

# Indonesian learners' perception on the usage of mobile applications in writing skill

Mega Indah Mutiarasari, Ngadiso, Diah Kristina

Universitas Sebelas Maret

megamutiaras11@student.uns.ac.id

Received:  
9-2-2020

Final Revision:  
7-3-2020

Published:  
19-04-2020

Corresponding  
Author:

**Mega Indah Mutiarasari**  
megamutiaras11@student.uns.ac.id

## ABSTRACT

*Nowadays, digital technologies play significant roles in daily life. In educational context, these technologies help learners to gain more knowledge. However, the learners mainly use mobile devices for non-academic purposes, like play game or open the social media applications rather than use the learning applications. In fact, mobile device is an effective media that can make the learners motivated and more interested in learning English. The further research needs to investigate students' perception on the usage of mobile applications especially in creative writing skill. The participants of the research are 30 senior high school students consisting of 12 males and 18 females. The data is collected by using close-ended questionnaire. This research classified as case study research using randomized sampling. Descriptive data analysis was conducted. The results indicate that mobile applications generally give some advantages in learning English. The perceived benefits of mobile learning comprised opportunities to have ubiquitous learning, have so many exercises, analyze the specific mistakes the learner has made, and also explain the principles behind the correct answer. The learners should maximize the usage of mobile applications positively. The findings have several significant implications for educators, particularly for the use of mobile applications in academic purposes and the strategies to implement mobile learning.*

**Keywords:** EFL; Mobile Applications; Perception; Senior High School

---

## Introduction

English as an international language is important to be learned. By learning English, learners can have an international awareness through the understanding of cultures and get more information from the world. It becomes a bridge between countries in the world to interact. Learning and teaching of English increased throughout the world during recent years. English language that has so far become one of problems faced by language learners. Learners tend to be less enthusiasm in learning English using books. Mobile application is the effective method that can make the learners motivated. In this era, mobile phone become the most important devices of daily life to communicate with someone, look for a new information, play game, and other activities, even for children. Mobile phones are used increasingly in mobile language learning, with applications ranging from improving knowledge of vocabulary, idioms, and grammar (e.g. Thornton & Hauser, 2005). It can help learners more easily to access the material every time and everywhere. It is an audio and visual learning that have so many exercises for the learners with the answer key and the explanation. Books

can tell the students what the rules are, but they cannot analyze the specific mistakes the student has made and also to understand the principles behind the correct solution.

A literature study shows that EFL students are generally positive about the use of mobile devices for learning EFL. In Turkey, Basoglu and Akdemir (2010) examined university students to compare the effectiveness of learning English vocabulary via mobile phones versus conventional flashcards. The findings indicated positive effects from the participants' mobile learning, as well as a positive attitude towards learning English vocabulary. Dashtestani's (2015) work examined the university students' attitudes towards the application of mobile-assisted language learning (MALL) in EFL contexts in Iran. The perceived benefits of mobile learning comprised opportunities for ubiquitous learning and access to the Internet, use of multimedia in the classroom, and portability (Dashtestani, 2015). Therefore, the goal of this study is to identify the perception of mobile applications in EFL context of senior high school learners' in Indonesia. Previous study have ex-

amined Iranian university students and provided analysis of findings (Dashtestani, 2015), but this study examines senior high school students in Indonesia.

**Methods**

The participants of this study included 32 senior high school students that have experienced with mobile learning application. The sample came from a larger sample of over 106 students were chosen from 3 classes of grade 11 in senior high school. The students were at an intermediate level of proficiency based on the profiles available at the school.

Semi-structured interviews were also undertaken to provide qualitative data and confirm the findings of the questionnaires. In order to triangulate the data of the questionnaires and interviews, the questions of the interview were focused on the same issues based on which the questionnaires were designed. Specifically, the questions of the interviews included:

1. What do you think about the use of mobile devices in learning EFL?
2. What do you think are the benefits of using mobile devices in learning EFL?
3. What do you think are the possible limitations and challenges of using mobile devices in learning EFL?
4. In what ways do you usually use your mobile device? Can you name some activities

you do by your mobile phone?

