



Yemeni EFL Students' Attitudes towards Using Mobile Phones for Learning Writing Skills at Sana'a University

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Keywords

1. attitudes
2. Yemeni EFL students
3. writing skills
4. mobile phones

Abstract:

This study aims to investigate the attitudes of Yemeni EFL students at Sana'a University towards the use of mobile phones in instruction on writing in English. A quantitative approach was used, with data being collected via a questionnaire administered to 25 second-level students during the academic year 2023-2024. Findings indicated that students had a positive attitude towards using mobile phones for learning writing skills. The findings also indicated statistically significant differences at the 0.05 level between the pre- and post-treatment scores in favor of the post-treatment. In addition, it was found that the highest mean among the three domains of the attitude scale was the Affective domain with a mean of 3.72, followed by the Cognitive domain with a mean of 3.56, and then the Behavioral domain with a mean of 3.30. Based on the findings, the study recommends that teachers dispense with traditional methods of teaching writing and instead adopt more interactive ones. Teachers can utilize technologies such as sophisticated mobile phone applications that can enhance students' motivation for learning and interaction among themselves. Future studies can use student populations from across different universities and schools in Yemen to explore students' attitudes towards the use of mobile phones to learn other language skills.

اتجاهات طلبة قسم اللغة الإنجليزية بجامعة صنعاء نحو تعلم مهارات الكتابة باستخدام الهواتف النقالة

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الكلمات المفتاحية

1. طلاب اللغة الإنجليزية كلغة اجنبية
2. الاتجاهات
3. الهواتف النقالة
4. مهارات الكتابة

الملخص:

هدفت هذه الدراسة الى تقصي اتجاهات طلبة قسم اللغة الإنجليزية في جامعة صنعاء نحو تعلم المهارات الكتابية باستخدام الهواتف النقالة. لتحقيق اهداف هذه الدراسة استخدمت الباحثة المنهج الكمي الوصفي عن طريق استخدام استبانة مكونة من (31) فقرة وزعت على عينة مقصودة مكونة من (25) طالبا من طلاب المستوى الثاني بقسم اللغة الانجليزية بكلية التربية في جامعة صنعاء في العام الدراسي 2023-2024. وبعد التحليل الإحصائي، توصلت الدراسة الحالية الى ان اتجاهات الطلبة نحو تعلم مهارات الكتابة باستخدام الهواتف النقالة كانت ايجابية بشكل عالي. كما اشارت نتائج الدراسة الى وجود فروق ذات دالة إحصائية عند مستوى الدلالة (0.05) بين متوسطات درجات طلاب المجموعة التجريبية بعد المعالجة (استخدام الهواتف النقالة). كما وضحت نتائج الدراسة أن اعلى متوسط بين المجالات الثلاثة كان في المجال العاطفي بمتوسط (3.72)، يليه المجال الوجداني بمتوسط (3.56)، ويليه المجال السلوكي في المرتبة الاخيرة بمتوسط (3.30). وكان من اهم المقترحات والتوصيات تفعيل استخدام الهواتف النقالة والاستفادة من تطبيقاتها في تعلم وتنمية مهارات اللغة الإنجليزية الأخرى، وكذلك تفعيل استخدامها في المدارس والكليات والجامعات اليمنية المختلفة، الى جانب تقصي الصعوبات والتحديات التي يواجهها المعلمون والطلاب عند استخدام الهواتف النقالة.

Introduction:

With rapid technological advancements, it has become increasingly evident that new language learning tools can enhance motivation for and facilitate the process of learning, and thus should be utilized through integrating them into educational practices. Among these tools are mobile phone apps that have gained widespread popularity due to their accessibility, convenience, and ability to provide a variety of learning styles (Ebrahimi et al., 2024). It was found that the increasing integration of learning apps into language education has a significant effect on facilitating learning English as a foreign language, particularly writing proficiency (Alshammry, 2025).

According to Lai & Zhang (2016), mobile learning is recognized as a vital method for improving students' feelings about writing. By giving students instant access to resources, fostering peer collaboration, and providing a secure, low-pressure environment for drafting and editing, mobile devices can help reduce writing tasks-induced anxiety. This functionally helps cultivate a more positive attitude, increased motivation, and greater self-confidence.

Mobile learning is highly valued for its flexibility, convenience, and low cost. It improves engagement through personalized interaction, and is crucial for increasing educational access for those without typical classroom options (Masero, 2023). Almeklafi (2006) noted that the benefits of using computers and mobile phones in language learning are clear. He also pointed out that students generally have a positive attitude toward technology and are willing to continue using it to practice English.

