic values. *KNE Social Sciences*. <https://doi.org/10.18502/kss.v7i14.12020>
- Ivankova, N., Creswell, J., & Stick, S. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods*, 18(1), 3-20. <https://doi.org/10.1177/1525822x05282260>
- Krashen, S. (1981). *Second language acquisition and second language learning*. Pergamon.
- Kukulksa-Hulme, A. (2020). Mobile and personal learning for newcomers to a city. *Electronic Journal of Foreign Language Teaching*, 17, 93–103. <https://doi.org/10.56040/agkh1717>
- Refat, N., Hafizoah, K., Rahman, A., & Razali, R. (2020). Measuring student motivation on the use of a mobile-assisted grammar learning tool. *PLOS One*, 15(8), e0236862. <https://doi.org/10.1371/journal.pone.0236862>
- Truong, T., Noordin, N., Ismail, L., & Yahya, Y. (2022). Revisiting views of grammar and grammar learning strategy use: A multiple case study in Vietnam. *Language Value*, 15(1). <https://doi.org/10.6035/languagev.6124>
- Wali, O., Khan, S., Zafir, K., & Alokozay, M. (2023). Analyzing the effectiveness of grammar translation method (GTM) and communicative language teaching (CLT) employed on undergraduate students of Nangarhar University, Afghanistan. *African Journal of Humanities and Social Sciences*, 3(1). <https://doi.org/10.51483/afjhss.3.1.2023.1-9>
- Wang, X. (2022). Methods of improving and optimizing English education in colleges and universities assisted by microvideo technology. *Scientific Programming*, 2022, 1-8. <https://doi.org/10.1155/2022/1291336>
- Spada, N., & Lightbown, P. M. (1999). Instruction, first language influence, and developmental readiness in second language acquisition. *Modern Language Journal*, 83, 1-22.
- Tomlinson, B. (2001). Materials development. In C. Carter & D. Nunan (Eds.), *The Cambridge guide to teaching English to speakers of other languages* (p. 66). Cambridge University Press.
- Tomlinson, B. (2011). *Materials development in language teaching*. Cambridge University Press.
- Dudley-Evans, T., & St John, M. J. (1998). *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge University Press.
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning-centered approach*. Cambridge University Press.
- Ur, P. (1996). *A course in language teaching: Practice and theory*. Cambridge University Press.
- Yalden, J. (1987). *The communicative syllabus: Evolution, design, and implementation*. Prentice Hall International.