5. What types of strategies should be adopted to facilitate the inclusion of mobile learning in the EFL context of Indonesian?

Online-based versions of the questionnaires were administered to the participants. The data was taken from Google form result. The questionnaire data were analyzed using descriptive analysis. While, content analysis was used to analyze the data of the interviews. Excerpts from students' actual statements were included in the study as well. The results of the observation were analyzed by analyzing the items of the checklist which were related to students' use of different types of mobile devices, teachers' attitudes towards students' use of mobile devices, and teachers' supervision over students' use of mobile devices. The content of observer's notes was also analyzed and reported.

**Findings and Discussion**

*Students' perceptions of mobile learning*

The questionnaire data concerning students' perceptions of mobile learning showed that senior high school students have positive perception about mobile applications in English learning. Students perceived some benefits of mobile learning comprised ubiquitous learning, facilitation of learning, ubiquitous access to the Internet, possibility of the use of multimedia, portability, environment-friendliness, and easily access to mobile learning software tools. However, the students did not have consensus on the high cost of mobile devices (Table 1).

*Table 1. Questionnaire results on students' perceptions of mobile learning.*

	Mean	SD
1. Using mobile devices enables students to have ubiquitous learning	4.03	1.092
2. Learning via mobile devices facilitates EFL learning	3.88	1.070
3. Using mobile devices provides ubiquitous access to the Internet	4.31	1.061
4. The use of mobile devices enables EFL students to use multimedia in class	3.59	1.103
5. Mobile devices are easily portable	4.41	1.012
6. Compared to printed materials, mobile devices are environment-friendly	4.09	1.027
7. A variety of EFL software tools for mobile devices can be accessed	3.91	1.027
8. Buying mobile devices is less costly than buying books and pens	3.34	1.359

**Likert** scales: 1. *strongly disagree*; 2. *disagree*; 3. *undecided*; 4. *agree*; 5. *strongly agree*.

The interview data show that some factors such as unavailability and lack of awareness of mobile learning software tools, the slow speed of the Internet, teachers' resistance to the use of mobile devices in class, and students' lack of knowledge of mobile learning are the main limitations of mobile learning from the perspectives of students. After triangulating the data of the interviews and questionnaires, it was revealed that the high cost of mobile devices, the lack of access to mobile devices, and teachers' lack of interest in the use of mobile devices in the classroom were the major limitations of mobile learning in Indonesia.

*Students' perceptions of limitations of mobile learning*

As table 2 shows, the implementation of mobile learning has some limitations and chal-

lenges from the perspective of the senior high school students. The most important challenges to students' use of mobile applications for learning EFL include the high cost of mobile devices, the lack of access to mobile learning software tools, the lack of wireless internet connection facilities in language teaching institutions, students' lack of knowledge about the use of mobile devices for EFL learning, screen size, and inefficiency of the use of mobile devices for learning EFL. However, the students did not have consensus regarding some challenges of mobile learning such as students' low digital literacy to use mobile devices for educational purposes, selection of appropriate learning application, and distraction.

Table 2. Questionnaire results on students' perceptions of limitations of mobile learning.

	Mean	SD
1. Suitable mobile devices are too costly to be purchased	3.47	0.879
2. Software tools related to mobile learning are not easily accessible	3.44	0.801
3. Wireless internet connections are not available at educational institutions	3.78	1.008
4. I lack digital literacy to use mobile devices for educational purposes effectively	2.94	0.982
5. We do not know which mobile devices can be most useful for language learning	2.97	0.999
6. We (students) do not know how to use mobile devices to learn English	3.41	0.837
7. Using mobile devices in the classroom may cause distraction	2.75	0.880
8. The screen size of most mobile devices is small for language learning	3.31	0.931
9. Using mobile devices is not suitable for learning languages	3.75	0.842

Likert scales: 1. strongly disagree; 2. disagree; 3. undecided; 4. agree; 5. strongly agree.