In places like Yemen, where universities and schools may lack internet access, mobile phones and laptops are valuable learning tools. Students can use these devices to access online learning environments, such as Google Classroom, from anywhere. Google Classroom, a free web service, helps students collaborate, share knowledge, and become

more independent learners (Al-Mekhlafi, 2020).

Literature Review

Technology has profoundly revolutionized education, and the widespread use of mobile learning has become a key part of this transformation. Since mobile learning uses wireless technologies to help people think, communicate, and share information, it is important to understand how students feel about this type of learning, as their attitudes affect their motivation and performance. However, this topic remains underexplored, particularly in the Middle East (Salhab & Daher, 2023).

The vital role of mobile phones in improving students' attitudes towards learning English and acquiring writing skills is widely supported in academic research. Studies indicate that mobile-assisted language learning (MALL) helps students feel more enthusiastic and motivated about learning English, as it offers convenient, accessible, and engaging opportunities to practice writing and other language skills (Le, 2021). Many studies suggest that students generally view mobile learning positively, valuing its convenience and ability to boost engagement and motivation (Keskin, 2011; Ozen, 2013).

In the field of language education, some recent studies have examined students' attitudes toward the use of different technological tools, including mobile phones, in developing writing skills. Al-Mudallal (2013) explored the role of weblogs in enhancing the English writing performance of eleventh-grade students and their attitudes toward writing. The results of the study revealed a statistically significant improvement in the experimental group's writing skills and attitudes after the intervention.

Rosalinda et al. (2022) conducted a study to find out the students' perceptions about the use of WhatsApp as a learning tool in writing class during COVID-19, using a case study as a research design. There were 31 students in the ninth grade at the time the study was conducted. The results showed that

students had positive attitudes towards the use of WhatsApp in writing class during online learning. Similarly, Tursaliha et al. (2022) explored the students' attitudes toward using Google Classroom for writing. The mixed-method research involved a survey and interviews with senior high school students in Samaturu, Kolaka. The results showed that the students generally had a positive attitude toward using Google Classroom for doing writing activities.

A study by Alharbi (2024) investigated the attitudes of 35 students at Jeddah University toward using the Telegram app for English as a foreign language learning. Using a quantitative approach and an online questionnaire, the research found that students had a positive attitude toward the use of the app in learning English language. This appears to be due to students' having found the experience to be easy and convenient for their learning process.

In a similar study, Mahfouz and Abdel Mohsen (2025) examined university students' perceptions of integrating ChatGPT into essay writing. Their focus was primarily on how useful, easy to use, and ethical the tool was. The study found that most students had positive attitudes towards ChatGPT in terms of its usefulness, ease of use, and ethical appropriateness of the application.

As is evident from the above review of the existing literature, most previous studies have examined students' attitudes towards using mobile learning apps such as ChatGPT, Google Classroom, WhatsApp, and Telegram. The use of mobile phones as a learning tool for acquiring writing skills and student attitudes toward this use, however, has been addressed as much as it should be. The present study, therefore, attempts to help fill this gap, examining the attitudes of Yemeni EFL students towards using mobile phones to acquire writing skills.

The Present Study

The main purpose of the present study is to explore the EFL Yemeni university students' attitudes towards using mobile phones to learn writing skills. Thus, the sample of the present study was chosen

purposively, and it is limited to level two students in the English Department, Faculty of Education, Sana'a University, during the first semester of the academic year 2023-2024.

Statement of the Problem

Previous research clearly shows that mobile learning tools help improve students' English writing skills and that students generally like using these technologies. However, most studies have focused only on whether students find the technology easy to use and helpful. What remains unclear is whether using mobile technology actually changes how students feel about learning writing in particular.

This study attempts to address this gap by investigating whether using mobile phones for writing instruction helps boost students' self-confidence when writing in English, reduce their writing-induced anxiety, and make them feel more positive about their writing skills. In addition, several studies suggest that mobile devices can enhance communication, collaboration, and motivation, leading to better academic outcomes through interactive feedback. However, no investigation has been done into how mobile phones affect Yemeni college students' attitudes toward writing in English as a foreign language. This study therefore seeks to explore Yemeni EFL students' attitudes towards the use of mobile phones in learning writing skills.

Objectives of the Study:

This study aims to achieve the following objectives:

1. to examine Yemeni EFL students' attitudes towards using mobile phones to learn writing skills.
2. to find out whether there are statistically significant differences at the 0.05 level between the mean scores of the experimental group's attitudes before and after the treatment (using mobile phones).

