

Research in English Language Pedagogy (2025) 13(2): 130205



DOI: 10.71673/relp.2025.1104881

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Original Research

Effect of Using Mobile-based Online Assignments on Grammar Test Performance among Iranian Elementary EFL Learners

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Submission date: 10-03-2024

Acceptance date: 06-12-2025

Abstract

This research aimed to investigate how Iranian students of English as a foreign language (EFL) utilise online mobile-based assignments to enhance their grammar skills and mindset. Thirty Iranian elementary EFL learners (male and female), ranging in age from eleven to sixteen, were chosen at random using convenience sampling to achieve this goal. Next, they were randomly assigned to one of two groups: either the experimental group (comprising 15 learners) or the control group (also comprising 15 learners). Primary English as a Foreign Language (EFL) students were randomly assigned to take the Oxford Quick Placement Test (OQPT). For one week, students in the experimental group used Live Worksheets, an online mobile grammar tool, to practice their comprehension of simple present, count, and non-count nouns; in contrast, students in the control group were given more conventional, pen-and-paper grammar activities. To gather data, two post-tests were administered: one immediately after therapy to assess immediate effects and another two weeks later to evaluate retention and transfer of knowledge. Using SPSS, we conducted t-tests on the gathered data, utilising both paired and independent samples. According to the results, using online mobile-based grammar assignments has a substantial effect on EFL learners' ability to acquire grammatical skills. Additionally, the results indicated that participants generally considered mobile-based grammar assignments a good idea. Thus, this study's findings could provide educators, policymakers, and researchers with a better understanding of how online, mobile-based assignments affect students' learning of grammar skills.

Keywords: Elementary Learners, Grammar, Live Worksheets, Mobile, Online Assignment, Traditional Assignment

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1. Introduction

In our country, technology is ubiquitous; people use a wide range of devices, including phones, laptops, desktops, tablets, smartboards, and TVs, to access and display information. Teachers utilise this technology to make distance learning more accessible, engaging, and enjoyable (Fleming, 2020). The old lecture method of instruction has given way to classes that are considerably more dynamic and interesting for both students and instructors. According to The Straits Times (2021), interactive learning makes the classroom a more engaging place for everyone by getting students more involved in the subject matter.

In today's world, it is uncommon to see learners without access to technical devices, such as mobile phones, tablets, or laptops. Mobile phones are used as communication tools for students, serving as devices that are primarily owned and used in their daily lives (Saputra & Kurniawati, 2021). Musti Rao (2017) believes that the proper use of technology yields beneficial outcomes for both instructors and students. People who are provided with technology-driven educational methods can submit their assignments promptly and achieve superior academic performance compared to those who do not utilize technology. Instructors can enhance the learning experience by providing help and making it more engaging and enjoyable for pupils. The media can also be utilized to enhance students' proficiency in grammar. Students and teachers from various parts of the world can access educational materials using mobile devices. Not only do they access content, but they also engage in conversations and share information with other learners. Mobile learning facilitates peer-to-peer learning. It also enables the transfer of existing materials into mobile learning applications, facilitating boundary bridges.

The significance of grammar in the process of acquiring English language skills is essential, as it provides the structural basis for categorising words, word combinations, and rules for constructing accurate and meaningful sentences. Nevertheless, numerous EFL learners face difficulties while acquiring grammatical proficiency, leading to common mistakes in various areas, including tenses, aspects, the copula 'be', adverb assignments, and adjective phrases. Consequently, EFL learners may have difficulties in acquiring proficiency in English grammar (Hanh & Chau, 2021). Hence, it is crucial to employ new methods to increase learner participation and enhance academic performance, thereby improving the effectiveness of grammar instruction. This is because students actively

participate in their own learning process (Thirusanku & Melor, 2014). Unfortunately, the reality is that acquiring knowledge of grammar is neither enjoyable nor straightforward, and teaching this essential skill differs considerably from teaching other skills (Kashanizadeh & Shahrokhi, 2021).

The use of online assignment allocation systems is increasing, providing advantages for both students and English instructors. These instruments can help students in their learning process and allow them the flexibility to participate in grammar projects and receive feedback at their preferred time. Moreover, the use of online assignments might enhance student completion rates by focusing on their interest in technology. Furthermore, instructors can use online assignments to assess students' grammar performance and allow parents to check on their kids' progress (Rao, 2017).