*Students' current mobile learning practices*

Table 3 indicates that the senior high school students *always* use mobile devices for non-academic purposes and *frequently* use mobile devices for academic purposes. Otherwise, the students *sometimes* use mobile devices for EFL purposes. The results indicate that the majority of students use mobile devices for non-academic purposes.

The observation indicated that the majority of Indonesian senior high school students owned smartphones in the classroom and some of them also had laptop. The results indicated that MALL is not practiced in the EFL classes. MALL was mainly a complementary material for learners' self-regulated learning. There were no MALL activities, materials, discussions, and awareness-raising in the classrooms. Moreover, some teachers did not allow students to use mobile devices in the

Table 3. Questionnaire results on students' current mobile learning practices.

	Mean	SD
1. Use of mobile device for academic purposes	3.13	1.040
2. Use of mobile device for non-academic purposes	4.06	0.948
3. Use of mobile device for EFL purposes	2.97	0.897

Likert scales: 1. never; 2. rarely; 3. sometimes; 4. frequently; 5. always.

classroom, but there are some who preferred the use of mobile devices in the classroom as well. The majority of students made use of mobile phone to open electronic dictionaries and some students used mobile phone to connect to the internet. The teachers did not guide students on how to use their mobile devices and did not assign them any activities which could have been done through the use of mobile devices.

*Students' perceptions of strategies to implement mobile learning*

The questionnaire data concerning students' perceptions of strategies to implement mo-

bile learning illustrates that the senior high school students *agreed* or *strongly agreed* that several strategies should be adopted to facilitate the implementation of mobile learning in EFL contexts. These perceived strategies comprise guiding students to choose suitable mobile devices for EFL learning, training students to use mobile devices for language learning, equipping EFL centers with mobile devices, encouraging students to use mobile devices in the classroom, introducing new mobile learning software applications to EFL students, and presenting mobile learning activities in the classroom.

Table 4. Questionnaire results on students' perceptions of strategies to implement mobile learning.

	Mean	SD
1. Students should be guided how to choose a suitable mobile device for language learning	4.22	0.706
2. Students should be trained how to use mobile devices for learning EFL	4.13	0.833
3. Language teaching centers should be equipped with mobile devices for student use	3.66	1.208
4. Teachers should encourage students to use mobile devices in the class	3.69	0.859
5. New mobile software tools should be introduced to students by teachers Periodically	3.97	0.999
6. Mobile learning EFL activities should be presented in the classroom by EFL teachers	4.13	0.707

The comparison of the questionnaire and interview data shows that teachers' support for students' use of mobile devices as well as training students how to use and choose a suitable mobile application for language learning are important measures which can be taken to facilitate the implementation of mobile learning in EFL courses.

If new technologies integrated into EFL teaching practices, it must consider individuals' perception of technology as an important issue. Even though MALL is able to motivate learners, it seems that the open nature of this innovative way of instruction is still perceived as new and difficult for learners (An & Williams, 2010). Schmidt (2009) proposed theoretical foundations for learning on a mobile devices constructed through the combination of three theories as follows: (1) The zone of proximal development which highlight what learners can do alone, the levels they want to achieve, and scaffolding or support to achieve that level; (2) Social learning theory which illustrates the impact of attention, motivation, and feedback towards learning process; (3) Theory of law of effect which highlights the importance of trial and error learning

opportunities and the effects of feedback in the learning.

As the result of this study, applying mobile learning in the EFL context of senior high school in Indonesia would motivate and facilitate students in learning English. Opportunities for ubiquitous learning was considered as the benefit of using mobile devices for EFL learning that have been confirmed in previous research on students' perceptions of mobile learning (Fallahkhair, 2009; Kukulka-Hulme & Shield, 2008; Ogata & Yano, 2005). Another research shown that access to the internet is also a valuable advantage of using mobile devices for learning (Fujimoto, 2012; Nah, et.al., 2008; Stockwell, 2010). Portability is another feature of the use of mobile devices for learning English that allows learners to experience personalized learning and adapt their learning to their personal learning styles and preferences (Sole, et.al., 2010). The concept of portability is closely related to ubiquitous learning and leaning on the move which is a unique affordance of mobile learning (Fujimoto, 2012). The finding related to environment-friendliness of mobile learning shows that the

students are aware of both pedagogical and environmental aspects of mobile learning (Dashtestani, 2015).