Research Questions:

This study intends to answer the following research questions:

1. How do Yemeni EFL students perceive the use of mobile phones to learn writing skills?
2. Is there any difference between the study subjects' attitudes toward using mobile phones

to learn writing in English before the treatment (using mobile phones) and their attitudes after the treatment?

Study delimitations:

1. The present study is confined to evaluating the attitudes of Yemeni EFL students towards the use of mobile phones in learning writing skills.
2. The population of this study only comprises college EFL sophomores.
3. 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.

Method:

The quantitative survey method was adopted, and a closed-ended questionnaire was used as a collection data instrument.

Participants:

The study sample consisted of twenty-five second-year students enrolled in the Writing III course taught in the second year of the 4-year BA program at the Department of English, the Faculty of Education, Sana'a University, during the 2023/2024 academic year. Participants were chosen purposively based on their ability to use and access the internet. They were considered homogenous in terms of language proficiency.

Research Instrument:

To collect the data of this study, a closed-ended questionnaire was used. It consists of (31) items, and is divided into three main domains: cognitive, affective, and behavioral. The cognitive domain includes 12 items, the affective domain consists of 10 items, and the behavioral domain is composed of 9 items. The items of the questionnaire were developed drawing on relevant previous studies and literature. The questionnaire included positive and negative sentences, with eighteen items being positive, and thirteen negative. Participants were asked to respond to the statements that aim to measure their own attitudes towards using mobile phones to develop their writing skills. It is based on a

five-point Likert scale ranging from (strongly agree, agree, undecided, disagree, or strongly disagree). The scores for each item ranged from 1 to 5. The same version of the questionnaire was distributed to the experimental group before and after the treatment. Table (1) shows the Likert scale scoring categories for positive and negative statements.

Table (1) Likert Scale for Positive and Negative Statements

Type of Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Instrument Validity and Reliability

The questionnaire was given to some experts in the English language and methodology to check the construct validity of the research tool. It was then modified according to their comments. The reliability of the questionnaire was assessed using Cronbach's Alpha. The reliability of the research tool was 0.89, which indicates high reliability.

Data Analysis

The collected data were analyzed statistically using the Statistical Package for the Social Sciences (SPSS) Program version 23, as well as descriptive statistics, Paired-Sample T-Test, Independent Sample T-Test. In addition, means and standard deviations were calculated for the items of the questionnaire.

Findings Related to the First Question:

The purpose of the first research question was to determine the attitudes of the Yemeni university students towards the use of mobile phones in writing instruction. Table (2) below shows the mean scores and standard deviations of the three domains of the students' attitudes.

Table (2) Mean and Standard Deviation Results of the Students on the Three Domains

Domain	N	Mean	Std. Deviation	Degree of Agreement
Cognitive	25	3.56	1.14	Agree
Affective	25	3.72	1.10	Agree
Behavioral	25	3.30	1.19	Neutral

Overall	50	3.52	1.14	Agree
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As can be seen from Table (2), the overall mean of the three domains was 3.52, and the standard deviation was 1.14. The

Affective Domain came first with a mean of 3.72, while the Cognitive Domain came next with a mean of 3.56, and the Behavioral Domain came last with a mean of 3.30.

Table (3) Descriptive Statistics and the Statements of Cognitive Domain

A. Attitudes Related to the Cognitive Domain										
No.	Statements	Disagree		Neutral		Agree		Mean	SD	Degree of Agreement
		F	%	F	%	F	%			
1.	I see that pre-writing activities help me write well.	1	4	2	8	22	88	4.48	1.04	Strongly Agree
2.	I think writing is important for me to express my feelings.	2	8	2	8	21	84	4.32	1.18	Strongly Agree
3.	I think that I am not good at writing.	2	10	3	12	20	80	4.16	1.06	Agree
4.	I think it is difficult to outline my topic.	2	8	4	16	19	76	4.12	0.97	Agree
5.	For me, writing is enjoyable and fun.	3	12	4	16	18	72	3.72	0.99	Agree
6.	I think it is easy for me to start a new piece of writing.	8	32	2	8	15	60	3.64	1.46	Agree
7.	I think that my writing does not please the readers.	7	24	4	16	14	56	3.52	1.22	Agree
8.	I think writing is important for me to express my feelings.	1	4	2	8	22	88	3.48	1.04	Agree
9.	I believe that following clear, systematic steps helps me think clearly.	8	32	3	12	14	56	3.40	1.04	Agree
10.	I find it hard to specify thoughts before writing.	8	32	7	28	10	40	3.12	1.36	Neutral
11.	I think writing is boring.	15	60	3	12	7	28	2.52	1.22	Neutral
12.	I think that academic writing is complicated.	15	60	5	20	5	20	2.25	1.15	Neutral
Average								3.56	1.14	Agree