Mobile applications are an integral aspect of our social lives today; thus, it can be advantageous to embrace them for language acquisition (Chen & Kessler, 2013). Blended learning (BL), which combines online and traditional learning methods, is considered beneficial for language classes. Attracting and motivating students to study grammar better can be achieved through blended learning, a practical and effective strategy. Numerous experts have endorsed m-learning and online mobile-based assignments for EFL instruction (e.g., Collins, 2005; Guerrero et al., 2010; Kukulska-Hulme, 2006; Ogata et al., 2006; Sarica & Cavus, 2009), but many teachers are still hesitant to use them. M-learning, which combines communication and technology, has recently emerged as a powerful awareness-raising tool for learning "anywhere, anytime" (Metcalf, 2006). This research aims to examine the possibilities and viability of completing online assignments through mobile devices and how using a mobile platform accessible over the Internet for homework affected the development of second language learners' command of English grammar. The primary goal of the study was to investigate how Iranian elementary school EFL students learned count and non-count nouns, as well as the present tense, through online mobile-based tasks. The researcher utilised the website "Liveworksheets.com" for this specific objective.

The significance of grammar in acquiring the English language is essential, as it creates the fundamental framework for identifying various word types, grammatical constructions, and rules necessary for constructing accurate and coherent sentences. Nevertheless, a significant number of English as a Foreign Language (EFL) learners face

challenges related to their grammatical proficiency, resulting in frequent errors in various domains, including, but not limited to, tenses, aspects, the copula 'be', adverb placement, and adjective phrases. Consequently, acquiring English grammar is a significant challenge for learners of English as a Foreign Language (EFL) (Hanh & Chau, 2021). To enhance the efficacy of grammar instruction while promoting student achievement, it is essential to employ creative methods that actively engage learners in the learning process (Thirusanku & Melor, 2014).

2. Literature Review

Similar to other parts of life, educational environments cannot function without the use of technology (Hashemifardnia et al., 2018). "Thanks to recent innovations in technology, technical support is now available through mobile devices like phones and tablets in addition to traditional computer platforms. With their integrated computer functionalities, these portable gadgets have made technology more accessible in many classrooms." (Hashemifardnia et al., 2018, p. 257). The use of mobile devices in the classroom has altered both the way students learn and the content they cover. Indeed, according to Rosell-Aguilar (2021), mobile devices have a positive impact on the development of language abilities and serve as helpful tools for language learning.

According to Kukulska-Hulme and Lee (2019), "mobile learning" refers to the act of acquiring knowledge and imparting education using a mobile device. Salami (2021) defines mobile learning, or m-learning, as an educational approach that allows students to acquire knowledge and skills at any location and at any time. According to Woodill (2011), mobile learning can enhance motivation, efficiency, and retention in language acquisition. Several additional scholars concur that mobile learning has the potential to enhance students' recall of grammar and their motivation (e.g., Chen, Liu, & Hwang, 2016; Su & Cheng, 2015; Vibulphol, 2016).

According to Greenbaum (1996), syntax is the building block of grammar, describing how phrases, clauses, and sentences work together. Word formation, phonetics, phonology, orthography, semantics, pragmatics, vocabulary, and morphology are some additional linguistic components that may be covered. Throughout this piece, syntax and grammar are used synonymously. Two main branches exist within the field: descriptive and prescriptive

grammar. While prescriptive grammar is concerned with determining right and wrong, descriptive grammar offers an impartial depiction of the laws of the language.

Additionally, it provides guidance on using both standard and non-standard English, as well as on specific phenomena. According to Azar (2007), grammar is there to help students understand what language is all about: the regular patterns that make words understandable when read, heard, written, or spoken. People would have to rely on specific words or sounds, pictures, or nonverbal cues to convey meaning if grammar didnot exist.

Canale and Swain (1980) assert that the teaching and acquisition of grammar are fundamental components of language learning. Teachers should, therefore, encourage children to understand this essential data by applying new technology. Mobile phones, tablets, and iPad applications offer students a more efficient means of studying the English language, particularly grammar. Students are allowed to assess their comprehension of various topics, including verbs, grammar concepts, prepositions, tenses, and others (Wang, 2016).