As with any type of new technology, mobile learning has several perceived challenges and obstacles. Stockwell (2008) stated that there are two types of obstacles to the application of mobile learning based on the results of the study, they were *easier obstacles* include keypad aspects, screen aspects, and pedagogical aspects and *more difficult obstacles* consist of psychological aspects, environmental aspects, and cost aspects. Based on the findings of this study, the majority of learners are aware of the limitations and challenges of mobile learning in the EFL context of Indonesia. One obstacle, which was reflected in the results of the questionnaires, is related to the cost issue of mobile devices. It is not necessarily true that more expensive mobile devices are more useful for educational purposes. The issue of access to mobile learning software tools can be easily solved if educational institutions provide students with appropriate applications and bear some costs to access mobile learning software tools. But that will count as an investment for improving their educational services and practices. Access to the Internet is another challenge that can be overcome by educational authorities and providers. Moreover, students believed that their teachers may not support the use of mobile devices in the classroom. Teachers' attitudes can discourage or encourage students to use certain types of technologies in the classroom. Therefore, different attitudes between teachers' and students' towards mobile learning should be eliminated.

Indonesian learners are rarely used mobile devices for EFL purposes, that would be associated with the lack of experience in using mobile phones for learning because people think that mobile phones are considered a tool for communication and entertainment, not learning. It was further described that the majority of students own mobile phones and laptops, but in EFL classes mobile devices are not used. In addition, some teachers prevent students from using mobile devices in the classroom. It is necessary that teachers adapt their teaching strategies and approaches to the demands of technologies and learning opportunities. Educational authorities and providers are invited to hold teacher training and workshop courses for EFL teachers in order to give the teachers knowledge to implement mobile learning efficiently and effectively.

Based on the findings and students' perceptions, it can be concluded that the low

level of digital literacy required for mobile learning is a serious issue which needs to be taken into account by educational authorities and decision-makers. Digital literacies required for mobile learning are constantly dynamic and might vary according to the type of device each student uses. Therefore, it is important to train students and teacher for the digital skills that they need to possess in order to function efficiently in mobile learning contexts. Educational institutions also should provide some learning equipment, such as mobile learning software applications, services, and the Internet connection for the implementation of mobile learning.

During the interview, the participant expressed that aspects such as grammar and vocabulary improved in their writing. This was reflected in a less frequent use of online translators and the construction of more clear and concise sentences. The participant acknowledged that recounts were the easiest texts to write. One of the reasons for this may be the short time taken to retell recent experiences and also, it is one of the most frequent genres used in teaching writing to students in their mother tongue (Chen, 2008). Additionally, recounting is considered one of the simplest narrative text types since events are presented one after the other in their order of occurrence (Feez, 2002). The implementation of mobile learning in the study helped the participant to feel interested and motivated in checking the contents of mobile learning application frequently. This study implies that the use of mobile technology could be incorporated into a traditional English class, especially for writing skills. These results reveal that mobile learning might generate positive results to increase writing abilities because the participant optimized the quality of the texts she produced in a short period of time.

The results of this study showed that Indonesian EFL students are broadly positive about the use of mobile devices in their learning. Stockwell (2008) points out, mobile learning might be the best choice when students are not forced to learn through their mobile phones. Moreover, mobile learning will take various designs and its contents and services will get an improvement periodically. Furthermore, Dashtestani (2013) advised that teachers should adopt positive attitudes towards mobile learning and believe that mobile technologies can improve their quality of teaching significantly. Unfortunately, both teachers and students have to follow what is dictated to them by educational curricula even though it might not match with students' and teachers' real needs and expectations. Although there might be a significant difference between students'

attitudes towards mobile learning and their actual use of mobile devices for learning EFL, educational authorities should take students' attitudes into account and adapt the EFL curriculum to their needs, preferences, and practicalities. The overall findings of this study showed that Indonesian EFL students perceive mobile learning as a beneficial learning approach. It should be noted that more studies should be undertaken to explore the effect of different variables on Indonesian students' use of mobile devices for learning English.

