International Research Journal of
SCIENCE, TECHNOLOGY, EDUCATION, AND MANAGEMENT
P-ISSN: 2799-063X | E-ISSN: 2799-0648
Volume 1, No. 2 | November 2021

Mobile assisted language learning: Perspectives from senior high school students

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ABSTRACT

Education has been in a drastic shift from face-to-face classes to distance education. Coping with this educational trend demands innovative practices to provide solutions to varied student conditions. Hence, this study explored the perspectives and experiences of Grade 11 students in the English for Academic and Professional Purposes (EAPP) classes in using mobile devices in the teaching-learning process in one of the public schools in the Department of Education Davao City, Mindanao, Philippines. The study employs a descriptive qualitative approach to conduct the research. Purposive sampling was used in the study that yielded 12 participants. Only Grade 11 students who use mobile devices to learn the lessons in EAPP class are eligible to participate in the study. Thematic analysis was used to analyze the data from focus group discussion and in-depth interviews aided by Quirkos software version 2.4.1. The findings revealed that using mobile technology in the class made learning easy and accessible. It is perceived to be an alternative mode of delivering the lesson. However, the participants also perceived the use of mobile devices in the class as distractive. Hence, guidelines on the responsible use of mobile devices in the classroom must be formulated and implemented. Future researchers might consider adopting a mixed methods research design in exploring this area. This is to balance perspectives with concrete figures that may quantify significant improvement or significant differences in students' learning.

ARTICLE INFO

Received : August 8, 2021
Revised : September 20, 2021
Accepted : October 17, 2021

KEYWORDS

Distance education, Mobile assisted language learning (MALL), Philippines, Qualitative

Suggested Citation (APA Style 7th Edition):

Lim, R.A. & Arcilla Jr., F.E. (2021). Mobile assisted language learning: Perspectives from senior high school students. *International Research Journal of Science, Technology, Education, and Management*, 1(2), 108-118. https://doi.org/10.5281/zenodo.5726387

INTRODUCTION

Mobile learning is getting pervasive and can potentially change the way language is being taught. It has impacted how learning occurs in various contexts and disciplines, including language learning (Kukulska-Hulme, 2009; Kacetl & Klímová, 2019; Cakmak, 2019). Mobile-Assisted Language Learning or MALL is a branch of mobile learning (Viberg & Grönlund, 2012) that basically uses mobile devices to deliver lessons. These mobile devices may include but are not limited to iPad, iPod, cellular phones, and laptops. The portability of these devices allows new ways of learning, which occur anytime and anywhere across various contexts and use (Chinnery, 2006; Kukulska-Hulme & Shield, 2008).

In government schools in the Philippines, the shortage of learning materials has been a persistent problem. However, the Department of Education has developed plans for ICT integration for the Basic Education System from 2000 to 2005, including school computerization, teacher preparation, IT curriculum creation, digital content development, finance and evaluation, and appraisal (Tinio, 2002; Crisolo, 2018), more needs to be said in the actual context of this new Senior High school program. This requires educators to be resourceful and innovate. Thus, the use of the 'Mobile Assisted Language Learning' in which electronic devices are granted premium to compensate for the shortage of textbooks and relevant instructional materials in the teaching-learning process (Kukulska-Hulme, 2005). The normal large print textbooks that are not accessible in the real form are replaced by handheld equipment. In mobile learning, the students are driven more and more by their personal learning interests, particularly those related to greater mobility and frequent travel. Some claim that mobile devices help promote interactions and interactive learning, which are directly important to language teaching and learning (Lominé & Buckhingham, 2009). This study is richly documented abroad. A study by Leis, Cooke, and Tohei (2013) revealed that students who used their mobile phones in classes tended to study more outside the classroom than those who were not permitted to use their mobile phones in class, thus resulted in better learning of the latter. In addition, the Davie and Hilber project (2015) examined students' attitudes at the University of Applied Sciences in South Westphalia towards using the Quizlet app to learn English vocabulary through their smartphones. The interviews showed that mobile learning flashcards were a highly efficient, convenient, and enjoyable learning method. The study concluded that using smartphones in learning a language can have positive motivations for students and additional long-term advantages that are not yet visible. Saran et al. (2008), Lu (2008), and Kukulska-Hulme and Shield (2008) have also shown that students are favorable to the use of mobile devices for learning vocabulary, and studies have also shown positive results. With the massive proliferation of technology today, mobile learning, learning with mobile devices in various contexts, is trending across different education sectors worldwide (Rikala, & Kankaanranta, 2012).

