

A STUDY OF UNDERGRADUATE STUDENTS' ATTITUDE, MOTIVATION, AND DIFFICULTIES ON THE USE OF MOBILE VOCABULARY LEARNING, ASSUMPTION UNIVERSITY

Li Pan¹

Marilyn Fernandez Deocampo²

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Abstract: This study investigates the undergraduates' attitudes, motivation, and learning difficulties in using mobile devices via vocabulary learning. The participants of this research are full-time undergraduates studying at Suvarnabhumi Campus, Assumption University (AU). This study used a mixed-method and focused on the exploratory design. For the questionnaire survey, 200 participants were selected using convenience sampling from the population. For the semi-structured interview, 15 participants were selected by using simple random sampling. The findings indicated that although 100% of the participants have mobile devices, some still used a traditional method, and the most popular vocabulary applications are Duolingo and BaiCiZhan. Also, students' attitudes toward using mobile devices were HIGH as the overall mean score (M) = 3.68. The indication is that students have positive attitudes towards using mobile devices at Assumption University. Moreover, students' motivation towards using mobile devices in AU is also HIGH. The overall mean score (M) = 3.68. As suggested, AU students are highly motivated to use mobile devices in teaching and learning. Lastly, students' difficulties with using mobile devices are MODERATE, with the overall mean score (M) = 2.76. This can be interpreted those students were having moderate difficulties with using mobile devices. Based on the findings, a few pedagogical implications were discussed, and recommendations for students and teachers were suggested to foster mobile vocabulary learning in the English language classroom.

Keywords: Attitude, Motivation, Difficulties, Mobile Vocabulary Learning, Mobile-Assisted Language Learning (MALL)

¹ Teacher, Rasami British International School, Thailand. pan1179411503@gmail.com

² Ph.D., Program Director of M.A. English Language Teaching, Graduate School of Human Sciences, Assumption University, Thailand. mai_67cheng@yahoo.com.sg

Introduction

“Without grammar, very little can be conveyed; without vocabulary, nothing can be conveyed” (Wilkins, 1972, p.111). Lewis (1993) argued that “lexis is the core or heart of language” (p.89). Vocabulary is viewed as a significant part of language ability as it is a prerequisite for using four language skills: listening, speaking, reading, and writing. A student who acquires vast vocabulary in the target language has a better comprehension of the meaning of the words (Hopp, 2017). According to Long (2017), vocabulary learning has become an area of interest to researchers in SLA after the 1960s. Language researchers and practitioners need to understand the difficulties of language learners in vocabulary learning. Although some EFL and ESL learners have a high level of language communication competence, they still have difficulties in reading and writing due to insufficient vocabulary (Alharbi, 2015). Therefore, students need to focus on vocabulary learning and find the most suitable way to learn vocabulary efficiently.

Modern mobile devices can provide many useful functions, which have been successfully integrated into all areas of people’s daily lives (Miangah & Nezarat, 2012). Mobile-Assisted Language Learning (MALL) becomes convenient, and language learning is likely to be easy, especially vocabulary learning. Mobile phones can present different learning materials in various styles and improve their interest in learning effectively (Jarvis, 2015). Teachers should spend time on unproven mobile apps to determine if they work for L2 learning (Beatty, 2003).

Learners’ attitudes always play a crucial role in language learning. Learners who decide to learn a second/foreign language tend to have a positive learning attitude (Sadighi & Zarafshan, 2006). A positive attitude toward the target language was found to determine one’s success in that language learning. In other words, a positive learning attitude can always bring good results to learners in second language learning. Also, a learning attitude is essential for vocabulary learning because word learning is not an easy job. Thus, second language learners need to spend a lot of time and energy on it.

In the experimental learning process, learners often encounter many difficulties, such as their memory, understanding, and recitation methods (Hayakawa, Bartolotti, Berg, & Marian, 2020). Vocabulary learning is one of the essential elements in English learning, especially in academic settings (Liu, 2010). Most English learners believe that vocabulary learning is not easy because they have to remember many explanations and use them appropriately. Therefore, English as a Foreign Language (EFL) and English as Second Language (ESL) learners should adopt appropriate vocabulary

learning strategies to improve their English vocabulary, but this involves motivation and interest on the learners' part.

