The Effectiveness of Using Mobile Phones in Developing English Writing Skills by Yemeni EFL University Students

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Abstract

This research aimed to investigate the effectiveness of using mobile phones in developing English writing skills by Yemeni EFL university students. The researcher employed a quasi-experimental method. The sample of this study was 50 EFL students who were selected from level two at the Department of English, Faculty of Education, Sana'a University during the academic year 2023-2024. The sample was divided into two groups. The control group consisted of (25) students taught by the traditional way while the experimental group consisted of (25) students taught through using mobile phones (Google Classroom App). The data were collected through a writing test whose results showed a large effect for using the mobile phones to improve the students' writing skills. The results of this study showed that there were statistically significant differences at the 0.05 level between the mean scores in the pre-test and post-test of the experimental group in favor of the post test. In addition, the results showed that there were statistically significant differences at the 0.05 level between the mean scores in the post-test of the experimental group taught the writing skills using mobile phones and the control one taught the writing skills by the traditional method in favor of the experimental group. It can be concluded that the students of the experimental group got significant effect and improvement in the writing skills after using mobile phones. The current study ends with some educational implications, recommendations and suggestions for future research studies.

1. INTRODUCTION

"Writing is an important language activity and a major classroom procedure. It is an effective technique for reinforcing oral language. It is important for providing evidence for our students' achievements" (Isa, 2013, p. 2). Writing skill is one of the skills that is very significant for university students because of their academic purpose. Students are required to write their essays, reports, projects and lecture notes, and theses related to their programs (Linuwih & Winardi, 2020). The university-level students are expected to use their previous knowledge on writing and be able to develop their ideas to complete the writing tasks (Ruhmann, et al, 1999,

as cited in Linuwih & Winardi, 2020). Moreover, in academic writing, students are expected not only to convey their ideas and thoughts but also to focus on different elements of writing to produce interesting work.

However, writing is difficult to teach and learn since it requires mastery of not just grammatical and theoretical techniques, but also conceptual and judging aspects. Writing in a foreign language is not easy for students, as most of them cannot express their ideas clearly. They cannot write down a good topic sentence as a starting point in their paragraph (Heaton as cited in Ibnian, 2017). Furthermore, it can be assumed that the students' writing ability in developing a paragraph is still more in a level of sufficient and poor. Some factors cause it. First, the students do not have the ability to express their ideas clearly. They still have difficulty writing a good topic sentence in their paragraph. Second, they still have limited vocabulary, which makes them have difficulty choosing the appropriate words relevant to the content of their writing. Third, the students are not familiar with the criteria for developing a good paragraph. Finally, the writing strategies applied in the classroom do not really help the students to be able to construct a good paragraph (Lea and Street,1997, as cited in Elsourani, 2017). Another problem in teaching writing in class is due to the traditional use of media, so that the classroom atmosphere is boring. These problems can inhibit the success of teaching writing and inhibit students from being able to master the writing skill (Sianipar & Gultom, 2022).

English writing teaching in Yemen is mainly focused on the teacher, and traditional methods are preferred over modern ones. Teachers often emphasize grammar rules and ignore creative writing. Many students have trouble clearly expressing their ideas on the topics they need to write about. Another challenge in teaching writing in Yemen is the lack of authenticity. The students are taught to write for exam purposes and to get good marks (Mohdar & Pawar, 2022), as Othman (2006) proved that teaching writing in the Yemeni context should be reoriented to meet professional challenges.

Yemeni students face various challenges in writing, particularly in English as a foreign language. They faced difficulties in planning or outlining the points before writing a paragraph or an essay. Furthermore, they faced difficulties in developing a good topic sentence for a paragraph and a thesis statement for an essay, writing supporting sentences to support the topic sentence, organizing ideas together in a coherent manner, and writing a concluding sentence or concluding paragraph (Al-Marrani, 2024, p. 1).

Nowadays, there are several strategies and methods that can be adopted in the process of English learning, especially for improving writing skills. Recently, a mobile phone has been considered an important and effective tool in language learning and teaching. Such technology devices may make the educational environment differ from the traditional way that concentrates completely on the classroom in giving information to learners, to adopt a new way of learning outside the classroom. Using and integrating some mobile phone devices may motivate students as well as teachers to do their traditional jobs in different and attractive ways (Tramneh, 2017).