In the Philippines, both public and private schools have turned to information technology (IT) as a tool to improve teaching and learning (Rodrigo, 2003; Crisolo, 2018). However, a corpus of data in the region revealed a lack of similar studies about Mobile-Assisted Language Learning. Although there have been initiatives undertaken by some private schools in the use of mobile learning, there are no published data as proof of information. Furthermore, there are many available studies of MALL on the internet, but they are mostly quantitative from abroad trying to establish the efficacy of mobile learning to vocabulary development (Çakmak & Erçetin, 2018; Mahdi, 2018; Rahimi & Mouri, 2016), language pronunciation (Cavus, 2016; Cavus & Ibrahim, 2017) and students learning achievement (Ozer & Kılıç, 2018). We have come across a qualitative study on MALL, but it explored how second language learners understand hypertext in reading from the internet (Altun, 2003). Another qualitative study investigated the perceptions of the preservice English as a Foreign Language teachers about MALL (Oz, 2015). In the light of the foregoing, the current study focuses on students' perceptions and attitudes towards using mobile devices in accessing learning materials for the subject English for Academic and Professional Purposes. These students were primarily under senior high school program in one of the public schools in the Department of Education, Division of Davao City, Mindanao, Philippines. The study specifically sought answers to the following questions: (1) How do the students perceive the use of mobile devices in the learning process? (2) What are the perceived advantages and disadvantages of the students in using mobile devices in the learning process? (3) How should the use of mobile devices be maximized in the teaching-learning process?

This study can be viewed using the lens of Transactional Distance Theory. With mobile devices are becoming widespread, a significant number of researchers and professionals have taken the technology into their working environments. Teachers and educators identify and implement mobile technology into the remote learning environment as a learning tool for students (Park, 2011; Tuncay, 2016). Transactional distance theory proposed by Michael Graham Moore provides the broad framework of the pedagogy of distance education (Gokool-Ramdoo, 2008; Giossos, Koutsouba, Lionarakis & Skavantzos, 2009). Transactional distance theory describes the basic principles of distance learning as academic philosophy. It lays forth a concept of distance education that includes the separation of teacher and student (Moore, 2007). Transactional distance theory is characterized not only as geographical but also as a pedagogical separation. This means that learning, although distance, follows pedagogical rules or practices such as the use of established grading systems, teaching strategy, and the like. Although learning is informal, the process is formalized using technology as a bridge between teacher pedagogy and learners' learning accommodation. The theory thus makes it possible to combine an education that is a curriculum in which technology comprises the primary or key mode of communication and where computer-mediated education is ancillary to the classroom (Moore, 1997). Many scholars consider transactional distance theory a central theoretical paradigm in considering initiatives of distance education programs (Gorsky & Caspi, 2005). Since mobile instruction accounts for learning outside the classroom, this theory is particularly appropriate in the study.

OBJECTIVES

The main purpose of the study was to explore the insights and experiences of Grade 11 English for Academic and Professional Purposes (EAPP) students in one of the public secondary schools in the Department of Education, Davao City Division Mindanao, Philippines in using mobile devices in the teaching-learning process. Specifically, this study intends to discover answers to the following questions: (1) How do the students perceive the use of mobile devices in the learning process? (2) What are the perceived advantages and disadvantages of the students in using mobile devices in the learning process? (3) How should the use of mobile devices be maximized in the teaching-learning process?

METHODS

Research Design

The study employed a descriptive qualitative research approach. In this research design, the researchers do not adhere to any established qualitative research tradition such as phenomenology, case study, ethnography, or grounded theory (Doyle et al., 2020). A descriptive qualitative study is appropriate to use when you wish to provide direct and straightforward descriptions of the phenomenon (Sandelowski, 2000). The qualitative method has become a popular choice of faculty and students (Dela Fuente, 2021; Dacanay et al., 2019; Biclar et al., 2019). In this study, the researchers were only interested to know the experiences of the students in using mobile devices in learning EAPP lessons in class.