Gardner and Miller (2014) stated that motivation is a well-recognized factor that determines whether learners will be successful in second language learning, which requires a great emphasis on learner autonomy. The learning motivation of L2 learners has been generally conceptualized as a combination of learners' effort, desire, and attitude toward their target language learning (Gardner, 1988). Motivation is a crucial factor for learners to acquire a foreign language successfully (Norbrook & Scott, 2004). Gamification and audio-visual learning via mobile devices will effectively improve learners' motivation (Sauerland, Broer, & Breiter, 2015; Secer, Sahin, & Alci, 2015). Compared to the traditional learning method, learners' motivation for continuous learning will be better enhanced by using mobile devices (Alioon & Delialioglu, 2017; Liu, Tao, & Nee, 2008). Moreover, motivation to learn can affect the effectiveness of learning using mobile devices, especially in learning English vocabulary (Lu, 2018).

Objectives:

1. To identify the current situation of students' mobile English vocabulary learning at Assumption University.
2. To identify the students' attitude toward the use of mobile devices at Assumption University.
3. To measure the students' motivation towards the use of mobile devices at Assumption University.
4. To identify the students' difficulties towards the use of mobile devices at Assumption University.

Literature Review

This study investigates the undergraduates' attitude, motivation, and learning difficulties in using mobile devices via vocabulary learning.

Gardner (1988) defines attitude as "the sum total of a man's instincts and feelings, prejudice or bias, preconceived notions, fears, threats, and convictions about any specified topic." In language learning, learners' attitude always plays a crucial role. According to Gardner & Lambert (1972), attitude is the learners' unremitting effort to achieve their goals, and it is an essential component of motivation in L2 learning. Also, learners' positive attitudes towards mobile phones or other mobile devices will improve mobile vocabulary learning (Yurdagül & Öz, 2018).

Generally, motivation can be divided into external motivation and internal motivation. Extrinsic motivation refers to the motivation that comes from external rewards, such as passing an exam or avoiding punishment (Dörnyei, 1998). Motivation is one of the important factors for language learners to acquire or learn a language successfully, and it always plays a vital role in the field of pedagogy and psychology (Dörnyei, 2001). However, intrinsic motivation is achieving inner satisfaction by taking on some challenging tasks. In the era of information technology, one of many approaches that are likely to help students acquire English vocabulary is to integrate mobile learning in the classroom, as this provides students easy access to learning that will likely help learners' language competence and foster motivation (Fageeh, 2013).

Since the development of mobile devices has dramatically accelerated, teachers, as facilitators of learning, need to consider how to improve their relevant knowledge, especially technological knowledge, to keep pace with the educational development. Based on the rapid evolution of the Internet, Siemens and Downs came up with a learning theory called connectivism (Downes, 2006; Siemens, 2005). Connectivism theory is a modern learning framework made up of three components: node, network, and connection (Siemens, 2005). Nodes are the basis of connection. Nodes not only refer to individuals but also could refer to schools, libraries, institutions, and companies (Downs, 2006). A connection is formed when two nodes interact with each other. Similarly, A network will be created due to the connection between more than two nodes.

Conceptual Framework

This study aims to investigate the undergraduates' attitude, motivation, and learning difficulties on the use of mobile devices via vocabulary learning, and it is mainly used to explore the current situation of AU students' mobile vocabulary learning. In the investigation of the current situation, the researcher focus on three factors, namely attitude, motivation and difficulties towards using mobile devices. Then, statistical methods were used to measure and analyze these three factors. Finally, the researcher could get the current Mobile-assisted Vocabulary learning (MAVL) situation at Assumption University

