# Exploring Vietnamese university students' perception of using Mobile Assisted Language Learning (MALL) to study English

Lai Thanh Van<sup>1\*</sup>, Le Hoang Duong<sup>2</sup>

<sup>1</sup>International School, Vietnam National University - Hanoi, Vietnam <sup>2</sup>Hanoi University, Hanoi, Vietnam \*Corresponding author: thanhvan2812@gmail.com

#### **ARTICLE INFO**

#### **ABSTRACT**

**DOI:**10.46223/HCMCOUJS. soci.en.12.2.2298.2022

Received: May 16<sup>th</sup>, 2022 Revised: June 20<sup>th</sup>, 2022 Accepted: July 25<sup>th</sup>, 2022

Keywords:

English language learning; MALL; students' perceptions

As a result of tremendous technological breakthroughs over the past several decades, there has been an unparalleled expansion of portable smart devices and mobile applications, especially for language learning purposes. Despite the amount of research on Mobile Assisted Language Learning (MALL), little is known about non-English major students' perceptions of the usage of MALL in Vietnamese universities. Using both qualitative and quantitative research approaches, this study explores the perceptions of non-English major university students at a Vietnamese university regarding the usefulness and ease of use of MALL in English learning based on the Technology Acceptance Model (TAM). 219 first- and second-year students were given a questionnaire to collect data, which was then combined with qualitative data acquired from semi-structured interviews and critically examined and analyzed. The results suggest that the majority of students regard MALL to be beneficial in terms of vocabulary acquisition, pronunciation enhancement, and ease of use. Consequently, it is highly suggested that MALL be implemented in the context of English teaching and learning at Vietnam's higher education institutions.

#### 1. Introduction

According to Ilyosovna (2020), English is the most widely spoken language in the world, with 67 countries recognizing it as their official language and 27 others recognizing it as their secondary official language. 350 million people speak English as their first language, while 400 million speak it as a second language. Due to the pervasiveness of the English language, several nations, including Vietnam, have made English a required subject at all educational levels and the primary language of teaching for a variety of fields (Van, 2010). In fact, English teachers and students currently outnumber of all other subjects in Vietnam (Van, 2010). Realizing the importance of learning and teaching English in the 21st century, the Vietnamese Government has decided to comprehensively develop the educational situation in Vietnam, particularly in regard to English, with a strong emphasis on digital transformation at all levels, beginning with tertiary education (Ho, Sivapalan, Pham, Pham, & Nguyen, 2021). Taking into mind the demographic and technological developments in Vietnam, the necessity to transfer from traditional to technology-integrated methods of instruction is becoming increasingly important (Ho et al., 2021).

During the first two decades of the 21st century, the Internet has grown to more than 3.2 billion active users, while mobile phones have registered two billion users (Taj, Sulan, Sipra, & Ahmad, 2016). 90 percent of the population in any developed country has at least one mobile

device, while 92 percent of young adults (18 - 29) use at least one smartphone (Klimova, 2017). Seraj, Klimova, and Habil (2021) observed that the usage of mobile devices for English Language Teaching (ELT) is rising globally. In addition, they emphasized that in the context of ELT, the mobile phone is interchangeable with other portable devices, such as the smartphone, cellphone, and Wireless Handheld Device (WHD). However, due to the convenience, accessibility, variety, and sheer quantity of apps on mobile phones, smartphones have become the most popular portable device, not only for communication, but for many aspects of life, including language acquisition (Klimova & Berger, 2020).

Therefore, this phenomenal and uniform development of smart device usage around the globe has presented educators with unprecedented chances to integrate new technology into language instruction. In fact, Taj et al. (2016) emphasize that the widespread usage of smart devices, which has the ability to expand language learning outside the traditional classroom, has provided extraordinary benefits for language studies.