An online assignment refers to a task delivered on the Internet using a full homework system. This system provides students with their assignment issues and offers instructional support for each difficulty. The system provides instant feedback, indicating whether the answer is correct or incorrect, along with diagnostic comments to guide the user. It also generates more problems that are similar to the original ones, allowing for repeated practice. The system offers step-by-step interactive answers, similar examples, online electronic textbooks, and video lectures as well (Shane Brewer, 2009).

Zhang (2013) asserts that assignments play a vital role in connecting the processes of teaching and learning. The often-employed strategy seeks to enhance student motivation, self-directed learning, and academic success (Cooper et al., 2006; Dettmers et al., 2011). The educational community widely recognizes that student assignments can further the learning process in the classroom. This is achieved by providing students with opportunities to apply their knowledge, enhance their engagement in the learning process, and develop self-discipline and responsibility (Vicky et al., 2016). Three factors are evaluated: the acquisition of basic knowledge, the strengthening of competencies, and the fostering of learning literacy to enhance the success of the assignment. The assignment design, assignment, and completion processes represent separate facets of the assignment implementation process.

Interactive learning facilitates enhanced cognitive development in pupils, enabling them to cultivate critical thinking skills, problem-solving abilities, and wider access to educational resources (Novikova et al., 2020). Multiple studies have demonstrated that mobile learning enhances academic achievement, including increased student engagement, improved information retention, personalised learning experiences, greater accessibility to educational resources, and enhanced peer collaboration. According to Demir and Akpinar's (2018) findings, learning is more lasting when conducted using a mobile device. Furthermore, the use of social networks and mobile technologies has a good influence on students' academic performance. They asserted that mobile learning is more advantageous and conducive to learning than books. Research findings indicate that mobile learning offers several advantages to students. These benefits include rapid access to information, diverse learning methods, contextual learning, autonomy in the learning process, support and motivation, enhanced course participation, a strong inclination to utilize the material, and significant improvements in academic performance.

Numerous studies have looked at how mobile devices can improve various aspects of language acquisition, including reading, writing, listening, and pronunciation such as by providing interactive language apps that offer real-time feedback, facilitating access to multimedia resources like videos and podcasts for immersive listening experiences, enabling personalized vocabulary practice through gamified learning, and allowing for immediate pronunciation practice with voice recognition technology. Mobile applications can help with language acquisition (Shahrokhi, 2021). Janfeshan and Sharhan (2023) used a quasi-experimental approach to investigate the impact of using a grammar app on EFL students' comprehension. In doing so, researchers enrolled fifty Iranian female students studying at an intermediate level for this research. After that, they were divided into two groups: one to act as a control and another to undergo the experiment. Before the students received individualised instruction, they were required to complete a grammatical evaluation to determine their baseline level. Following the pre-test, the experimental group used the grammatical learning application on their mobile devices to receive grammatical teaching during each treatment session. The conventional approach to teaching grammar was used in the control group. To determine the success of the intervention, both groups took a post-test measuring their grammatical skills after completing 14 lessons. The results showed that the experimental group did considerably better on the follow-up exam.

Kourang Beheshti and Sadeghi (2019) investigated how intermediate EFL students in Iran learned to use conditional sentences with the aid of a smartphone app named Cushy Grammar. The participants were divided into three groups: application learning, blended learning, and a control group. The blended group received both traditional and app-based learning strategies, whereas the application group relied only on the app for their course materials and instructions. Traditional methods were used only by the control group. After comparing the post-test scores of the three groups, the data showed that the application learning group performed the best. The results suggest that EFL students can benefit from using a mobile app to learn conditional phrases.

The primary objective of this study was to compare learners who used Online Mobile-Based Assignments in their learning process with those who relied on traditional classroom assignments. The subsequent research inquiry and assumption were formulated:

- 1. Does Online Mobile-Based Assignment improve the grammar test performance of Iranian elementary EFL learners?
- 2. Is there any significant difference between students' performance on grammar tests using online mobile-based assignments and traditional ones?

3. Methodology

3.1. Design and Context of the Study

A quantitative design with a quasi-experimental research method, utilising an immediate and delayed post-test framework, was adopted for this study. The problem of assigning students into groups equally in educational environments led the researcher to select the quasi-experimental design. The study was conducted in Jahad Language Institute of Isfahan, Iran, in 2024.