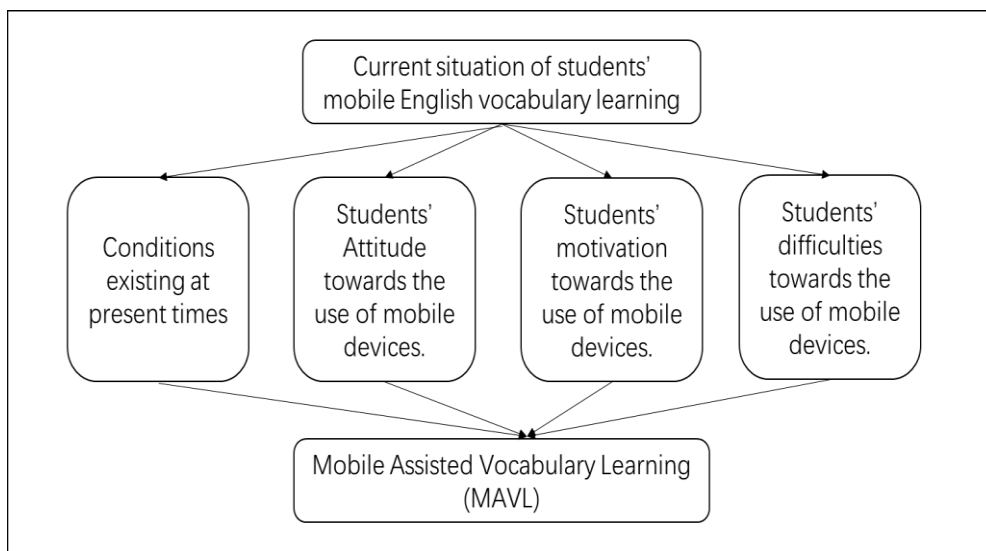


Figure 1: Conceptual Framework of the Study

Method

The research involves two different instruments.

Questionnaire

The instrument of qualitative research was a questionnaire. It has three parts: five personal information items, ten general question items, and 21 scaling analysis items. The first part provided useful information about participants, such as gender, age, major, and nationality. The second part was about all investigation of learners' current status of mobile learning was investigated. The last part had to measure the level of agreement of each variable.

Semi-Structured Interview

The instrument of qualitative research was a semi-structured interview. The interviewer provided eight questions to 15 students who participated in the interview. They were selected from the 200 students who participated in the study and answered the questionnaire. The learners' mobile learning experiences and viewpoints on the future of mobile learning are part of the interviews. Moreover, all eight questions used were the bases for answering the first objective (current situation).

Population

The population in this research was the full-time undergraduate students who were studying in the academic year 2020 at Suvarnabhumi Campus, Assumption University (AU). However, the study only focused on the 200 students from different faculties, including Business Administration, Arts, Science & Technology, Engineering, Communication Arts, Architecture, and Music, where the questionnaire was distributed. After 15 interviews, the researcher found that the information provided by the interviewees was almost the same as the previous, and they could not provide more useful information for research, so the interview data was saturated. It has been recommended that qualitative studies require a minimum sample size of at least 12 to reach data saturation (Clarke & Braun, 2013; Fugard & Potts, 2014; Guest, Bunce, & Johnson, 2006). Moreover, convenience sampling was used in both the questionnaire and interview survey because it facilitates researchers' investigation and increases the randomness of large sample sampling.

Findings

From research objectives, data analysis and there were four findings of this study as follows:

Objective 1: To identify the current situation of students' mobile English vocabulary learning at Assumption University

The first objective is related to the current situation of mobile vocabulary learning at Assumption University. The researchers found some details about the students' perception of using mobile apps within Assumption University based on the questionnaire and interview findings.

From the questionnaire part, the researcher found that most AU students have mobile devices, and most believe they can improve their English through mobile devices. So far, mobile vocabulary applications are the most popular English learning application, and most students have tried to recite words using vocabulary applications. Also, they are still willing to try vocabulary applications now. Many students use mobile vocabulary learning 4-6 times a week, and most think it is very important for their English learning. Duolingo is the most popular among many vocabulary applications for Assumption University's students.

From the interview, the researcher found that more students prefer mobile learning to traditional learning. Many students love using their mobile devices, and they can't live without their phones or tablets, so mobile learning is more attractive. Also, mobile vocabulary learning is convenient because students

can learn new words anytime and anywhere. Besides, mobile applications contain more abundant and exciting material than vocabulary books. The biggest problem for those who prefer traditional learning is that they are often distracted by useless advertisements and irrelevant messages from other vocabulary learning applications. In addition, some students have a habit of vocabulary learning; for example, some prefer to memorize words with vocabulary books and notebooks. Of course, looking at the screen for a long time will harm students' health, especially their eyes.

Two of the most popular mobile vocabulary apps are BaiCiZhan and Duolingo. A lot of interviewees said that Duolingo is a great app. Its main feature is that it gamifies vocabulary learning, and many learners think it is very interesting to memorize words through this application. BaiCiZhan is an application specially designed for Chinese students. As its vocabulary library contains a list of words those Chinese students need to learn at all stages, such as high school English, college English, IELTS, TOEFL, etc., this explains why these applications are more familiar to the students. Additionally, they also have many advantages. For example, they can provide students with good study plans and timely reminder services.