Although there is a great deal of study on this subject, the majority of studies mainly focus on the acquisition of language skills (Listening, Reading, Writing, and Speaking, with an emphasis on vocabulary and pronunciation) (Ahmad, 2016; Burston, 2014; Chen, Chen, Jia, & An, 2020; Klimova, 2017; Klimova & Berger, 2020; Seraj et al., 2021; Taj et al., 2016; YYkselir, 2017). To measure the effectiveness of Mobile-Assisted Language Learning (MALL), it is generally acknowledged that preliminary research into the learners' perceptions of MALL should be done (Chen et al., 2020; Klimova & Berger, 2020; Seraj et al., 2021).

Despite the significance of comprehending students' perspectives, little research has been conducted on this vital aspect, particularly in the context of Vietnam's higher education (Nguyen, 2021; Pham, 2020; Vo, 2020; Vo & Vo, 2020). In addition, the few research available focuses mostly on teachers' perspectives, ignoring the perceptions of non-English-major students in their first and second years, who make up the bulk of English language learners in higher education (Ho et al., 2021; Nguyen, 2021; Vo & Vo, 2020).

This study tries to address this specific research issue:

"What are the perceptions of non-English-major students in a first and second year towards the use of MALL in English language learning both inside and outside of the classroom setting?"

#### 2. Literature review

#### 2.1. Definitions of MALL

Generally, it is agreed that there is no precise definition of MALL (YYkselir, 2017), and MALL is often regarded to be a subfield of m-learning, which is the process of language learning utilizing mobile devices.

Many scholars believe that Mobile-Assisted Language Learning (MALL) and Computer-Assisted Language Learning (CALL) belong to the same category; however, MALL is distinguished by the use of personal and portable devices resulting in new methods of learning and spontaneous access and interactions across different platforms, allowing MALL to be learner-centered as opposed to teacher-led as in CALL (Chen et al., 2020).

Exploring the unique characteristics of MALL, Burston (2014) proposes a description of MALL as personalized activities that meet the needs of learners owing to its mobility and adaptability. Therefore, MALL may be described as the personal and public process of learning via exploration and conversation in many platforms and circumstances, facilitated by the use of interactive technology by individuals (Seraj et al., 2021). Since this definition is the most inclusive and up-to-date, it will serve as the primary definition of MALL for the purposes of this study.

## 2.2. Technology acceptance model

Davis (1993) recognizes the significance of perceptions as contributing factors to the effectiveness of new technology applications; hence, he creates the Technology Acceptance Model to quantify this phenomenon. In this model, the degree to which the users would accept and actually use the new technology is depended on two factors - their perceived usefulness and ease of use.

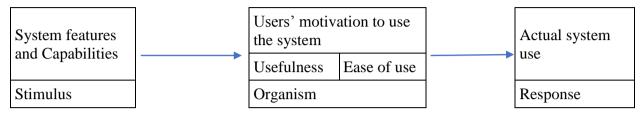


Figure 1. Theoretical framework for the perception towards the use of MALL

Source: The Technology Acceptance Model (Davis, 1993)

According to Muhtar, Pammu, and Nasmilah (2020) as cited in Darsih and Asikin (2020) and Metruk (2021), the usefulness variable for MALL should include a number of factors, such as frequency, perceived effectiveness in enhancing four core skills (Reading, Listening, Writing, Speaking), as well as grammar, pronunciation, and vocabulary skills. Muhtar, Pammu, and Nasmilah (2021) and Metruk (2021) believe that the ease of use criteria in MALL should encompass user-friendliness, clarity of instruction, accessibility, and the amount of work required to master the use of mobile applications. Due to its ability to comprehensively investigate the degree to which technology is utilized by actual users by evaluating such technology's utility and convenience of use, this method is implemented in a number of studies evaluating students' perceptions towards MALL (Alkhudair, 2020; Muhtar et al., 2020, as cited in Darsih & Asikin, 2020; Metruk, 2021; Muhtar et al., 2021; Pham, 2020; Saidouni & Bahloul, 2016).

Due to its prevalence and breadth, this model has been selected as the principal framework for evaluating the learners' perspectives in this study.