1. LITERATURE REVIEW

According to Traxler (2005), as cited in Abu Laban(2017), mobile learning is defined as "any educational device which takes place in the learning and teaching process by using technologies such as smartphones or iPads". A mobile phone is one of the most attractive technologies, which is considered a revolutionary approach to education (Gangaiamaran & Pasupathi, 2017; Ahmed, et al., 2023; Alrefaee, et al., 2025). According to Klimova (2019), mobile technologies and mobile applications are becoming an indispensable part of learning, including foreign language learning.

Mobile learning has some important benefits, such as preparing students for the future, up-to-date learning, an alternative to textbooks, and making it possible for learning to go outside of the classroom (Bakhsh, 2015). Jacob and Issa (2008) added that mobile learning possibly makes a learning atmosphere more joyful and could also be an additional learning medium. In addition, mobile devices enable easy access to various applications, which makes them more popular learning tools than traditional technological tools (Gadwin-Jones, 2018).

One of the best mobile phone applications is Google Classroom, which is an application that is developed by Google for academic purposes and has a major impact on teaching and learning. In terms of advantages, it is helpful to both students and teachers in providing additional teaching materials or assignments and check-ins without the need to meet with students (Indrayani, 2022). It is regarded as one of the top platforms available for improving teachers' instruction, and it additionally serves as a free online tool for educators who want to easily assign tasks, distribute, and mark assignments without using paper (Negare as cited in Pham & Nguyen, 2024). Teachers can post their lessons, offer students comments, and also submit their files. Moreover, Google Classroom lets teachers add text, pictures, videos, and other files to their lessons. They can also make quizzes for students, and quizzes are graded automatically, which saves the teacher time and effort (Al-Mekhlafi, 2020).

Several previous studies indicate the importance of mobile learning in teaching and learning English language skills, including writing performance. The advance of mobile phones and wireless communication technology has encouraged an increasing number of studies concerning mobile learning, which confirm that students are able to learn via mobile devices without being limited by space and time (Chang, 2011).

2.1. Previous Studies within the Framework of Technology Use and Writing

Recently, several previous studies that are reported in the literature were conducted to explore the effects of using different technological devices, such as mobile phones, on developing writing skills. For example, Al-Mudallal (2013) investigated the effect of using a weblog on enhancing eleventh graders' English writing performance and their attitudes towards writing. The findings of this study indicated that there were statistically significant differences between the mean scores of the experimental group on the writing skills and attitudes scale before and after the experiment.

Saddique and Nair (2015) explored the effect of utilizing mobile phones in the classroom on enhancing the descriptive writing skills of the Pakistani intermediate students. They also investigated whether the students' engagement was enhanced after using the mobile phones or not. Their findings revealed that using mobile phones was effective in teaching

writing skills. Furthermore, their findings also indicated that the use of mobile phones made the students more engaged and motivated towards writing skills.

Bataineh et al. (2018) investigated the effect of WhatsApp on improving 98 Jordanian eleventh-grade students' writing performance in four aspects: content and ideas, organization and mechanics, vocabulary, and language use. The findings indicated that mobile phones significantly improved the participants' writing skills, with better outcomes for females than their male counterparts.

Jassim and Dzakiria (2019) carried out a study on the effect of utilizing mobile phones on developing English writing skills. The findings showed that mobile phones could successfully be implemented as an instructive aid to teach writing skills because mobile phones motivate students for learning writing skills.

In a similar study, Dollah, Nair, and Wider (2021) investigated the effect of utilizing the Telegram App to enhance students' ESL writing skills and attitudes. The results indicated that the students' writing skills were enhanced significantly because of using the Telegram App.

Laili and Muflihah (2020) examined the effectiveness of the Google Classroom application in writing recount texts for senior high school students. The results of their study showed that Google Classroom affected the students' writing performance and helped them finish and collect the assignments.

Yucedal (2023) studied the impact of implementing Mobile Assisted Language Learning (MALL) on 60 university students' writing competence in Iraq. During 12 weeks of implementation, students in the experimental group had to write one essay every week. The results revealed that the MALL activities significantly improved the students' writing skills, motivation, and general attitudes about learning English and writing.