3.2. Participants

A sample of thirty Iranian male and female learners was selected. The participants were randomly recruited from EFL learners enrolled at the Jahad Language Institute in Isfahan. According to the OQPT scores, all participants demonstrated a basic level of English proficiency. The current study's sample was allocated randomly into two groups: an experimental group and a control group, each consisting of 15 learners. The individuals ranged in age from 11 to 16, and all of them were proficient in the Persian language. The

researchers assessed the participants' overall proficiency and homogeneity by administering the Oxford Quick Placement Test. The placement test results of the participants ranged from 18 to 29, indicating an elementary level. Out of the total group of 50 elementary students, a subset of 30 students was selected as the study participants based on their OQPT scores.

3.3. Instruments

3.3.1.Oxford Quick Placement Test (OQPT)

The Oxford Quick Placement Test version 2 (UCLES, 2001) was administered to confirm that the subjects possessed an elementary level of competency. The minimum and maximum scores required for the elementary level were 18 and 29 out of a total of 60. Participants whose results fell below or exceeded the required scores were eliminated from the study.

3.3.2. Grammar Post-Tests

The researcher developed and administered two grammar tests, referred to as immediate post-test (to determine if there was an immediate change or improvement as a result of the intervention) and delay post-test (to evaluate how well participants retain and transfer the information or skills learned during the intervention and to determine if there are sustained changes or improvements over time) to evaluate the grammatical proficiency of the participants following the treatment. Two post-tests of grammar were created based on the learners' coursebook. Each test consisted of 27 items, including multiple-choice, fill-in-theblank, ordering, and completion questions. Participants were given 45 minutes to complete each. The total score amounted to 27, with each item carrying a value of one point. The tests underwent a content validity assessment conducted by two experts before being administered to the subjects. The format of the initial and subsequent post-tests on grammar was consistent; however, the content differed to reduce the potential influence of the retention effect. Furthermore, to assess the reliability of the post-tests, the internal consistency reliability of both assessments was evaluated by Cronbach's alpha coefficient. The immediate and delayed post-test reliability coefficients were 0.79 and 0.87, respectively.

3.3.3. LiveWorksheets Application

LiveWorksheets helps instructors design and develop interactive worksheets for their students. The web-based program, "Liveworksheet.com," is a platform that enables learners to engage with interactive worksheets and methodically correct printed worksheets in various formats, including doc, pdf, and jpg. The application includes various question forms, including multiple-choice, short-answer, true-false, and matching questions. The worksheets facilitate independent study for learners (Prabowo, 2021).

Liveworksheet is a widely utilized educational resource that aims to enhance the effectiveness of learning activities. Liveworksheet has undergone evolution alongside technological advancements, transforming from a traditional printed instructional material into an electronic format. In addition to presenting learning content, interactive visuals, games, and videos can effectively engage students and enhance their comprehension of English. Liveworksheet is a digital platform that incorporates various multimedia elements such as text, images, videos, and animations, which is highly helpful in preventing student boredom. The utilization of Liveworksheet is relatively straightforward. Students proceed by accessing the worksheet and thereafter engaging in the practice. Once they have completed their assignments, they should click the "Finished" button. Subsequently, the assignments are forwarded to the instructor's email address, and the instructor employs an automated system to assess their students.

3.4. Data Collection

The study employed a quasi-experimental research methodology, utilizing a first-post-test and second-post-test design. Before beginning this study, the homogeneity of the participants' English language skills was checked using the OQPT. The participants were selected using convenience sampling and subsequently divided into two groups: an experimental group and a control group, each comprising 15 students. The treatment consisted of two sessions, each lasting ninety minutes. The teacher was to instruct both groups using the *Teen to Teen 2* book, unit 5, focusing specifically on grammar. Additionally, the teacher was assigned to develop online grammar worksheets through "Liveworksheet.com."

3.5. Procedure

The experimental group was administered online grammar assignments as an intervention for one week. The experimental group was requested to install Eitta, a mobile application, on their cell phones. They were then required to use this application to receive online assignment links. The results of these assignments were then sent to the teacher via email.

The control group was given traditional paper-and-pencil grammar assignments. Participants were instructed to access the provided links on their mobile devices during each treatment session. They were then expected to engage in exercises related to the selected tense, count and non-count nouns, and do certain assignments.