#### 2.3. Perceptions towards the use of MALL

#### 2.3.1. Benefits of using MALL for English learners

According to Klimova (2017), MALL is a very effective tool for developing the language abilities of students of all ages, and the majority of students find its use conducive to their English language acquisition. In addition, the majority of students observe that the usage of MALL is typically useful in strengthening all language skills in learners (Burston, 2014). In addition to the four core language skills (Listening, Reading, Speaking, and Writing), vocabulary, grammar, and pronunciation also gain considerably from the usage of MALL, according to Metruk (2021). Quizlet, Grammarly, and Thesaurus are the most popular tools for learning vocabulary and grammar, according to Pham (2018) and Pham (2022), whereas Elsa and Google Translate are useful for learning pronunciation (Pham, 2022).

In addition, MALL may be utilized to increase student productivity by granting them greater control over their work due to its mobility, networkability, and simplicity of access, enabling them to study anywhere and at any time (Alkhudair, 2020).

Darsih and Asikin (2020) elaborate on the advantages of MALL for material exploration by stating that MALL is advantageous for students because they allow greater ease of use and allow further exposition of the subject due to their connectivity, allowing students who encounter problems to seek assistance from experts around the world.

Another advantage of MALL is its ability to motivate learners. According to Klimova (2017), the majority of students are interested in MALL, claiming its effectiveness in improving motivation and, consequently, their overall satisfaction with English learning.

## 2.3.2. Drawbacks of MALL

While MALL is largely acclaimed by students for its efficacy in language acquisition, it has also been criticized for its complexity and lack of user-friendliness (Nguyen, 2021). It is thought that several MALL applications require an Internet connection to work correctly, which students in remote areas cannot afford, particularly in developing countries such as Vietnam or Bangladesh (Seraj et al., 2021). This is the same issue that desktop CALL users have; consequently, it is not a significant issue with MALL (Nguyen, 2021).

In addition, some individuals observe that the operation of certain MALL apps is unnecessarily complicated and time-consuming, requiring students to devote an excessive amount of time to learning how to run the system (Taj et al., 2016). However, according to Seraj et al. (2021), the majority of MALL apps are now created with user interaction in mind, resulting in a new generation of applications that are extremely user-friendly.

Accordingly, it is commonly assumed that MALL is, for the most part, straightforward to operate, and that the majority of obstacles associated with its use are not insurmountable (Seraj et al., 2021).

# 3. Methodology

# 3.1. Research design

In order to explore the specifics of this research problem, an exploratory mixed-method research design is utilized to collect and analyze both qualitative and quantitative data (Creswell, 2002).

The quantitative data may be statistically evaluated to acquire an understanding of the patterns and frequency of this problem, while qualitative data from the semi-structured interview can provide in-depth insights, particularly about the personal problems of students (Cohen, Manion, & Morrison, 2011).

# 3.2. Research settings and participants

The research involves 219 students from three different universities in Hanoi. All participants are first- and second-year non-English major students, who are available and willing to join in this study, making up the majority of English language learners at these three universities.

As most students at these institutions major in Business and Economics, which have a higher proportion of female learners in Vietnam (Vu, Nguyen, & Doan, 2020), the proportion of male students is significantly lower. The students were chosen at random in order to reach a broad number of students from a variety of courses and ability levels, therefore enriching and expanding their comprehension of the examined issue.

**Table 1** Descriptive statistics for Gender

		Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Valid	Male	42	19.2	19.2	19.2
	Female	176	80.4	80.4	99.5
	Others	1	.5	.5	100.0
	Total	219	100.0	100.0	

All participants signed the consent form and acknowledge the ownership of at least one mobile device (smartphones and/or tablets), allowing them to utilize MALL for language learning both in and out of the classroom.

## 3.3. Data collection and analysis

Questionnaires assessing perceptions toward MALL usage provide the quantitative data for this investigation. This questionnaire is based on those developed by Metruk (2021) to assess the perceptions of the utility and simplicity of use of MALL, whose consent was obtained by email prior to the study. With the assistance of professional linguists, the questionnaire items are translated into Vietnamese to ensure participant comprehension. The statements are separated into three main areas, with the first containing open-ended questions concerning the personal information of participants, the second addressing their perceptions of MALL's usefulness, and the third addressing MALL's ease of use. Using a Likert scale with five options (range from strongly disagree, disagree, neutral, and agree to highly agree), descriptive statistics are collected from the responses of 219 students. Utilizing Cronbach's Alpha formula, the reliability of this device was confirmed. The internal consistency of the questionnaire was evaluated to be 0.94, hence the questionnaire may be deemed credible for this study.