Insaf and Aya (2023) conducted a study to test the effectiveness of mobile-assisted language learning on 70 EFL students' writing performance and motivation. The participants in the experimental group were taught via mobile-based concept mapping, whereas the students in the control group were taught writing traditionally. The study's findings demonstrated that mobile-mediated concept mapping improved EFL students' writing fluency. Also, the findings suggested that the implementation improved the learners' writing motivation.

In a recent investigation, Alshammry (2025) examined how mobile applications influence the development of essential writing skills, including spelling, grammar, vocabulary, and composition, among EFL students. The findings indicate substantial improvement across all writing components.

Due to the importance of the topic and the role of the new learning technologies, such as mobile phones in improving the students in the English writing skills, the researcher conducted the current study to explore the effectiveness of using mobile phones in developing English writing skills by Yemeni EFL university students.

2. THE PRESENT STUDY

The main purpose of the present study was to investigate the effect of using mobile phones in developing English writing Skills by Yemeni EFL university students at Sana'a University during the academic year 2023 – 2024.

3.1. The Statement of the Problem

Through the researcher's work and experience as an English language teacher, she noticed that it was not easy for many Yemeni EFL students to write down their thoughts and ideas in a written form.

In addition, there were weaknesses in students' writing performance and their writing test scores. This was due to the traditional teaching methods, traditional evaluation methods, lack of motivation, weak participation in class and negative attitudes towards writing skills. These are the most important factors affecting students' writing performance. Several studies also revealed that the traditional teaching methods are the reason for students' poor writing skills and reduce students' motivation. They claimed that the traditional methods were not helpful for the students in learning the writing skills and suggested using cooperative learning strategies to enhance writing skills.

Recently, technology has an important role in enhancing and facilitating English language teaching and learning (Jassim & Dzakria, 2019). Many researchers have argued that mobile devices are appropriate for supporting social contacts and collaborative learning opportunities. These devices improve student achievement, help student motivation, and provide more active learning environment and greater feedback. However, there is a lack of research in Yemen examining how mobile phones affect students' writing skills.

Therefore, the researcher tried to find out how writing skills can be taught, learnt, and studied more effectively and the students can be more motivated. Consequently, it is so significant to implement a study in order to explore the effectiveness of using mobile phones in developing English writing skills by Yemeni EFL university students.

3.2. Aims of the Study

This study aims to achieve the following aims:
1. Identifying the writing skills intended to be developed for level two Yemeni EFL students.
2. Identifying whether there are significant differences between the mean scores of the experimental group in writing skills before and after the treatment (mobile phones).
3. Identifying whether there are significant differences between the mean scores of the experimental group taught writing skills by mobile phones and the control group taught writing skills by the traditional method
4. Identifying the effect size of using mobile phones on developing the Yemeni EFL students' writing skills.

3.3. Research Questions

This study intends to answer the following questions:

1. What are the writing skills intended to be developed for level two Yemeni EFL students using mobile phones?

2. Are there statistically significance differences at the 0.05 level between the mean scores of the experimental group in the pre and the post writing test?

3. Are there statistically significance differences at the 0.05 level between the mean scores of the experimental group taught writing skills using mobile phones and the control group taught writing skills by the traditional method?

4. What is the effect size of using mobile phones in developing the Yemeni EFL students' writing skills?

3.4.Limitation of the Study

The scope of the present study is limited in terms of the following aspects:

1. Topical limitations: It measures the effectiveness of using mobile phones in developing students' writing skills.
2. Human limitations: The population of this study is limited to level two students.
3. Locative and Temporal limitations: This study was conducted in the Department of English at the Faculty of Education, Sana'a University in Yemen during the first semester of the academic year 2023-2024.

3.5. Methodology

3.5.1. Research Design

The researcher used the quasi-experimental research design because of the nature of the research, which aimed at investigating the effectiveness of using mobile phones in developing English writing skills by Yemeni EFL university students.

3.5.2. Participants

The population of the study consisted of all level two students (60) enrolled at the English Department, Faculty of Education, Sana'a University, during the first semester of the academic year (2023-2024). Fifty-seven of the students were females and the other three were males.

The participants of the study were assigned purposively into two equal groups: experimental and control. The control group consisted of (25) students, similarly, the experimental group consisted of (25) students and the other (10 students were used in the pilot study. Their ages ranged between 20 to 23 and their mother tongue is Arabic. They have studied two courses of writing: Writing 1 and Writing 2.).They were enrolled in the Writing 3 course at the Second Level in the Department of English, Faculty of Education at Sana'a University. They had the same abilities and level in English and writing proficiency.