Many students think using mobile vocabulary can be an effective learning method as they are abundant with learning materials, professional pronunciation, and examples showing how sentences can be constructed (Lan, Sung, & Chang, 2007). Thus, these are their basis for determining whether the application is good. However, not all students have the same preferences. For example, some students do not bother whether their mobile devices have useful study plans or time reminder services as long as it has game functions that help them increase their motivation to learn words.

Objective 2: To identify the students' attitudes toward the use of mobile devices at Assumption University

Table 1. *Summary of Means and Standard Deviation of Students' Attitudes (n=200)*

Questions	Mean	Standard Deviation	Interpretation
1. I believe that the mobile vocabulary learning application is very effective in improving my vocabulary.	3.70	1.04	High
2. I want to develop an e-lifestyle using vocabulary applications	3.43	1.19	Moderate

Questions	Mean	Standard Deviation	Interpretation
daily.			
3. I believe using the Online Dictionary application on my smartphone makes it easier for me to know the usages of words through illustrative examples.	3.59	1.05	High
4. I believe that using mobile vocabulary applications can remember words faster than traditional vocabulary learning.	3.71	1.12	High
5. I believe smartphones are essential tools for learning new vocabulary.	3.90	1.09	High
6. I prefer to use digital dictionaries and mobile vocabulary applications for vocabulary learning.	3.71	1.18	High
7. I prefer to use mobile applications to look at and learn new words.	3.75	1.28	High
8. I prefer to use mobile applications to know the source and origin of words.	3.64	1.32	High
9. I would instead use mobile applications to use thesaurus and translator programs to help me learn and use new vocabulary.	3.69	1.22	High
Overall	3.68	1.17	High

Table 1 illustrates that the overall mean score for students' attitudes toward using mobile devices showed an overall (mean score) $M = 3.68$ and an overall (standard deviation) $SD = 1.17$. According to the criteria of interpretation, this would be interpreted that 200 students' attitudes towards the use of mobile devices at Assumption University were, overall, HIGH. This also indicated that students have positive attitudes toward using mobile devices at Assumption University. Moreover, in the fifth question, *I believe smartphones are essential tools for learning new vocabulary*, achieving $M = 3.90$ and $SD = 1.09$. However, the second question, *I want to develop an e-lifestyle using vocabulary applications daily*, received the lowest, $M = 3.43$ and $SD = 1.19$.

Many Assumption University students believe smartphones are essential for learning vocabulary, and vocabulary application effectively improves their

vocabulary ability. They prefer to use mobile vocabulary applications to look at and learn new words, especially if they want to know the source and origin of words from the application. In addition, students also like to use digital dictionaries. They think digital dictionaries are very powerful tools. For example, they can know the usages of words through illustrative examples provided by digital dictionaries. Many students believe that mobile vocabulary learning is more effective than traditional vocabulary learning, and they can memorize words faster than before after applying mobile learning. Also, they would rather use mobile applications to use thesaurus and translator programs to help me learn and use new vocabulary.

Objective 3: To measure the students' motivation toward the use of mobile devices at Assumption University

Table 2: *Summary of Means and Standard Deviation of Students' Motivation (n=200)*

Questions	Mean	Standard Deviation	Interpretation
1. I feel more motivated to do my English assignments if I can use my online dictionary or vocabulary application.	3.66	1.04	High
2. I feel more motivated to learn new vocabulary lists sent via the Online Dictionary application on my smartphone.	3.73	1.03	High
3. I feel more motivated to read novels or watch movies in English when I have a Vocabulary/Dictionary application.	3.62	1.07	High
4. For continuous learning, mobile vocabulary apps motivate me more than traditional learning.	3.54	1.11	High
5. I feel motivated to learn English vocabulary as mobile vocabulary applications provide easy access to help me understand the words I need.	3.62	1.14	High
6. I feel motivated to learn English vocabulary as mobile vocabulary applications helped me to pronounce the word appropriately.	3.55	1.15	High

Questions	Mean	Standard Deviation	Interpretation
Overall	3.62	1.09	High

Table 2 illustrated that the overall mean score (M) for students' motivation toward the use of mobile devices showed an overall (mean score) M= 3.62 and an overall (standard deviation) SD= 1.09. According to the criteria of interpretation, this would be interpreted that 200 students' motivation towards the use of mobile devices at Assumption University was HIGH.