Simultaneously, semi-structured interviews are done with 30 selected students to further investigate the topics of perceived utility and perceived usability of MALL. This small sample size is chosen due to the participants' availability and willingness to participate (Creswell, 2002). The responses will be transcribed and analyzed qualitatively to determine the major themes. Both qualitative and quantitative data will be submitted to data interpretation in order to reach a conclusion.

#### 4. Findings and discussion

# 4.1. Students' perceptions towards the usefulness of MALL

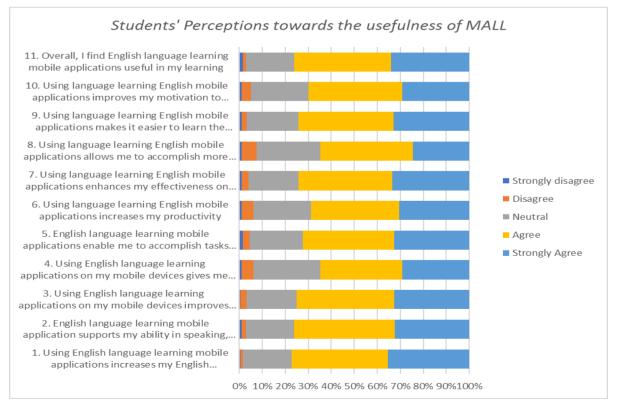


Figure 2. Students' perceptions towards the usefulness of MALL

First and foremost, in terms of vocabulary, grammar, and pronunciation, a majority of participants (up to 77 percent) agree or strongly agree that MALL helps to improve these three areas, whilst the remainder participants hold neutral viewpoints. Based on the findings of interviews with many students, it is clear that with the assistance of English-language apps, students are better able to check and recall vocabulary. For instance, participant 1 states that an online English dictionary is utilized to grasp the meaning and pronunciation of new terms, as well as vocabulary applications such as Quizlet, a form of online flashcard, to practice and memorize more regularly. Regarding grammar, the respondents underline the importance of grammar-checking tools such as Grammarly and Thesaurus, which have aided students in developing spoken and written documents. This is consistent with Darsih and Asikin's (2020, p. 188) assertion that "apps like Elsa and Google Translate assist students to improve their pronunciation and vocabulary."

Regarding the second question item, which refers to the four most important abilities in English acquisition, it is evident that around 75 percent agree that their listening, speaking, reading, and writing skills may be improved by utilizing MALL, meaning to say a substantial majority of students support the benefits of MALL towards their English skills. In the meantime, 21% of participants maintain a neutral stance, while a minority of around 4% disagree with this assertion. Tagoe and Abakah (2014) identified areas of mobile-based language learning in 2014 and found that the majority of students used MALLs to increase vocabulary, listening, grammar, phonetics, and reading comprehension, they also described a situated learning system on an unspecified mobile device that led to a significant program in pre-/post-test writing performance between the two groups in favor of the experimental condition in terms of factors such as the number of sentences produced, reasoning, communication, and organization.