The first grammar test (immediate post-test) was conducted three weeks after instruction on count and non-count nouns and basic present tense sentences (unit five of the course book). Subsequently, following a two-week interval, the second grammar test (delayed post-test) was conducted to assess the long-term impact of online grammar assignments on participants' grammar knowledge and evaluate how well participants retained and transferred the simple tense, count, and non-count nouns learned during the intervention. No pre-test was conducted because elementary students lacked prior knowledge of the simple present tense, count nouns, and non-count nouns.

3.5. Data Analysis Procedure

The mean scores of the groups on the OQPT were analyzed to determine if there were any notable disparities in the language proficiency levels of the learners within the groups. The data collected from both grammar examinations was analyzed using SPSS 27 software, employing paired samples and independent samples t-tests. These two statistical procedures were used to compare the pre-test and post-test of the experimental group (paired samples t-test) and compare the post-tests of both groups (independent samples t-test)

4. Results

4.1. Results of Research Question One

The purpose of this study was to examine the impact of online mobile-based assignments on the grammar test scores of Iranian elementary EFL students. A paired sample t-test was employed to compare the experimental group's first and second post-tests.

Table 1.Descriptive Statistics of Grammar Test Scores of Experimental Group

	M	N	SD	
First Post-Test (Immediate)	23.80	15	2.33	
Second Post-Test (Delayed)	24.20	15	2.7	

Table 1 shows that the experimental group achieved a higher second-grammar posttest score. A paired sample t-test was administered to determine whether there was a statistically significant difference between the first and second post-test scores.

Table 2.Paired Samples T-test for Grammar Test Scores of Experimental Group

	Paired Differences							
				95% Co	nfidence	_		
		Std.	Std. Error	Interval of the Difference				Sig. (2-
	Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
First Post-	4	2.23	.57	-1.63	.83	69	14	.49
Test -								
Second								
Post-Test								

Table 2 shows that the experimental group's grammar test scores did not significantly improve between the first and second post-tests (M = 23.80, SD = 2.33), as indicated by a t-value—69, p-value less than .05 (two-tailed). Grammar was, therefore, significantly and persistently impacted by tasks administered via mobile devices.

4.3. Results for Research Question Two

The study's second research question aimed to determine whether the use of online mobile-based assignments has a significant impact on students' performance on grammar examinations compared to more conventional methods. The experimental and control groups' first and second post-test grammar scores were compared using an independent samples t-test.

Table 3.Descriptive Statistics of Grammar First and Second Post-test Test Scores of Both Groups

	Groups	N	M	SD
First Post-Test (Immediate)	experimental	15	23.80	2.33
	Control	15	21.33	2.74
Second Post-Test (Delay)	experimental	15	24.20	2.7
	Control	15	21.40	2.61

Table 3 shows that, compared to the control group, the experimental group performed better on both post-tests measuring grammar comprehension. An independent samples t-test was administered to determine the significance of the difference.

Table 4. *Independent Samples T-test for Grammar First and Second Post-test Test Scores of Both Groups*

		Leve	ne's								
		Test	for	•							
		Equa	lity of								
		Varia	inces	t-tes	t for Eq	uality o	f Means				
		-								95%	
										Confide	ence
						Sig.				Interva	l of the
						(2-	Mean	Std.	Error	Differe	
		F	Sig.	t	Df		Difference				
First Post-	Equal	.28	.02	2.65	28	.01	2.46	.93		.56	4.37
Test	variances										
(Immediate)	assumed										
	Equal			2.65	27.3	.01	2.46	.93		.55	4.37
	variances										
	not										
	assumed										
Second	Equal	.904	.03	2.88	28	.00	2.8	.97		.81	4.78
Post-Test	variances										
(Delay)	assumed										
	Equal			2.88	27.96	.00	2.8	.97		.81	4.78
	variances										
	not										
	assumed										

A statistically significant difference was seen between the control group's first posttest score (M = 21.33, SD = 2.74; t (28) = 2.65, p =.01, two-tailed) and the experimental group's score (M = 23.80, SD = 2.33). The disparities in means were somewhat large, with a mean difference of 2.46 and a 95% confidence interval of [.56, 4.37] (Table 4). Additionally, the control group had significantly lower second post-test scores (M = 21.40, SD = 2.61; t(28) = 2.88, p = .007, two-tailed) compared to the experimental group (M = 24.20, SD = 2.70). There was a significant disparity in the means, with a mean difference of 2.8 and a 95% confidence interval of [.81, 4.78] (Table 5). When comparing the performance of the two groups on the post-tests, both immediate and delayed, the experimental group generally performed better.