### Conclusion

CALL has become a popular mode of language teaching and learning, especially within the context of EFL. However, CALL still cannot overcome the restrictions of time and space. MALL, unlike CALL, can offer the advantage of mobility, which enables seamless learning from inside to outside the classroom. The results of this study identified significant differences between the participants in terms of attitudes towards technological affordance, even though most of their responses were positive. With regard to the second construct, the applicability of MALL, participants strongly supported the notion that their post-MALL-course knowledge in using their mobile phones to improve their English had improved. This response demonstrates that participants had benefited from MALL, and their feedback concerning this mode of learning was positive. Generally speaking, participants' scores for the four proposed constructs about the perception of mobile learning were positive. Clearly, the development of mobile technologies has changed our lives and the way we learn a foreign language. New applications for mobile devices emerge every day, and this study expands our current understanding of MALL. Practitioners and researchers can find inspiration here for further research while exploring the unlimited possibilities of applying MALL to EFL learning.

Based on the findings and students' perceptions, it can be concluded that the low level of digital literacy required for mobile learning is a serious issue which needs to be taken into account by educational authorities and decision-makers. As Traxler (2012) proposes, digital literacies required for mobile learning are constantly dynamic and might vary according to the type of device each student uses. Therefore, it is important to train students and teacher for the digital skills that they need to possess in order to function efficiently in mobile learning contexts. Educational institutions also should provide some learning equipment, such

as mobile learning software applications, services, and the Internet connection for the implementation of mobile learning.

### References

- Al-Fahad, F.N. (2009). Students' attitudes and perceptions towards the effectiveness of mobile learning in King Said University, Saudi Arabia. *Turkish Online Journal of Educational Technology*, 8(2), 111-119. Retrieved from <http://files.eric.ed.gov/fulltext/ED505940.pdf>.
- Ally, M. (2013). Mobile learning: From research to practice to impact education. *Learning and Teaching in Higher Education: Gulf Perspectives*, 10(2), 1-10. Retrieved from <http://lthe.zu.ac.ae/index.php/lthehome/article/viewFile/140/62>
- Basoglu, E.B., & Akdemir, O. (2010). A comparison of undergraduate students' English vocabulary learning: Using mobile phones and flash cards. *The Turkish Online Journal of Educational Technology*, 9(3), 1-7.
- Chen, B., & Denoyelles, A. (2013). Exploring students' mobile learning practices in higher education. *Educause Review Online*. Retrieved from <http://www.educause.edu/ero/article/exploring-students-mobile-learning-practices-higher-education>
- Chen, J. (2008). An investigation of EFL students' use of cohesive devices. *Asia Pacific Education Review*, 5(2), 215-225.
- Dashtestani, R. (2012). Barriers to the implementation of CALL in EFL courses: Iranian EFL teachers' attitudes and perspectives. *The JALT CALL Journal*, 8(2), 55-70.
- Dashtestani, R. (2013). Implementing mobile-assisted language learning (MALL) in an EFL context: Iranian EFL teachers' perspectives on challenges and affordances. *The JALT CALL Journal*, 9(2), 149-168.
- Dashtestani, R., & Samoudi, H. (2014). The use of laptops for learning English as a foreign language (EFL): Merits, challenges, and current practices. *The TESOL International Journal*, 9(1), 105-124.
- Dashtestani, R. (2015). English as a foreign language teachers' perspectives on implementing online instruction in the Iranian EFL context. *Research in Learning Technology*, 22. doi:10.3402/rlt.v22.20142