3.5.3. Instrument

To collect data for this study, an achievement test was used. The test was prepared through reviewing related literature and studying the content of the level two writing textbook. After designing the test, it was given to some experts in the English language and methodology for checking its validity. They gave comments and suggestions, which were taken into consideration in writing the test. The topics and questions of the test were modified according to their recommendations. The test was distributed to the students during the first semester of the academic year 2023- 2024 in the classroom. It took approximately 60 -90 minutes to complete. It was administered to measure the students' achievement in writing skills. The research tool was piloted by 10 level two students in the English Department at the Faculty of Education, Sana'a University, during the first semester of the 2023- 2024 academic year.

The experimental group was taught writing through the use of mobile phones as a learning tool, while the control group was taught writing through the traditional method. The experiment lasted for 12 weeks and included pre-test and post-test.

3.5.4. Instrument Validity and Reliability

AL-Agha (1996) states that a valid test is the test that measures what it is designed to measure. The test was introduced to some experts in the English language and methodology to check the construct validity of the research tool. The test was modified according to their recommendations. Moreover, the instrument is reliable when it gives the same results in case of reapplying it for the same purpose in the same conditions (AL-Agha, 1996). To verify the reliability of the test, the researchers calculated Cronbach's Alpha, which was 0.99, indicating high reliability of the instrument. The students' writing performance was assessed on each of the five criteria: content, organization, vocabulary, language use, and mechanics. Two raters scored the students' papers. They scored each paper independently. The final score consisted of the average score of the two raters.

3.5.5. Data Analysis

The data of the study were collected through the pre-test and the post-test. Descriptive statistics, paired-Sample T-Test, independent Sample T-Test, in addition to the means and standard deviation, were calculated for the scores of the test. The collected data were analyzed statistically using the Statistical Package for the Social Sciences (SPSS) Program version 23.

4. RESULTS AND DISCUSSION

This section attempts to answer the research questions of the study.

4.1. Answering the First Research Question

The main research question was to identify writing skills intended to be developed for level two Yemeni EFL students via mobile phones. To answer this question, the researcher reviewed related literature and had a deep look at the contents of the writing textbook of level two in the first semester. The writing skills are shown in table 1).

Table (1) Writing Skills

Skill	Description
Content and organization	Fully developed (topic sentences، main ideas and supporting details) All parts of task are addressed (introduction, body, and conclusion) Information is relevant Content is understood Task is well-organized and coherent
Vocabulary	Correct use of varied vocabulary Correct use of connected words and transition words or phrases Use of appropriate connecters
Language use	Correct use of tenses and structures Correct use of advanced language structures Correct word order Correct use of articles, parts of speech, pronouns, and prepositions

Mechanics	Correct use of: Spelling Punctuation Capitalization

Table (1) above briefly shows that level two students are supposed to write five types of essay: descriptive, narrative, opinion, comparison and contrast, and cause and effect essays with the following sub-skills:

- Writing appropriate introduction, body, and conclusion.
- Providing topic sentences, main ideas, detail sentences, and supporting sentences.
- Using correct tenses, structures word order, and appropriate connecters.
- Writing relevant content, varied vocabulary.
- Using correct spelling and punctuation.

4.2.Answering the Second Research Question

To answer the second research question about whether the students writing skills differ before and after using mobile phones, the paired sample t-test was used as shown in table (2).

Table (2): Paired Samples t Test

Skill	Group	N	Mean	Std. Deviation	T	Sig. Value
Content	Pre-test	25	7.28	0.45	6.267	0.000
	Post-test		8.48	1.19		
Vocabulary	Pre-test	25	7.32	0.70	5.222	0.000
	Post-test		8.32	1.21		
Organization	Pre-test	25	2.40	0.55	4.615	0.000
	Post-test		3.32	1.21		
Grammar	Pre-test	25	7.32	0.55	4.822	0.000
	Post-test		8.24	1.12		
Mechanics	Pre-test	25	2.40	0.70	4.000	0.001
	Post-test		3.20	1.15		
Total	Pre-test	25	26.72	2.92	5.243	0.000
	Post-test		31.56	5.76		

Table (2 shows that the average mean of the pre-test of the experimental group was (26.72), while the average mean of the post-test of the experimental group was (31.56). T-test was used to compare between pre-test and post-test. T. computed value was (-5.24). This indicates that there was significant difference between the pre-test and post-test at level 0.05 in favor of the post-test.