A. Attitudes Related to the Cognitive Domain

Table (3) below shows the calculated means and standard deviation of the twelve statements relating to the students' views and attitudes on the Cognitive Domain. The statements and the participants' responses are shown in the table below to express how strongly the students felt about each statement in a descending order.

Table (3) Descriptive Statistics and the Statements of Cognitive Domain

As shown in Table (3) above, the average mean of the students' attitudes related to the Cognitive Domain was 3.56. The results indicate that the means for the twelve statements regarding the Cognitive Domain ranged between 4.48 and 2.25. The results also indicate that the highest rating was for the statement: *I see that pre-writing activities help me write well*, with a mean of 4.48. The next statement came: *I think writing is important for me to express my feelings*, with a mean of 4.32, followed by the statement: *I think that I am not good at writing*, with a mean of 4.16.

Then came the statement: *I think it is difficult to outline for my topic*, with a mean of 4.12, followed by the statement: *For me, writing is enjoyable and fun*, with a mean of 3.92. After that came the statement: *I think it is easy for me to start a new piece of writing*, with a mean of 3.64, followed by the statement: *I think of myself as a good writer*, with a mean of 3.60. Then came the statement: *I think that my writings do not please the readers*, with a mean of 3.52, followed by the statement: *I think writing is important to express my feelings*, with a mean of 3.48. Then came the statement: *I believe that following clear systematic steps helps me think clearly*, with a mean of 3.40, followed by the statement: *I find it hard to specify thoughts before writing*, with a mean of 3.12, and followed by the statement: *I think that academic writing is complicated*, with a mean of 2.52. The lowest rating was for the statement: *I think writing is boring*, with a mean of 2.25.

B. Attitudes related to the Affective Domain

Table (4) below shows the calculated means and standard deviations of the ten

statements relating to the students' views and attitudes on the Affective Domain. The statements and the participants' responses are

shown in the table below, which displays how strongly the students felt about each statement in descending order.

Table (4) Descriptive Statistics and the Statements of Affective Domain

B. Attitudes related to the Affective Domain										
No	Statement	Disagree		Neutral		Agree		Mean	SD	Degree Agreement
			%		%		%			
3.	feel happy when I learn writing skills.		0		0	5	0	4.32	0.98	Strongly Agree
4.	like to make a list of ideas before I write.		2		2	9	6	4.16	0.17	Agree
5.	like to share my written work with others.					2	8	4.12	0.97	Agree
6.	have a fear of my writing being evaluated.	1	4		2		4	3.88	0.13	Agree
7.	feel I can write a good composition.		2		4	1	4	3.88	0.88	Agree
8.	look forward to writing down my ideas.				2	6	4	3.76	0.92	Agree
9.	do not like seeing my thoughts on paper.		8		4	2	8	3.60	0.44	Agree
10.	am not interested in developing my writing skills.		4		6	0	0	3.28	0.10	Neutral
11.	do not like the writing course at the university.		8		8	1	4	3.24	0.13	Neutral
12.	feel stressed and nervous about writing in English.		6		2		2	2.96	0.36	Neutral
	Average							3.72	0.10	Agree

Table (4) above shows that the average mean of the students on the attitudes related to the Affective Domain was 3.72. The results indicate that the means for the nine statements regarding the Affective Domain ranged between 4.32 and 2.96. The results also reveal that the highest rating was given to the statement: *I feel happy when I learn writing skills*, with a mean of 4.32, followed by the statement: *I like to make a list of ideas before I write*, with a mean of 4.16. Then came the statement: *I like to share my written work with others*, with a mean of 4.12, followed by the two statements: *I feel I can write a good composition*, and *I have a fear of my writing being evaluated*, with the same mean of 3.88. After that came the statement: *I look forward to writing down my ideas*, with a mean of 3.76, followed by the statements: *I do not like*

seeing my thoughts on paper, with a mean of 3.60. Next came the statement: *I am not interested in developing my writing skills*, with a mean of 3.28, followed by the statement: *I do not like the writing course at the university*, with a mean of 3.24. The lowest rating was for the statement: *I feel stressed and nervous about writing in English*, with a mean of 2.96.