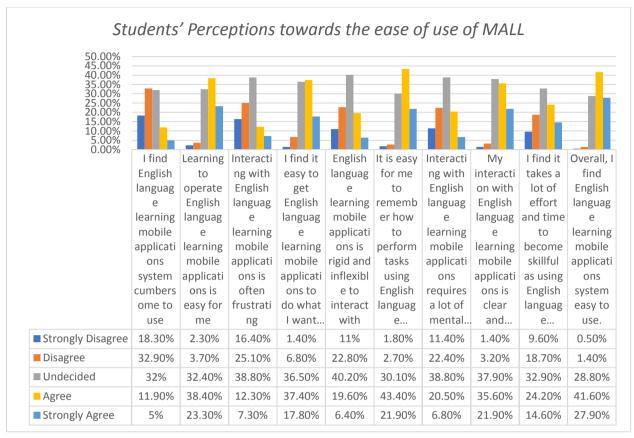
The results for question items 03 through 08 speak to the impact of MALL on the students' work. It was evident that pupils shared remarkably comparable experiences. Seventy to seventy-seven percent of participants indicate that English language learning programs on their mobile devices improve the quality, control, speed, efficiency, and effectiveness of their job. In addition, somewhere between 22 and 30 percent of individuals are uncertain as to whether MALL is beneficial. In contrast, a minority of respondents express the view that these programs do not aid in completing their assigned responsibilities. For instance, several of them stated that they may improve their vocabulary and pronunciation by utilizing online dictionaries such as Thesaurus or Oxford Dictionary to prepare for public speaking. Besides, they are more confident in their use of grammar checks and a wider variety of synonyms while writing. Participants also endorse the notion that MALL gives them better control over their work by allowing them to edit and keep their assigned assignments anywhere. Regarding the question of how quickly mobile devices can assist students in completing assignments, interviewees concur with Darsih and Asikin's (2020) findings that the rapid advancement of portable technology enables students to complete their assignments by opening and updating their devices wherever they choose.

Moving on to the item pertaining to the topic, it can be seen that the majority of students, 74 percent, believe that MALL makes it easier to study the material, while 23 percent have a skeptical opinion and just 3 percent disagree with the statement. This conclusion is reinforced by Darsih and Asikin (2020), who found that a further benefit for major students studying English using mobile applications is the improved ease with which they may study the subject content. Several interviewees highlighted, to demonstrate this point, that it can be difficult to comprehend

a lecture in a classroom or from a book; but, the usage of mobile applications, especially for the explanation of key concepts and statistics, can make it much simpler to comprehend. However, one participant remarked that he/she would rather approach the instructor for clarification than utilize the mobile application, probably due to its unreliability. This may explain why many students are uncertain about this statement.

For the item concentrating on the development of motivation in English language learning using mobile applications, it was evident that a substantial number of respondents, up to 70 percent, agree with the statement, while 25 percent are undecided and 5 percent disagree. Specifically, the results of the interview confirm the notion that applications increase students' willingness to study English due to their portability and accessibility at any time. In accordance with these findings, Metruk (2021)'s study showed that Mobile Assisted Language Learning (MALL) is vital for increasing students' motivation and improving their performance in English grammar, particularly prepositions, as measured by a performance test and questionnaire. Supporting these findings, it is undeniable that motivation is essential for learning accomplishment, as students are compelled to have passion, motivation, a need for learning, and their classroom conduct and attitude (as cited in Bekele, 2010). To illustrate this point, several participants mention that in social events with foreign friends or speaking sessions with native teachers, they are more motivated to perform their English communication skills. Additionally, according to Cole and Chan (1994), motivation plays a significant impact in a learner's success in a mobile learning environment. Students may utilize mobile technology to enhance and improve their academic performance; as a consequence, their satisfaction and sense of usefulness when learning using apps have a big influence on their motivation and studying performance (Burston, 2014).

As indicated by the response to the last question, a large majority of participants, around 76%, think that English language learning applications are beneficial to their learning, while a small number of them (21%) have a skeptical attitude and only 3% disagree. This conclusion is also similar to the findings of earlier research by Nuraeni, Carolina, Supriyatna, Widiati, and Bahri (2020), which revealed that the majority of students viewed the use of MALL to enhance classroom activities, especially English language acquisition, favorably. In order to explain this point, the respondents supply additional information indicating that they mostly use the program to rapidly verify the meaning of words and messages, which helps them save time and comprehend more readily. Their vocabulary and pronunciation can be greatly enhanced by using online dictionaries. In addition, it is acknowledged that social media platforms such as Facebook, Tiktok, and YouTube have created a vast array of content related to the four main English skills of reading, listening, speaking, and writing, thereby attracting the majority of students with much more interesting and professional products. The majority of interviewees express enthusiasm and drive when studying using these channels. Lastly, there is little question that mobile applications aid students in completing their assignments. With only a smartphone, kids can not only practice speaking with Elsa, check for writing problems with Grammarly, and study vocabulary with Quizlet, but they can also generate unique assignments such as films, recordings, and images in a shorter amount of time by utilizing various applications. In conclusion, mobile applications play a crucial part in the English-learning process of pupils.