Participants

Twelve (12) students were selected as the participants who experienced the use of mobile assisted learning. These participants were enrolled in the first semester, Academic Year 2019-2020 of the Senior High School Program is one of the public schools in the Department of Education, Davao City Division, Mindanao, Philippines. Six were included in a Focused-Group Discussion, and the other six participated in an in-depth interview. The number of participants for Focus Group Discussion is enough as Krueger and Casey (2010) suggest that a good focus group must limit the size to six to eight people. Informed consent was secured from the participants before the data gathering. The participants were asked open-ended questions relative to their experiences in using mobile devices in learning EAPP lessons. The selection of participants was based on the following eligibility criteria: (a) Grade 11 students (b) Bona fide public school, senior high school student, and (c) With mobile devices who uses them for learning the EAPP lessons.

Instrument

The researchers made an interview guide questions relative to the research questions. There were five predetermined interview guide questions for each of the research questions. However, the researchers were not bound to follow verbatim the construction of the questions nor the sequence of the questions. The researchers developed the actual questions based on the answers of the participants. Further, the interview guide questions were examined by the colleagues of the researchers on the presence of language barriers, biases, and possible derogatory questions or remarks. Comments of the colleagues on the questions were later included in the final and revised questions.

Data Gathering Procedures

The following steps were observed by the researchers in gathering the data: (a) The researchers formulated research questions based on the purpose of the study. Thereafter a set of interview guide questions based on the research questions was formulated. (b)The research instrument was subjected to content validation by language experts who happened to the colleagues of the researchers. (c) The researchers set the qualifying criteria for the participants. (d) The participants were informed and given a consent form. (e) The researchers conducted the interview in school, particularly in a vacant room free from noise and distractions.

Ethical Consideration

The researchers explained very well to the participants their role in participating the interview. After they verbally concurred, the informed consent form was given to each of the participants where they needed to affix their signature, signifying understanding their consent of participation. The selection of the participants was based solely on the eligibility criteria and not according to affinity or congeniality. After the interview, the participants were given a simple snack.

Data Analysis/Rigors

After the data was gathered, transcribing the recorded interviews followed. The transcribed data were carefully read and re-read to establish codes. Moreover, significant statements were grouped into themes and categorized accordingly (Dela Fuente, 2019; Braun & Clarke, 2006). The overall qualitative data analysis was aided with Quirkos software version 2.4.1., a computer-assisted qualitative data analysis software. QDAS has been usually used to support the analysis of the data from focus group discussions, in-depth interviews, and document analysis (Woods et al., 2016) and has been reported to increase rigor in qualitative studies (Lu & Shulman, 2008).

FINDINGS

This section attempts to thoroughly describe the themes that emerged from the in-depth interview and focus group discussion. The themes were arranged under three dimensions or categories: students' perceived use of mobile devices in the teaching-learning process; students' perceived advantages and disadvantages in using mobile devices in the teaching-learning process; and ways to maximize the use of mobile devices in the teaching-learning process.

Students' Perceived Use of Mobile Devices in the Teaching-Learning Process

In the analysis of the data, two themes emerged in this inquiry. The first theme was aid for learning. The participants of this study believed that the use of mobile devices aids the overall learning process of the subject. When discussing somewhat difficult concepts or lessons, the students could just open their mobile devices, and if they have internet access, they could search for information right away. Learning becomes instant. FGD 4 said that:

> "*For me, using mobile devices in the class is very helpful because instead of brainstorming a lot, I could just open my google chrome and search for the information. I know and understand things faster." (FGD4)*

IDI 3 added similarly:

> "*Yes, I believe the point of allowing us to use our phones in the class is very nice because this is so liberating. I could still remember when I was in junior high, no cellphone was allowed in the class. I find it boring. Here, learning is enjoyable and easy." (IDI3)*