This also indicated that students are highly motivated to use mobile devices at Assumption University. Moreover, in the second question, *I feel more motivated to learn new vocabulary lists sent via the Online Dictionary application on my smartphone*, achieving the highest M= 3.73, with SD= 1.03. However, in the fourth question, for continuous learning, *mobile vocabulary application gives me more motivation than traditional learning*, receiving the lowest M= 3.54 and SD= 1.11.

Many Assumption University students feel that mobile vocabulary learning gives them higher motivation than traditional learning. If they can use their digital dictionary or vocabulary application, they feel more motivated to do their English assignments, learn new vocabulary, and read novels or watch movies in English. They believe that vocabulary applications provide easy access to help them understand and pronounce words appropriately.

Objective 4: To identify the students' difficulties towards the use of mobile devices at Assumption University

Table 3: *Summary of Means and Standard Deviation of Students' Difficulties (n=200)*

Questions	Mean	Standard Deviation	Interpretation
7. I often encounter operational difficulties when I use mobile applications.	2.27	1.05	Low
8. It is easy to forget some words I have already remembered via mobile vocabulary applications when I need to use it	2.61	1.00	Moderate
9. It is hard to understand the meaning of words when I learn	2.30	0.97	Low

Questions	Mean	Standard Deviation	Interpretation
vocabulary by using a mobile vocabulary application.			
10. Mobile vocabulary applications cannot offer me a long-term ability to understand new vocabulary.	3.60	1.30	High
11. The built-in items of mobile vocabulary applications are challenging to understand and expensive	2.60	0.87	Moderate
12. Mobile vocabulary learning has become my passive habit and not active.	3.19	1.14	Moderate
Overall	2.76	1.06	Moderate

Table 3 illustrates that the overall mean score for students' difficulties towards using mobile devices has an overall (mean score) $M= 2.76$ and (standard deviation) $SD= 1.06$. According to the criteria of interpretation, this would be interpreted that 200 students' motivation towards the use of mobile devices at Assumption University was MODERATE. This means they have moderate difficulties with the use of mobile devices. Moreover, the fourth question, *mobile vocabulary applications cannot offer me a long-term ability to understand new vocabulary*, has achieved the highest $M= 3.60$ and $SD= 1.30$. However, the first question, *I often encounter operational difficulties when I use mobile applications*, was the lowest, with $M=2.27$ and $SD= 1.05$.

Assumption University students still need to face difficulties when using vocabulary applications, and few students encounter operational challenges. For example, Some students think they can easily forget some words they have already remembered and find it hard to understand the meaning of the words via mobile applications. Notably, many students believe that mobile vocabulary applications cannot offer them a long-term ability to understand new vocabulary. Besides, some students think the built-in items of mobile vocabulary applications are difficult to understand and expensive. Lastly, some students think mobile vocabulary learning becomes their passive habit and not active.

Discussion

Gardner (1988) defines attitude as “the total of a man’s instincts and feelings, prejudice or bias, preconceived notions, fears, threats, and convictions about any specified topic.” Learners’ attitudes generally positively impact learners’

motivation and lead to the success of L2 learning (Sadighi & Zarafshan, 2006). Also, attitude is the learners' unremitting effort to achieve their goals, and it is an essential component of motivation in L2 learning (Gardner & Lambert, 1972). Therefore, learners must maintain a positive learning attitude to acquire more vocabulary to learn the English language better (Liu, 2010).

A recent study related to learners' attitudes towards mobile language learning by Yurdagül and Öz (2018) aimed to explore the attitudes of preppy students towards mobile learning to understand their perspectives before designing and developing such mobile applications for language learning. It showed that learners have a positive attitude toward mobile language learning. Mobile devices often have different purposes, including looking up the dictionary, listening to English songs, watching movies, and so on. Importantly, learners mostly seek and demand vocabulary practicing applications, which should be more effective and useful. They believe memorizing words through mobile learning is better than traditional.

In this study, students have positive attitudes towards using mobile devices at Assumption University, according to the data from the questionnaire. Nowadays, every student has a smartphone, believing smartphones are important tools for learning new vocabulary. Also, they think mobile vocabulary application is a very effective way to learn new words and is better than traditional vocabulary learning. Moreover, students are more likely to use vocabulary applications to look at and learn new words and search for the source and origin of words from apps. Besides, they would rather use mobile applications to use thesaurus and translator programs to help them learn and use new vocabulary.