C. Attitudes related to the Behavioral Domain

Table (5) below shows the calculated means and standard deviations of the nine statements relating to the students' views and attitudes on the Behavioral Domain. The statements and the participants' responses are shown in the table below, which displays the degrees of the strength the students felt about each statement in descending order.

Table (5) Descriptive Statistics and the Statements of Behavioral Domain

C. Attitudes related to the Behavioral Domain										
No	Statement	Disagree		Neutral		Agree		Mean	SD	Degree Agreement
		F	%	F	%	F	%			
23.	I make a few mistakes in writing.		8	6	24	17	69	3.88	1.05	Agree
24.	It is easy for me to finish a piece of writing.		16	2	8	19	76	3.80	0.97	Agree
25.	My ideas flow smoothly when I write.		16	4	16	17	68	3.56	0.96	Agree
26.	I am able to complete writing tasks without assistance.		20	7	28	13	52	3.32	1.06	Neutral
27.	I am able to write without difficulties.		32	4	16	13	52	3.28	1.42	Neutral
28.	I avoid writing in English whenever possible.		32	7	28	10	40	3.28	1.17	Neutral
29.	I got lost when I started writing in English.		20	5	20	15	60	3.04	1.36	Neutral
30.	I use writing in my everyday life.		36	7	28	9	36	2.84	1.40	Neutral
31.	It is difficult to organize my ideas when I am writing.	1	44	4	16	10	40	2.76	1.39	Neutral
	Average							3.30	1.19	Neutral

As shown in Table (5) above, the average mean of the students on the attitudes related to the Behavioral Domain was 3.30. The results indicate that the means for the nine statements regarding the Behavioral Domain ranged between 3.88 and 2.76. The results also reveal that the highest rating was for the statement: *I make a few mistakes in writing*, with a mean of 3.88, followed by the statement: *It is easy for me to finish a piece of writing*, with a mean of 3.80. Then came the statement: *My ideas flow smoothly when I write*, with a mean of 3.56, followed by the statement: *I am able to complete writing tasks without assistance*, with a mean of 3.32. Next came the two statements: *I am able to write without difficulties*, and *I avoid writing in*

English whenever possible, with the same mean of 3.28. These are followed by the statement: *I got lost when I started writing in English*, with a mean of 3.04, and the statement: *I use writing in my everyday life*, with a mean of 2.84. The last rating was for the statement: *It is difficult to organize my ideas when I am writing*, with a mean of 2.76.

Findings Related to the Second Question

The purpose of the second research question was to determine whether the students' attitude towards the use of mobile phones in learning writing skills before the treatment is different from that after the treatment. For answering this question, the Dependent Samples T-Test was computed as shown in Table (6).

Table (6): Paired Samples T-Test

Domain	Group	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Cognitive	Pre-treatment	25	2.72	1.18	3.620	0.0014
	Post-treatment		3.56	1.14		
Affective	Pre-treatment	25	2.67	1.43	4.048	0.001
	Post-treatment		3.72	1.10		
Behavioral	Pre-treatment	25	2.97	1.12	1.420	0.170
	Post-treatment		3.30	1.19		
Overall	Pre-treatment	25	2.78	1.24	3.103	0.005
	Post-treatment		3.52	1.14		

As can be seen from Table (6), the average mean of the experimental group's attitude towards using mobile phones to learn writing was 2.78 in the pre-treatment phase, while it was 3.52 in the post-treatment phase. The t-test was used to compare students' attitudes in the pre- and post-treatment. T. computed value

was 3.103. This indicates that there was a significant difference between the students' pre- and post-treatment attitudes at the level 0.05 in favor of the post-treatment attitude. This in turn means that using mobile phones is effective in raising students' attitudes. These findings are similar to those of some previous

studies (e.g. Saddique & Nair, 2015; AlShlowiy & Layali, 2020; Le, 2021; Insaf & Aya, 2023; Mahfoud & Abdel Mohsen, 2025) which show positive attitudes towards using mobile phones for learning and developing writing skills.

Conclusion

This study aimed to explore the Yemeni EFL students' attitudes towards the use of mobile phones in writing instruction. The results of the study clearly showed that students' attitude towards using mobile phones to learn writing skills was positive. The findings also indicated that there were statistically significant differences at the 0.05 level between the mean scores of the experimental group students' attitudes in the pre- and post-treatment in favor of the post-treatment.