Another theme that emerged is the ease of learning. Students both in the in-depth interview and focus group discussion confessed that the use of mobile devices in learning EAPP lessons facilitates learning. Access to the learning materials used in the class has been made easy. The materials were uploaded to the learning management system. In this case, the Facebook group had been used as an alternative learning management system. An excerpt of the interview is here below:

> *"I think the use of Facebook as a learning management system is very helpful to me because I can easily access the learning materials you uploaded on Facebook, sir. Unlike before in the use of textbooks, you can bring bulky materials. You cannot type in or search words." (IDI 4)*

Additionally, students perceived the use of MALL as a more convenient way of learning. The use of mobile devices like cellular phones and laptops makes learning possible anytime at their convenience. When before students brought in the classroom textbooks, now the materials are digitized and put in a capsule. Learning appears to be just as necessary as opening their cellular phones from time to time. FGD2 has this to say:

> *"To me, I like the use of a cellphone in class because I do not need to bring my books. Everything comes in handy, and you can access the materials anywhere you are, even if I am inside the jeepneys, in the comfort room, or in the market buying goods. I like it very much." (FGD2)*

Student 2 stressed that the use of mobile devices saves time in looking for information. Using a laptop in particular, the use of search feature in a pdf reader and Microsoft word makes looking for information at the snap of fingertips. This is a quick and time-efficient strategy in looking for keywords of the necessary information. Although some books have indexing, it is not as efficient as you do in softcopy files stored on mobile devices. Student 2 expressed the kind of idea:

> *"When I use my laptop, I can easily retrieve the file or the material of the lesson. When my teacher has an instruction to look for something, I use the keyword of the instruction to search for the information in my file. This is a kind a good experience because I do not need to read through the file. It is quick." (IDI2)*

Students' Perceived Advantages and Disadvantages in the Use of Mobile Devices in the Teaching-Learning Process

The researchers would also like to know the perceived advantages and disadvantages of using mobile devices in the EAPP class. There were two major themes that emerged in the analysis. One is that the use of mobile devices was perceived to be an alternative mode of learning. A student expressed that she liked very much the experience of using mobile devices in class because heavy textbooks were replaced with the use of digital files on

the phone. A cellular phone is necessary for daily communication and so the learning materials. See the excerpt of the transcript below:

> *"I feel so blessed of allowing us to bring our cellular phones inside the classroom and while the teacher is giving a lesson. We now have the option to bring just our phone, and this is kind a convenient for me. Allowing us to choose whether to bring books or not for as long as we have the material is so cool." (IDI1)*

On the other hand, student 6 shared that the use of mobile devices is an advantage because lessons are now stored on a phone or laptop, which can be shared via Bluetooth or other sharing applications like Facebook messenger using the internet. Learning in this context is viewed as collaborative in nature. See the transcript below.

> *"Using mobile devices as part of the lesson is very important because lessons and videos are uploaded online. We usually download it, and we usually share the materials with others via messenger. I think this is nice because the materials are coming from the teacher, and we can just share them with anyone who needs it." (IDI6)*

The last and the second theme is a source of distraction. Although many shared about the advantages of mobile devices in learning, there were still perceived negative consequences in using MALL in learning. Some commented that mobile devices in the classroom pose distraction. Many became lazy, and most low-performing students relied on virtual information, not listening to the teachers anymore. Student 3 commented:

> *"Use of mobile devices in the class has disadvantages because sometimes instead of focusing on the lesson, we are tempted to open Facebook and browse on our newsfeed and sometimes post anything shit on our timelines. Teachers are busy talking, so most of the time, he cannot catch us doing nothing for the lesson." (FGD3)*

FGD2 added the same idea:

> *"I feel like I am relying too much on my cellphone like I am relying on social media, Google something. I feel like all the answers are in the Google, so I just Google everything." (FGD2)*

Ways to Maximize the Use of Mobile Devices in the Teaching-Learning Process

In the third line of inquiry, there were also two themes extracted. First is the utilization of diverse educational and social programs. Many participants believed that for mobile devices to be fully utilized, school managers, curriculum implementers, and designers must devise ways to package learning interactively. The school must provide learners with a legit online learning management system where they can access and learn using their mobile devices. The learning activities can be delivered in diverse modalities so they can have options to choose from. IDI 5 commented that:

> *"I usually use Google when I do research on topics I cannot understand. I do not have a choice of website. It would be better if we could have activities for our lessons on the school website. Videos, audios, and interactive links are very exciting!" (IDI5)*

On the second theme, guidelines for using mobile devices in the classroom were formulated. Although students enjoyed the use of mobile devices in the delivery of lessons as aforementioned, they got distracted by the

online and social media applications. Instead of focusing on the lesson, they were tempted to open their Facebook application, browse, and post any fancy things. Hence, students reflected that the teacher should monitor the class and implement limitations on its use, like providing sanctions to those who can violate the agreed-upon rules. Student 3 expressed that:

> *"I think the teacher should monitor the class, especially those who are at the back because most of the time they are the ones not listening to the teacher. House rules are important and provide penalties to violators." (FGD3)*

Student 6 also made a more reflective remark:

> *I think we should be responsible enough to use our cellphones and laptops because our teacher is busy teaching, so we should listen and avoid opening apps that distract us like we need to discipline ourselves. We need to control ourselves. (FGD6)*

DISCUSSIONS

The findings of the study revealed that the use of mobile devices in the classroom was perceived to aid or facilitate the teaching and learning process. Leis (2014) argued that the advent of the internet, laptops, and tablets have been increasingly popular in normal classes (Barrera et al., 2020) and in the English language school, where a wealth of information is offered almost instantly to the students online. Computers and electronic tablets seem to be successful and could bring many advantages to an educational institution. However, Gómez-García et al. (2020) warned that the use of mobile devices alone could not by themselves improve learning. There is a need for teacher intervention to make the support works, plus other factors that teachers need to consider.

With the use of mobile devices, learning a lesson becomes easy and accessible. The participants shared that learning the contents of the subject can be done anytime and anywhere because all the relevant files in the subject were uploaded in an online platform. With an internet connection, files can be accessed, read, and even downloaded for offline use through the students' mobile devices. On a similar note, Davie and Hilber (2015) examined the impact of MALL on the attitude of engineering students on the use of mobile devices, particularly the mobile application Quizlet in learning English vocabulary. The study revealed that the students enjoyed learning English vocabulary using the mobile application. They considered their learning to be convenient, efficient, and enjoyable. This finding showed that the motivation of students in learning might be facilitated using technology. Gay et al. (2001) emphasized that while mobile learning provides an excellent option for collaboration, interactivity, and teamwork among the students and the teacher, MALL is only considered an extension for the teacher in any learning environment. Hence, teacher presence is vital throughout delivering the lessons (Wang et al., 2021). However, the advent of MALL in education provides an impetus to change and advance how education should be designed and delivered to the students. It could change the habits of the new generation who are natively computer savvy from using a mobile device for its sole purpose of communicating and socializing to academic surfing and learning.

On the second line of inquiry about the perceived advantages and disadvantages of using MALL in the classroom, two major themes surfaced. One is the alternative learning mode. This insight refers to the participants' experience in using online applications in the mobile devices in learning, contrary to the traditional way of learning using printed materials and textbooks. Valarmathi (2011) and AbuSa'aleek (2014) emphasized the idea that Mobile Assisted Language Learning (MALL) is an approach to learning a language that is assisted or enhanced using mobile devices. In other words, MALL is an approach to language teaching and learning where mobile devices are considered a language resource, a tool, and support in the acquisition of language features. However, Huang et al. (2010) posited that since MALL is a new method in education and learning, its implications to students, teachers, and educational institutions must be taken with caution. Thus, Kukulska-Hulme and Pettit (2009) insisted that

mobile devices enable interaction; however, the resulting communication can be less meaningful due to the limited depth of thinking and learning and distraction. Although potential disadvantages exist in mobile learning devices, the drawbacks are outweighed by the advantages that mobile learning can provide to three groups of users: individual students, faculty, and university administrators. If mobile learning allows students to access information easily, it will bring value to their learning experience (Prasertsilp, 2013). On the final note of maximizing the use of mobile devices in the teaching and learning process, themes formulated include the need to utilize diverse educational and social programs and guideless of MALL use in the classroom. Bailey et al. (1999) maintained that given the pervasive domination of technology in education, educators are challenged to develop innovative and creative educational materials that enhance and supplement the traditional lecture format. Educational materials must promote constructive learning, develop problem-solving capabilities and enable small-group dialogue.