5. Discussion

Examining how mobile-based online assignments affected basic EFL students' performance on grammar exams was the primary goal of this research. The data showed that the experimental group outperformed the control group. Given this, it's reasonable to assume that the LiveWorksheet website's mobile-based online assignment would help students improve their grammar skills.

The study's results demonstrate that using Liveworksheets to practice grammar can significantly enhance students' English language skills. In addition, this discovery aligns with other studies that support the idea that students' grammatical proficiency improves when live worksheets are used in grammar lessons (Dewi, 2020; Fadhilawati, 2021; Rahayu & Purnawarman, 2019). The significant progress made by the experimental group of students may be attributed to several factors. The relevance of practising grammar forms becomes clear to students when they actively participate in their own language learning, which is especially true for English as a Foreign Language (EFL) learners (Thirusanku & Melor, 2014). Incorporating visual features, scoring, and feedback into online assignments might make them more appealing to students. As a result, people would devote more time to specific workouts. Students can use Liveworksheets for self-evaluation and assessment because they receive feedback immediately after each answer, and their scores are displayed on the leaderboard at the end of the quiz. This can encourage them to take the quiz again and see if they can achieve a better result this time. Visual components that are both dynamic and engaging can also enhance the significance and excitement of the learning process (Brinton, 2001). Students have a better time studying on Liveworksheets due to the extra features it provides, such as meme feedback, music, vibrant backgrounds, and an aesthetically pleasing UI. As a result, people would devote more time to specific workouts. Students' understanding of grammatical topics can be improved by giving them the same homework numerous times. Additionally, the supplemental tasks were all multiple-choice, which encouraged students to practice and improve their abilities rather than simply guessing (Lee et al., 2012).

The current investigation's conclusions are consistent with those of Shahrokhi (2021), who evaluated the efficacy of mobile applications in promoting grammar acquisition. The results of a grammar learning intervention were studied using a quasi-experimental design. The impact on the grammatical competence of EFL students. Fifty female intermediate learners of Iranian were selected for this reason. Two groups, each comprising twenty-five students, made up the participants. Following the pre-test, participants in the experimental group received grammatical instruction during each treatment session through a mobile application.

On the other hand, the control group received grammar lessons through more conventional means. Both groups were given a post-test to assess the effectiveness of the treatment after 14 sessions. According to the study results, a statistically significant improvement in post-test performance was observed in the experimental group. This finding provides further evidence that the mobile app used in this study successfully enhanced students' acquisition of grammatical knowledge.

Janfeshan and Sharhan (2023) aimed to evaluate whether blended learning—integrating face-to-face instruction with mobile-assisted language learning through WhatsApp—enhances vocabulary acquisition and learner autonomy among Iranian English as a Foreign Language (EFL) students compared to traditional teaching methods. To assess their English proficiency, the Preliminary English Test (PET) was administered to 80 intermediate learners at the outset of the study. From this group, 50 learners with intermediate scores were selected and randomly assigned to either the experimental or control groups. A one-way analysis of covariance was conducted to analyze the results. Post-test scores revealed a statistically significant difference between the experimental and control groups. This study offers valuable insights into the application of technology in teaching various language components and skills.

This study's findings align with those of Kourang Beheshti and Sadeghi (2019), who looked at how intermediate Iranian EFL learners learned conditional sentences using the mobile app Cushy Grammar. There were three groups: application learning, blended learning, and a control group. The hybrid group received both traditional and app-based

learning strategies, whereas the application group relied only on the app for their course materials and instructions. Traditional methods of education were used only by the control group. After comparing the post-test scores of the three groups, the data showed that the application learning group performed the best.

6. Conclusion

As previously stated, the findings of this study demonstrate that the use of online, mobile-based grammar assignments has a positive impact on students' proficiency in grammar tests. Online mobile-based assignments can potentially enhance grammar learning and students' performance on grammar assessments. The main findings of the present study were that (1) students who received online mobile-based assignments performed significantly better than the traditional assignment in grammar tests, and (2) the experimental group achieved a higher score on the second grammar post-test. However, there was no significant statistical improvement in the grammar test scores of the experimental group between the first and second post-tests.