Motivation is necessary for successful language learning for second or foreign language learners. Competent learners cannot achieve their long-term learning goals without sufficient motivation, even if they are well instructed by excellent teachers (Dornyei, 1998). Language learning motivation is not a trait but a general learning characteristic for everybody to learn or acquire a second language (Gardner, 2007).

A recent study related to the impact of using mobile learning applications, namely Telegram Messenger, on teaching and learning English in an ESP context by Alkhezzi and Al-Dousari (2016), shows the use of mobile phones for language teaching and learning can be more effective than traditional methods of learning. This research was conducted in Turkey, and 294 Middle East Technical University undergraduates became participants. It has also shown that students are intrinsically motivated to use mobile learning because

they recognize that vocabulary acquisition and vocabulary are critical to their current learning and future careers. When students have mobile devices, they will be more motivated to learn new words or read a new book.

In this study, students have HIGH motivation for the use of mobile devices at Assumption University, according to the data from the questionnaire. Using mobile vocabulary applications, students' motivation was likely to be influenced by learning new words, watching English videos, and doing an English assignment. Also, mobile applications motivated students to carry on using their mobile devices to learn the English vocabulary rather than the traditional method. Moreover, mobile applications also provided students easy access to help them articulate and understand words appropriately.

Learners often encounter many difficulties in the process of learning, especially with vocabulary learning. Vocabulary learning is one of the most critical steps in learning a second or foreign language. Without enough vocabulary, learners will not be able to use the language in writing or communication (Nation, 2011). Although vocabulary is very important for language learning, it is also a difficult problem for learners, who often need to spend time memorizing vocabulary. English contains many vocabularies, so it requires paying more attention to vocabulary learning than other languages (Cortazzi & Jin, 1996).

In this study, students have moderate difficulties with using mobile devices at Assumption University, but it does not mean that they are free of difficulties regarding vocabulary learning. For example, many students still think that their vocabulary application could not offer them a long-term ability to understand new vocabulary as they found that relying on the mobile application so much resulted in too much reliance on the mobile and does not learn for a long-time goal. In learning, although mobile devices can be seen as part of the students' life in order to make them reliable and helpful, a proper learning environment is needed to make mobile learning successful.

Many students think using mobile vocabulary can be effective learning methods as they are abundant with learning materials, professional pronunciation, and examples showing how sentences can be constructed (Lan, Sung, & Chang, 2007). Thus, these are their basis for determining whether the application is good or not. However, not all students have the same preferences. For example, some students do not bother whether their mobile devices have useful study plans or time reminder services as long as it has game functions that help them increase their motivation to learn words.

Mobile learning and the use of vocabulary learning can be of great help to students if they are used appropriately. Thus, before deciding to use mobile vocabulary learning, students need to understand that it is about their necessity or needs, meaning they need to know when to use and not to use them. For example, for some students with low self-consciousness, mobile apps can provide them with good learning plans and reminder services to help them manage their learning. Mobile learning aims to increase students' involvement in and outside the classroom; therefore, mobile learning is not only about a learner who uses his/her mobile alone but uses the mobile to have collaborative learning.

Vocabulary learning has played a significant foundation in the acquisition of the English language, specifically in the context of Thailand, where the majority of the students have learned English as a foreign language. Vocabulary is the most important component of language learning. Therefore, it needs to be paired with certain tools to help learners understand the meaning for correct inferences and understanding. Information technology provides learners with different mobile instruments so that learning can be done regardless of time, place, and space. In learning vocabulary, mobile technologies are equipped with different applications that help students' vocabulary learning process easier. As found in the study, the students' positive attitude is influenced by mobile equipment features which help them learn vocabulary through its 'illustrative examples.' As the source and origin of words are normally emphasized when a person searches for a word's meaning through mobile technology, learners will likely be motivated (Chen, & Wang, 2015).

Consequently, if students can integrate mobile vocabulary learning in the classroom correctly, abundant learning resources, such as audio, video, games, audio to help words articulation, etc. can be used, so they can take advantage of the different features of the mobile vocabulary application (Mifsud, 2014).

Mobile vocabulary applications can also be applied to some teaching areas. Also, teachers can integrate useful mobile learning with their students and show them how to use it. Because of the interactive nature of the Internet, teachers and students can use the different features of vocabulary learning applications depending on students learning needs. To make use of the effectiveness of mobile vocabulary learning, teachers, therefore, must be familiar with the different features which are more functional to the students, so understanding the language becomes active and not passive for a long-time learning goal.

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