# 4.2. Students' perceptions towards the ease of use of MALL

Figure 3. Students' perceptions towards the ease of use of MALL

This questionnaire adopted and utilized ten statements pertaining to the students' thoughts on the Ease of Using Mall. In general, it can be seen that the majority of students agree with the items referencing optimism; yet, their responses vary when asked about MALL's complexity. It is also noteworthy to notice that the proportion of participants who had skepticism regarding all 10 items has remained steady at around one-third. This may be due to the variety of applications, some of which may be simple to use while others might be more complicated (Darsih & Asikin, 2020).

Half of the participants disagree with the first statement, "I find the English language learning mobile apps system onerous to use," while 32% are unsure and the rest participants agree. When asked about this, a respondent stated that he/she mostly utilizes the dictionary, which can be used both online and offline and can be downloaded, but other programs can only be used with the Internet and take extra steps. Moving on to the second item, "I find it simple to learn to use English language learning mobile applications," it is evident that a minority of 6 percent disagree with this statement, while 32 percent are undecided and 60 percent support the statement. This outcome is completely explicable when compared to the previous one.

Moving on to items 03, 05, and 07, which all pertain to the difficulty of interacting with MALL, it can be seen that approximately one-third of the participants disagree with the statement "Interaction with MALL is frequently frustrating, inflexible, and requires a great deal of mental effort," while approximately 40 percent are neutral and 20 to 25 percent agree. This large variety of neutral replies demonstrates the complexity of the students' emotions when interacting with and using these applications. An interviewee stated that when the Internet is enough, the program runs easily; nevertheless, Internet disconnection or application faults may be rather unpleasant, especially with online quizzes like Kahoot, Quizizz, or Quizlet. This perspective aligns with the

research of Darsih and Asikin (2020), but with the interview responses in greater depth. According to a second respondent, social media is significantly more adaptable than other platforms; for instance, on Tiktok, it is simpler to navigate the videos with all the content related to the topic of interest, rather than navigating through multiple steps on other learning websites such as BBC. However, others believe that MALL is at least more convenient to access and operate than laptop or desktop computers. Lastly, discussing mental exertion, interviewers emphasize that patience is the most important component with mobile apps because it relies not only on the application's complexity but also on the device.

In contrast, for items 04, 06, and 08, the same pattern may be observed, which is the reverse of the trend shown for items 03, 05, 07. Referring to the three statements "I find it easy to get English language learning mobile applications to do what I want, to remember how to perform tasks using English language learning mobile applications, and my interaction with English language learning mobile applications is clear and understandable," a small percentage of students disagree, while the majority (30 - 36 percent) give a neutral response and more than half of them indicate agreement. The majority of interviewees favor this because they find it simpler to operate the program for their English learning objectives, which include looking for new words (online dictionaries), completing tasks (Microsoft Teams or Google forms), and locating information (Google, social media).

Regarding the ninth item, which relates to the statement "I believe it takes a great deal of time and effort to become proficient in utilizing English mobile applications," it can be observed that students' perspectives differ from those of previous items. A little less than 30% of respondents disagree with this statement, while 38% agree and 33% are unsure. The percentage appears to be comparable across the available alternatives. This demonstrates that it is difficult to determine if it will take a large amount of time to become proficient using English language learning mobile applications. Several interviewers stated that it might rely on the students' styles, motivation, or the application itself.

In relation to the statement 'Overall, I find the English mobile apps system easy to use,' it can be determined that the majority of responses, as much as 70 percent, support the convenience of MALL, while 28 percent are unable to decide and just 2 percent, or four students, disagree. This implies that the majority of students considered the English mobile application they downloaded to be user-friendly and straightforward to operate.