In conclusion, it was determined that utilizing this digital application is highly advantageous in facilitating the consistent submission of assignments by EFL elementary students based on the study done by Goehle and Wagaman (2016), which showed a beneficial relationship between the inclusion of an active incentive mechanism for correctness and completion in online assignment platforms and enhanced educational achievements. An example of an online assignment program that incorporates a reward system is Liveworksheet.com. Upon providing accurate responses, students are rewarded with a congratulatory message and observe a rise in their SmartScores.

Research has demonstrated a positive correlation between technology-driven personalised feedback and enhanced conceptual understanding. Online assignments with automatic feedback offer teachers an effective means to assess learning outcomes, which subsequently impact their teaching methods (Cheng et al., 2004; Lin et al., 2008; Rasila et al., 2015; Yerushalmy et al., 2017). Kapur (2012) observed that students exposed to online assignment feedback showed more immediate improvements in conceptual understanding compared to traditional direct instruction. Consistently, prior studies have also established a positive correlation between structured feedback and further improvements in students'

conceptual understanding (Archer & Olson, 2018; Cheng et al., 2004; Hegedus et al., 2015; James, 2016; Rasila et al., 2015).

The creation of innovative e-student worksheets holds significant importance in meeting the educational demands of the 21st century. Teachers should offer a range of worksheets to their students, including live worksheets that facilitate remote learning and assessment. This approach helps address critical aspects of modern education, including instructional resources, practical applications, disengagement, technological advancements, and the impact of pandemics (Suryaningsih & Nurlita, 2021).

Online grammar assignments benefit students by providing personalized learning experiences that allow them to work at their own pace and receive immediate feedback on their grammar skills. These assignments promote independent learning, critical thinking, and collaboration while fostering digital literacy and technological proficiency. For teachers, online grammar assignments enable differentiation and personalized instruction. They also offer real-time tracking of student progress, facilitating adjustments to teaching strategies and promoting evidence-based decision-making. Furthermore, online grammar assignments help institutions streamline administrative tasks and foster efficient communication, supporting the implementation of blended learning models.

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Appendices

Appendix A: Grammar Post-Tests

First Post-Test (Only the Grammar Parts)

_ [9096			Name:				
) le	st A	OCA		Class:	Total:	/ 50		
1. Cor 1. <u>.</u> 2	bulary nplete the word s o <u>d</u> a _ i _ k _ f _ e _	s for drinks.	3. Look at the pictures. Complete the words for containers and quantities.					
5. t	4. jc_ 5. t 6atr		1.	a c <u>an</u> of soda	2. al	of bread		
1 point for e	each correct answer.	Total 5 points / 5		V	THE STATE OF THE S			
	k at the picture d words.	s. Write the correct	3.	a g of water	4 . a ko	of onions		
		ken fish meat rice		a b of water	6. a b			
1	<u>fish</u>	2	Gra	mmar				
3	Ru	4.	H 1.	Irite questions wi low many. Use is (bread / on the table How much bread (cans of soda / in the	there or are t le?) is there on the	there.		
				(pasta / in the box?				
5		6	5.	(apples / in the bag	1?)			
1 point for e	each correct answer.	Total 5 points / 5	6.	(boxes of rice / in the	ne cupboard?)			

2 points for each correct answer.

Total 10 points / 10

5. Circle the correct words.

1 point for each correct answer.

6. Unscramble the affirmative and negative statements. 1. any / I / need / milk / don't I don't need any milk. 2. want / coffee / My friends / some

7. Complete the statements with the correct affirmative (√) or negative (X)

5. My friends _____ pasta. (like / 🗸)

6. We _____ any bananas. (need / X)

1 point for each correct answer.