Based on the results of the current study, some recommendations are suggested both for writing teachers and for future studies. Writing teachers should change the way and activities of teaching writing from traditional ones to more interactive ones by using learning technology. They should select effective mobile phone apps which can enhance students' motivation for learning writing, participation in writing tasks and activities, and interaction among themselves (i.e. among students). As for future research, similar studies can be conducted using populations across different Yemeni universities and schools.

References

- [1] Alharbi, A. (2024). Jeddah University students' attitudes toward using Telegram to support their EFL learning. *Open Access Library Journal*, 11(7), 1-20. <http://www.researchgate.net>.
- [2] Al-Madullal, I. (2013). The effect of weblog on improving Palestinian eleventh graders' English writing performance and their attitudes towards writing. [Unpublished M.A. Thesis]. The Islamic University of Gaza. <https://www.ajsrp>.
- [3] Al-Mekhlafi, M. (2020). An exploration of Yemeni university students' attitudes towards learning linguistic courses using Google Classroom. *Millennium Journal of English Literature, linguistics and translation*, 1 (1). <http://milljournal.org/es-journal>.
- [4] Almekhlafi, A. (2006). The effect of computer assisted language learning (CALL) on the United Arab
i. Emirates English as a foreign language (EFL) school students' achievement and
ii. Attitudes. *Journal of Interactive Research*, 17(2), <http://www.learnclub.org/p/64230/>
- [5] Alshammry, E. (2025). The Impact of Using Mobile Phone Application on EFL Students' Writing Proficiency. *International Journal of English Language Teaching*, 13(2), 16-22. <https://www.eajournals.org>.
- [6] Al Shlowiy, A. & Layali, K. (2020). Saudi students' perspectives of blogs in ESL writing. *International Journal of English Language & Translation Studies*. 7(4), 57-67.
- [7] Ebrahimi, S. S., Urien, j., & Courage, S. E. (2004). Impact of attachment to cell phones on classroom learning. *World Journal of Advances Research and Reviews*, 21(03), 699-706.
- [8] Insaf, M. & Aya, R. (2023). Students' Attitudes towards the Use of Smartphone in Developing Writing Skills in EFL Classes. Unpublished M.A. Thesis. Mohammed El Bachir El Ibrahim University.
- [9] Lai, C., & Zang, H. (2016). Mobile assisted language learning (MALL) writing strategies and learners' performance. *Journal of Computer Assisted Learning*, 32(6), 578-589. <http://www.sciencedirect.com>.
- [10] Le, M. T. (2021). Students' attitudes towards using smartphones and portable devices for studying writing. *International Journal of TESOL*. <http://www.researchgate.net>.
- [11] Masero, R. (2023). Mobile learning benefits: The advantages of learning On-The-Go, <http://elearningindustry.com/mobile-learning-benefits-the-advantages-of-learning-on-the-go>.
- [12] Mahfouz, I., & Abdel Mohsen, M. (2025). Investigating college students' attitudes and perceptions of using ChatGPT in writing language essays. *Arab World English Journal*, 21-39. <http://dx.doi.org/10.24093/awej/A1.2>.
- [13] Ozan, O. (2013). Directive support in connectivist mobile learning environments. [Unpublished M.A. Thesis], Graduate

- School of Social Sciences. Anadolu University, Eskisdhir.
- [14]Ozdamar Keskin, N., (2011). Developing and assessing a mobile learning system for academicians. [Unpublished M.A. Thesis]. Anadolu University, Eskisdhir.
- [15]Salhab, R., & Daher, W. (2023). The impact of mobile learning on students attitudes towards learning in an educational technology course. *Multimodal Technologies and Interaction*, 7(7). <http://www.researchgate.net>.
- [16]Siddique, M., & Nair (2015). The effectiveness of using mobile phone in enhancing writing skills: Teachers' and students' reflections. *Australian Journal of Basic and Applied Sciences*, 9(37), 390-396. Retrieved from http://www.ajbsweb.com/old/Ajbas_Special-IPN-Dec%20_2015.html.
- [17]Turzaliha, Rafiha, & Tahlib, A. (2022). Students' attitudes toward the use of Google Classroom in writing activity. *Foremost Journal*, 3(2). 37-43. <http://www.researchgate.net>.
- [18]Rosalinda, E., Hamamah, & Degeng, P. D. D. (2022). Students perceptions on the use of WhatsApp for learning writing during Covid-19 pandemic: A case study. *Journal of Excellence in English Language Education*, 1(4). <http://www.researchgate.net>.