#### 5. Conclusion

The necessity for the digital transformation of English language instruction has prompted the creation of new technologies, notably the use of Mobile-Assisted Language Learning (MALL). In the context of this study, the majority of participants view MALL as a successful study aid, complementing its efficacy in developing the four fundamental skills (Reading, Listening, Writing, and Speaking) and highlighting its usefulness in building vocabulary and pronunciation. In addition, because of MALL's mobility and adaptability, participants find it highly productive for their job, granting them better control over their projects. In addition, MALL may be highly successful in motivating students to study and can be viewed as providing them with a great deal of satisfaction in their English learning, which is consistent with the study of Metruk (2021). The overall consensus is that MALL is user-friendly and simple to operate, despite a few issues resulting from the complexity and length of time required to learn how to use it. Due to the positive perceptions of students toward MALL, it is highly suggested that MALL be implemented in the context of English teaching and learning at Vietnam's higher education institutions.

#### References

- Ahmad, S. R. (2016). Importance of English communication skills. *International Journal of Applied Research*, 2(3), 478-480.
- Alkhudair, R. (2020). Mobile assisted language learning in Saudi EFL classrooms: Effectiveness, perception, and attitude. *Theory and Practice in Language Studies*, 10(12), 183-194. doi:10.17507/tpls.1012.16
- Bekele, T. A. (2010). Motivation and satisfaction in Internet-supported learning environments: A review. *Educational Technology & Society*, *13*(2), 116-127.
- Burston, J. (2014). Twenty years of MALL project implementation: A meta-analysis of learning outcomes. *Recall*, 27(1), 4-20. doi:10.1017/s0958344014000159
- Chen, Z., Chen, W., Jia, J., & An, H. (2020). The effects of using mobile devices on language learning: A meta-analysis. *Educational Technology Research and Development*, 68(4), 1769 -1789. doi:10.1007/s11423-020-09801-5
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). London, UK: Routledge.
- Cole, G. P., & Chan, L. (1994). *Teaching principles and practice* (2nd ed.). Brisbane, Australia: Prentice Hall of Australia Pty Ltd.
- Creswell, J. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research.* Upper Saddle River, NJ: Merrill Prentice Hall.
- Darsih, E., & Asikin, N. (2020). Mobile assisted language learning: EFL learners' perceptions towards the use of mobile applications in learning English. *English Review: Journal of English Education*, 8(2), 183-194. doi:10.25134/erjee.v 8i2.2999
- Davis, F. D. (1993). User acceptance of information technology: System characteristics, user perceptions and behavioral impacts. *International Journal of Man-Machine Studies*, 38(3), 475-487.
- Gencoglu, B., Helms-Lorenz, M., Maulana, R., & Jansen, E. (2021). A conceptual framework for understanding variability in student perceptions. *Frontiers in Psychology*, *12*(1), 1-11. doi:10.3389/fpsyg.2021.725407
- Godwin-Jones, R. (2017). Smartphones and language learning. *Language Learning & Technology*, 21(2), 3-17.
- Ho, N., & Sivapalan, S., Pham, H., Pham, A., & Nguyen, L. (2021). Teaching English as a second language in Vietnam: Transitioning from the traditional learning approach to the blended learning approach. *SHS Web of Conferences*, *124*(1), 1003-1014. doi:10.1051/shsconf/202112401003
- Hoang, Q., Pham, T., Dang, Q., & Nguyen, T. (2022). Factors influencing Vietnamese teenagers' intention to use mobile devices for English language learning. *Advances in Social Science*, *Education and Humanities Research*, 621(1), 230-245. doi:10.2991/assehr.k.211224.023
- Ilyosovna, N. A. (2020). The importance of English language. *International Journal on Orange Technologies*, 2(1), 22-24.