	Test A
Circle the correct words.	7. Sam any sandwiches.
1. My brother like / likes soda.	(have / X)
2. We don't / doesn't need any eggs.	8. Grandma some tea.
3. My parents want / wants some tea.	(want / √)
Peter haves / has a bottle of water in bag.	his 1 point for each correct answer. Total 7 points / 7
5. My cousin don't / doesn't like coffee.	Teen2Teen
6. Mom needs / need some pasta.	8. Write the conversation in the correct
at for each correct answer.	Actually, no. I don't like milk very much.
Unscramble the affirmative and negative statements.	Me? I want some milk. You too? Sounds good! I like cola a lot. It's delicious.
1. any / I / need / milk / don't	Well, what about some cola?
I don't need any milk.	What are you in the mood for?
2. want / coffee / My friends / some	Clara: (1) What are you in the mood for?
2	Billy: (2)
3. sandwiches / Tina / some / has	Clara: (3)
	Billy: (4)
4. like / doesn't / pasta / My brother	Clara: (5)
	1 point for each correct answer. Total 4 points / 4
5. don't / any / have / apples / We	9. Read the conversation. Circle the
6. wants / water / some / The dog	correct answers.
	Joe: What (1) you in the mood for?
at for each correct answer. Total 5 points	Ann: Me? I (2) an apple. You too?
	Goe: Actually, no. 1 (3) like apples very
Complete the statements with the	much.
correct affirmative (✓) or negative	
form of the verb.	Joe: Sounds good! I like peaches a lot. (5) delicious.
1. I <u>don't like</u> cola. (like / X)	
2. You some water. (need /	
3. Dad any coffee. (want / /	
4. My sister a can of cola.	3. a. doesn't b. don't c. am not
(have / ✓)	4. a. about b. is c. mood
5. My friends pasta (like / w	5. a. It's b. I'm c. They're

Total 4 points / 4

1 point for each correct answer.

Second Post-Test (Only Grammar Parts)

Test B		Class:	Total: / 50
	NA T	- Jiu33.	10tai. 150
Vocabulary 1. Complete the wor 1. t e a 2. w t 3. s _ d 1 point for each correct answer. 2. Look at the picture food words.	4uie 5ofe 6. mk Total 5 points / 5	3. a of water 5. a of bread	4. a of pasta 6. a of soda
		1 point for each correct answer.	Total 5 points / 5
1. f ish	2. b	1. (apples / in the cu	there or are there.
3. p	4. m	3. (rice / in the box?) 4. (loaves of bread /)
1 point for each correct answer.	Total 5 points / 5	5. (water / in the bot	tle?)
3. Look at the pictur for containers and		6. (cans of soda / in	your bag?)
bottle box can g	ass kilo loaf	2 points for each correct answer.	Total 10 points / 10

Total 5 points / 5

Total 5 points / 5

5. Circle the correct words.

pasta.

1 point for each correct answer.

I need / needs some water.
 Our cat like / likes chicken.
 We don't / doesn't have any juice.
 Sara haves / has some bread in her bag.
 My friends want / wants some coffee.
 My brother don't / doesn't want any

Unscramble the affirmative and negative statements.
 some / we / pasta / need
 <u>We need some pasta.</u>
 like / Mr. Simpson / coffee / doesn't

3. any / don't / sandwiches / I / have

4. orange juice / likes / My brother

6. a bottle / has / of water / Tim

Complete the statements with the correct affirmative (√) or negative (X)

1. They <u>don't want</u> any apples.

2. Tom _____ an orange in his bag.

Maria _____ any cola.(want / ✗)
 Mom _____ some bread. (need / ✓)

5. I ______ peppers. (like / **X**)

1 point for each correct answer.

form of the verb.

(want / X)

(have / **√**)

5. want / don't / soda / My grandparents /

		16:	St D
	6. My cousin7. My parents(want / √)	some	e tea.
	8. The dog	any mea	t. (have / X)
l poi	nt for each correct answe	r. Total	7 points / 7
Te	een2Teen		
8.	Write the conve	rsation in the	e correct
	Sounds good! I lik	e peaches a lot	t. They're
	What are you in th	e mood for?	
	Me? I want an app		
	Actually, no. I don Well, what about a		ery mucn.
	Fiona: (1) <i>What</i>	1.0	mood for?
	Liam: (2)		
	Fiona: (3)		
	Liam: (4)		
	Fiona: (5)		
l poi	nt for each correct answe	r. Total	4 points / 4
9.	Read the conve		le the
	Mark: (1) are	you in the moo	d for?
	Rita: Me? I wan	t (2) milk. Y	ou too?
	Mark: Actually, n	o. I (3) like r	milk very
	Rita: Well, what	(4) some co	ola?
	Mark: Sounds go (5) delic		a lot.
	1. a. Where	b. When	c. What
	2. a. some	b. the	c. any
	3. a. doesn't	b. am not	c. don't
	4. a. for	b. about	c. mood

5. a. I'm

1 point for each correct answer.

b. Iťs

c. They're

Total 4 points / 4