4.3.Answering the Third Research Question

To answer the third research question about whether the students writing skills differ between the control and the experimental group, the independent sample t-test was used as shown in table (3).

Table (3): Independent Samples t-Test

Skill	Group	N	Mean	Std. Deviation	T	Sig. Value
Content	experimental	25	8.48	0.66	3.974	0.000
	control	25	7.24	1.19		
Organization	experimental	25	3.32	0.64	4.070	0.000
	control	25	2.20	1.21		
Vocabulary	experimental	25	3.32	0.64	4.070	0.000
	control	25	2.24	1.21		
Grammar	experimental	25	8.24	0.47	4.414	0.000
	control	25	7.16	1.12		
Mechanics	experimental	25	3.20	0.50	3.974	0.001
	control	25	2.20	1.15		
Total	experimental	25	31.56	0.57	4.278	0.000
	control	25	26.04	0.28		

Table 3) shows that the average mean of the experimental group was (31.56), while the average mean of the control group was (26.04). The T-test was used to compare between the control and the experimental group. The T. computed value was (-4.27). This indicates that there was a significant difference between the control and experimental group at the level of 0.05 in favor of the experimental group. These results indicate that using mobile phones was very effective in developing the students' writing skills.

4.4. Answering the Fourht Research Question

The purpose of the fourth research question was to determine the extent of mobile phones effect on the students' writing skills. For answering this question, the researcher applied the "Effect Size" technique (Afana, 2000: 42).

Table (4) Eta square ($\eta2$) and (d) formula

Skill	t-value	$\eta2$	D	Effect size
Content	4.538	0.295	1.296	Large
Organization	4.070	0.252	1.162	Large
Vocabulary	4.070	0.252	1.162	Large
Grammar	4.414	0.284	1.261	Large
Mechanics	3.974	0.243	1.135	Large
Total	4.278	0.271	1.222	Large

The results of ($\eta2$) and (d) values as shown in table (4) indicate a large effect size of using mobile phones (0.170) on improving the writing skills of the experimental group compared with the control group.

The findings of this study are similar to the findings of other researchers (Al-Mudallal, 2013; Siddique& Nair, 2015; Alsaied & Akhtar, 2019; Dollah, Nair and Wider, 2021; Mauricio & Genuino, 2020; Mahfouz & Abdel Mohsen, 2025; and Alshammry, 2025), which reveal that the mobile phone usage has a positive effect on the writing skills of the students. However, the results of this study are not similar to the study of (Saleem & Bakhsh, 2017), which showed negative effect for using mobile phones on improving students' writing skills.

5. CONCLUSION

The current study has explored the effectiveness of using mobile phones in developing Englidh writing skills by Yemeni EFL university students. The results of this study indicated that there were significant differences between the mean scores in the pre-test and post-test of the experimental group in favor of the post test. In addition, there were significant differences between the mean scores of the experimental group taught writing skills by using mobile phones and the control one taught writing skills by the traditional method in favor of the experimental group. The findings of the current study suggest some pedagogical implications and some future studies.

5.1.Recommendations to Teachers

Based on the findings of the current study, the researchers suggest the following recommendations for the EFL teachers.

1. The teachers should change the way and the activities of teaching from the traditional ones to more interactive ones by using technology.
2. The teachers are recommended to use mobile phones with other English skills, listening, speaking, reading.
3. The teachers should provide support for the students to be able to learn on their own through using modern mobile phones.
4. The teachers should select effective mobile phones applications, which enhance students' motivation, participation and interaction among students.

4.2. Suggestions for Further Research

1.It is suggested that a similar study should be conducted with other public and private schools and universities in Yemen.

2. It is recommended conducting further studies to examine the effectiveness of mobile phones on other skills as listening, reading and speaking.

3. It is recommended conducting further studies to investigate the effectiveness of using mobile phones on other English subjects.

4. It is recommended conducting further studies to investigate the attitudes of the teachers and students towards using mobile phones.

5. It is recommended conducting further studies to explore the difficulties and challenges facing teachers and students when using mobile phones.

6. Future research studies should examine the different factors influencing the use of the mobile phones such as gender, age, and cultural background.

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