- Klimova, B. (2017). Mobile phones and/or smartphones and their apps for teaching English as a foreign language. *Education and Information Technologies*, 23(3), 1091-1099. doi:10.1007/s10639-017-9655-5
- Klimova, B., & Berger, A. (2020). Interactive English language mobile application. *International Conference on Mobile Computing and Sustainable Informatics*, 1(1), 203-209. doi:10.1007/978-3-030-49795-8 19
- Metruk, R. (2021). The use of smartphone English language learning apps in the process of learning English: Slovak EFL students' perspectives. *Sustainability*, *13*(15), 1-17. doi:10.3390/su13158205
- Muhtar, I. Y., Pammu, A., & Nasmilah, N. (2021). Students' perceptions of the use of 'TELL' in English learning process in Bosowa University Makassar. *ELS Journal on Interdisciplinary Studies in Humanities*, 4(4), 474-484.
- Nguyen, L. T. H. (2021). Teachers' perception of ICT integration in English language teaching at Vietnamese tertiary level. *European Journal of Contemporary Education*, *10*(3), 697-710. doi:10.13187/ejced.2021.3.697
- Nuraeni, C., Carolina, I., Supriyatna, A., Widiati, W., & Bahri, S. (2020). Mobile-Assisted Language Learning (MALL): Students' perception and problems towards mobile learning in English language. *Journal of Physics: Conference Series*, 1641(1), 1201-1207.
- Pham, L. (2018). Using quizlet to engage the students in learning vocabulary. *Issues in Language Instruction*, 5(1), 29-30. doi:10.17161/ili.v5i0.7019
- Pham, T. A. (2022). University students' perceptions on the use of quizlet in learning vocabulary. *International Journal of Emerging Technologies in Learning (IJET)*, 17(7), 54-63. doi:10.3991/ijet.v17i07.29073
- Pham, T. T. (2020). Mobile-assisted language learning in a university context in Vietnam: Students' attitudes. *VNU Journal of Foreign Studies*, *36*(1), 103-116. doi:10.25073/2525-2445/vnufs.4502
- Saidouni, K., & Bahloul, A. (2016). Teachers and students attitudes towards using mobile-assisted language learning in higher education. *SSRN Electronic Journal*, 3(3), 123-140. doi:10.2139/ssrn.2822983
- Seraj, P., Klimova, B., & Habil, H. (2021). Use of mobile phones in teaching English in Bangladesh: A systematic review (2010-2020). *Sustainability*, *13*(10), 5674-5687. doi:10.3390/su13105674
- Tagoe, M. A., & Abakah, E. (2014) Determining distance education students' readiness for mobile learning at University of Ghana using the theory of planned behavior. *International of Education and Development using ICT*, 10(1), 91-106.
- Taj, I. H., Sulan, N., Sipra, M., & Ahmad, W. (2016). Impact of Mobile Assisted Language Learning (MALL) on EFL: A meta-analysis. *Advances in Language and Literary Studies*, 7(2), 76-83.
- Van, H. V. (2010). The current situation and issues of the teaching of English in Vietnam. 立命館 言語文化研究, 22(1), 7-18.

- Vo, H. N. (2020). Understanding higher education learners' acceptance and use of mobile devices for language learning: A Rasch-based path modeling approach. *Computers & Amp; Education*, 146(1), 146-158. doi:10.1016/j.compedu.2019.103761
- Vo, H. N., & Mu, G. (2020). Perceived teacher support and students' acceptance of mobile-assisted language learning: Evidence from Vietnamese higher education context. *British Journal of Educational Technology*, 52(2), 879-898. doi:10.1111/bjet.13044
- Vo, L. V., & Vo, L. T. (2020). EFL teachers' attitudes towards the use of mobile devices in learning English at a university in Vietnam. SSRN Electronic Journal, 11(1), 114-123. doi:10.2139/ssrn.3581340
- Vu, H. M., Nguyen, X. T., & Doan, H. D. (2020). Factors influencing to the university choice of high-school pupils-an empirical study of Lam Dong Province, Vietnam. *Journal of Critical Reviews*, 7(8), 1656-1665.
- YYkselir, C. (2017). A meta-synthesis of qualitative research about Mobile Assisted Language Learning (MALL) in foreign language teaching. *SSRN Electronic Journal*, 8(3), 302-318. doi:10.2139/ssrn.3053570