- Fallahkhair, S. (2009). Development of a cross-platform support system for language learners via interactive television and mobile phone. *Journal of Computer Assisted Learning*, 23, 321-325.
- Feez, S. (2002). *Text-based syllabus design*. Sydney: National Centre for English Language Teaching and Research, Macquarie University.
- Fujimoto, C. (2012). Perceptions of mobile language learning in Australia: How ready are learners to study on the move? *The JALT CALL Journal*, 8(3), 165-195.
- Hsu, L. (2013). English as a foreign language learners' perception of mobile assisted language learning: a cross-national study. *Computer Assisted Language Learning*, 26(3), 197-213.
- Huang, Y.-M., Huang, Y.-M., Huang, S.-H., & Lin, Y.-T. (2012). A ubiquitous English vocabulary learning system: Evidence of active/passive attitudes vs. usefulness/ease-of-use. *Computers and Education*, 58, 273-282.
- Ismail, I., Idrus, R.M., & Gunasegaran, T. (2010). Motivation, psychology and language effect on mobile learning in University Sains Malaysia. *International Journal of Interactive Mobile Teaching*, 4, 31-36.
- Kadirire, J. (2009). Mobile learning demystified. In R. Guy (Ed.), *The evolution of mobile teaching and learning* (pp. 15-55). Santa Rosa, CA: Informing Science Press.
- Kukulka-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *Research Gate*, 20(3), 271-289.
- Milrad, M., & Jackson, M. (2008). Designing and implementing educational mobile services in university classrooms using smart phones and cellular networks. *International Journal of Engineering Education*, 24(1), 84-91.
- Nah, K.C., White, P., & Sussex, R. (2008). The potential of using a mobile phone to access the Internet for learning EFL listening skills within a Korean context. *ReCALL*, 20(3), 331-347.
- Navaridas, F., Santiago, R., & Tourón, J. (2013). Opinions from teachers in the Fresno area of Central California regarding the influence of mobile technology on their students' learning. *RELIEVE - e-Journal of Educational Research, Assessment and Evaluation*, 19(2), 1-18. <http://dx.doi.org/10.7203/relieve.19.2.3047>
- Ogata, H., & Yano, Y. (2005). Knowledge awareness for computer-assisted language learning using handhelds. *International Journal of Learning Technology*, 5(1), 435-449.
- Percival, J., & Percival, N. (2008). Engineering students' perceptions of mobile learning. *World Congress on Engineering and Computer Science*, San Francisco, CA.
- Sadiq, R.B., Cavus, N., & Ibrahim, D. (2019). *Mobile application based on CCI standards to help children learn English as a foreign language*. Interactive Learning Environments, DOI: 10.1080/10494820.2019.1579239
- Schmidt, Denise A., Baran, E., Thompson, A.D., Mishra, P., J. Matthew, Koehler & Shin, T.S. (2009). Technological Pedagogical Content Knowledge (TPACK): The Development and Validation of an Assessment Instrument for Preservice Teachers. *Journal of Research on Technology in Education*, 42:2, 123-149.
- Sole, R.C., Calic, J., & Neijmann, D. (2010). A social and self-reflective approach to MALL. *ReCALL*, 22, 39-52.
- Stockwell, G. (2007). Vocabulary on the move: Investigating an intelligent mobile phone-based vocabulary tutor. *Computer Assisted Language Learning*, 20(4), 365-383.
- Stockwell, G. (2008). Investigating learner preparedness for and usage patterns of mobile learning. *ReCALL*, 20(3), 253-270.
- Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning & Technology*, 14(2), 95-110.
- Stockwell, G. (2012). Commentary: Working with constraints in mobile learning: A response to Ballance. *Language Learning & Technology*, 16(3), 24-31.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, 21, 217-228.
- Traxler, J. (2012). Context as text in mobile digital literacy: A European university perspective.
- Walker, R. (2013). "I don't think I would be where I am right now". Pupil perspectives on using mobile devices for learning. *Research in Learning Technology*, 21. doi:10.3402/rlt.v21i0.22116
- Zhang, H., Song, W., & Burston, J. (2011). Reexamining the effectiveness of vocabulary learning via mobile phones. *The Turkish Online Journal of Educational Technology*, 10, 203-214.