Gamifying class activities is a good way to achieve learning objectives (Dichev & Dicheva, 2017). Lessons are delivered with a maximum amount of easiness at the same time learning the target competencies. While games do not replace conventional teaching methods, games can improve the acquisition of knowledge and processing of target skills. On the second theme, guidelines of use were given a premium. Since there were identified disadvantages to the use of MALL in the classroom, the study participants likewise offered solutions. They emphasized that discipline must be at the core of implementing this learning strategy. Putting limitations and sanctions on students who abuse mobile devices during class time must be established and imposed. Gómez-García et al. (2020) argued that the use of mobile devices could not enhance academic achievements; rather, how teachers use the devices contingent upon other several contextual factors such as the type of the device used, the activities carried out using the device, and the maturity of the learners. Further, this finding is parallel to the idea of Kukulska-Hulme et al. (2009); Bruns et al. (2006); and Ozdamli (2011) that a combination of technical, pedagogical, and sociological expertise will be needed to make sense of and give direction to, emerging mobile learning principles. Mobile learning needs to be contextualized in broader, integrative educational scenarios. In these scenarios, mobile devices need to inter-operate with ubiquitous embedded technologies and network and server infrastructures, and they need to support well-grounded educational functions. Oller (2012) argued that higher education decision-makers, instructional designers, and, most importantly, teachers need to innovate and experiment with mobile learning as mobile learning technology and applications are changing and improving from time to time.

IMPLICATIONS

In the light of findings, the use of mobile devices in the class has been perceived positively by the students. Hence, students must be afforded the appropriate devices capable of processing online applications demanding high-end processors and data. This does not come easy because this has a budget and economic implications for the family. The government as well as an important role to play in this scenario. There is also a need for stable internet infrastructure, especially in areas identified as hard to reach by signals. This must be boosted first, then data allocation for students and teachers comes next in the concern.

Additionally, students must be well educated on the proper and intelligent use of online information. As reported in the findings, students were reliant on the information from the internet. They became lazy, looking for pieces of evidence of the claim. They have the tendency to receive information like hook and sinker. Thus, these students must be taught how to critically examine information, including identifying legitimate sources. Digital literacy is a must, empowering the students to know how to use online information to their advantage. Finally, insights into the foregoing findings can be helpful in designing the curriculum for distance education and learning. Since education is now becoming digital, which can take place anytime and anywhere, the use of mobile devices in learning is crucial. Schools need to think about how mobile devices can be utilized in both synchronous and asynchronous class sessions.

For future researchers, the following points may be considered: It would also be interesting to come up with a quantitative study of the same research focus, including gender and language skills as moderating variables.

Gender may have influenced students' perception and utilization of mobile technology in the learning process. It may also be good if mobile learning is focused on a particular macro skill of language- listening, speaking, reading, and writing- to establish specific pedagogical implications of mobile technologies to language teaching. Learning dimensions such as comprehension and retention are similarly exciting to explore in the realm of mobile technologies. An attempt to measure the level of comprehension and the extent of language learning retention among students under the auspices of mobile technology can provide consistent and concrete results to many claims of its efficacy. Future researchers may consider adopting a mixed methods research design in exploring this area. This is to balance perspectives with concrete figures that may quantify significant improvement or significant difference of learning. Quantitative research design aids researchers and readers of the study in determining the extent of its effect against a particular variable, for instance, comprehension. A qualitative measure of research supplies researchers and readers underlying principles and mechanisms operating in its application in the learning process. The comprehensive recommendations presented herein can stir educators and researchers to look for strong educational, philosophical, and theoretical underpinnings that provide mobile technologies pedagogic implications to teaching and learning.

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