# Smartphone-Assisted Language Learning: A Breakthrough for English Learning Autonomy

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### Abstract

21st-century language learning involves technology as a medium of learning. Over the centuries, various technologies have been created to synchronize the language learning process to the present-day phenomenon that results in flexibility - students can learn a language anywhere, anytime even without a teacher. As the newest information technology, smartphones have now functioned as mini-computers that are used by students for language learning. It promotes autonomous learning, that is the ability to control one's learning and the potential ability to act in learning situations. This research aims to investigate the potential of smartphones in promoting autonomous language learning, focusing on three questions; (1) what smartphone applications are used by students for language learning, (2) what skills are associated with it, and (3) how they use them for language learning. An interview and smartphone log were used to collect the data. The findings showed that there are 51 applications used by the participants. Those applications are used for different purposes in language learning.

## Keywords

Smartphone, Language Learning, and Learning autonomy.

# 1. Introduction

The development of technology leads to the development of every aspect of life. The traditional ways of life change into digital or modern ways. One aspect that changes is education. The teaching and learning process is impacted by the advancements of technology (Fatimah and Santiana, 2017; Stosic: 2015). For example, the use of media in the teaching and learning process changes from paper-based to virtual and digital such as slides of PowerPoint, mp3 player to any computer-assisted learning (Fatimah, et. al, 2019). Besides, it also impacts students' and teachers' attitudes in using technology for teaching and learning activities. As Raja and Nagasubramani (2018) stated that nowadays modern students prefer to use technology for their learning because it provides an interactive learning atmosphere and promotes autonomy. In short, being able to use technology for the teaching and learning process can lead to successful teaching and learning language.

Many technological tools have been created from time to time. Such tools continue to be invented to assist the teaching and learning process (Raja and Nagasubramani, 2018). In the teaching and learning process, computers are one of the technological tools used for a long period of time. Throughout the time, the design of computers has become more portable and handier such as laptop, iPad, or even the smallest computer pocket called a smartphone. Smartphone provides lots of applications that can be downloaded free or paid. There are two common operating systems used in a smartphone; they are iOS and Android. Both systems provide the same facility. People can easily download applications such as social media, chatting sites, online games, online dictionaries, Google as the biggest search engine, music player, video player, etc.

As one of the newest technologies, a smartphone is easily accepted by people even nowadays, it becomes their daily companion. Besides, it functions as a communication device; smartphone provides an application found in the computer. In short, people have a mini-computer in their pocket; they can make a call, text, email, read an e-book, listen to music, and so on (Bllaca, Nuhi: 2016; Kacetl, Klimova, and Blanka: 2019). In

Indonesia, statistics showed that in 2016, there are more than 60 million Indonesian using smartphones or 65.2% of people use them. 58% of users are teenagers who are relatively students. This indicates that the use of smartphones has been a part of people's lives, especially teenagers and students used for various activities, including learning.

Chuang and Shih (2010) said, Technologies are being used by mobile learning to enhance learning everywhere and every time, when considering the application of technology for learning problems. It provides students with some features enabling them to learn wherever and whenever they want. They can pick their own time to learn by themselves using a smartphone. Furthermore, the use of a mobile device will make it easier to have broader access to authentic L2 services and allow learners to actively search for their learning resources. This can be seen as a significant quality of self-employed learners who take charge of learning materials. (Benson 2012). In short, students can select their source of information, their way of learning and their time.

Learning with a smartphone leads students to become an individual learner to gain access to the source of learning. The characteristics of autonomous learners can be seen by having a time learning a language as their own, deciding what skill they want to learn, and having the responsibility of what they learn. Mehdiyev in Fatimah et.al (2021) adds that this ability is important to create better academic performance in the future. From those explanations, it can be stated that smartphone provides lots of application enabling students to learn the way they want through its applications such as a digital dictionary, sound recorder, Wattpad, etc. Therefore, it is important to investigate what smartphone applications are used by students, what skill they refer to when using those applications, and how they use it to learn. Therefore, this study aims at investigating the university's students' use of smartphone applications, what skills are associated with it, and how they use them for learning a language.

# 2. Literature Review

# 2.1 Description of Mobile Learning

Doing some activities in the classroom led by the teacher's instruction is one of the common ways of learning. Yet nowadays, technologies provide students with flexibility. They can learn by themselves anytime anywhere such as through a smartphone, and this is called mobile learning. Chuang and Shih (2010) state that mobile learning is using technologies to facilitate and promote learning anywhere and anytime. In addition, Wexler (2007) notes "Mobile learning: any practice that enables individuals to be more efficient when consuming, communicating with, or generating content, mediated by a small digital portable computer that the person carries on a regular basis, has stable communication and fits into a pocket or purse. It means that mobile learning can be done using several compact digital portable devices such as a personal computer, laptop, iPad, or smartphone (Tahir et al., 2019).

Among the devices mentioned, the smartphone has become the newest and the lightest device students can carry everywhere. Rae in Kurtz (2012) described a smartphone as a mobile phone with capabilities such as more sophisticated processing and networking than a conventional phone; a smartphone has essentially become a palmtop computer that incorporates the capabilities of a phone with a personal digital assistant. In other words, the smartphone is a mobile phone that has a function as a computer.

# 2.2 Benefit and Limitations of Smartphone-Assisted language Learning

Besides its multiple functions of the smartphone in language learning, it also has some limitations. Ramamuruthy and Rao (2014) summarize the benefits and limitations of a smartphone in language learning. The benefits are; Student enjoyment and motivation, personalized informal learning, co-constructing learning through collaborative activities portability, social interactivity, and immediacy. Using a smartphone for learning a language gives the students so much fun and motivates them with its fun. Students can decide what they want to learn and have the schedule as their own; therefore, it gives them more relaxing time as informal learning. Some activities can be done collaboratively using some applications in a smartphone. Thus, students can interactively exchange information with other users (Suriaman et al., 2019). In other words, the students can be more involved in that learning process. While the limitations are; physical frailty, theft, the importance

of keeping the battery charged, disruptive functions, screen size, issues in informal teacher-learner interaction, and edutainment.

Physical frailty refers to the limitation of students' physical activity. Using a smartphone makes the students less active than what the class-interaction does. Theft means students can do some lie or cheat during learning (Nath et al., 2021; Suharyanto et al., 2021; Umanailo et al., 2021). For example, when they do some online exercises, someone might do it for him/her. Unlike a teacher, sometimes smartphones can be an error or broken. In addition, small screen size can worsen the sight when the students do reading, and it is not as comfortable as what the computer provides (Ervina et al., 2019; Rumaolat et al., 2019; Tahir & Umanailo, 2019). Moreover, a smartphone cannot teach students attitude as to what classroom teacher can do during the teacher and learning process. Finally, learning using smartphones seems to entertain more than gives education.

#### 2.3 Description of Autonomous Learning

Autonomous learning involves being able to monitor our learning and being able to behave in a situation of learning (Holec, 1981). A process can be termed autonomous when the learning process is done based on the learner's willingness and responsibility. Van Lier (1996) stating that autonomous learners need to make a significant decision about what, how, and when to learn. Moreover, Benson (1997) identifies three versions of autonomy, 'technical', 'psychological', and 'political', where 'technical' autonomy is simply the act of learning a language outside the framework of an educational institution and without the intervention of a teacher, 'psychological' autonomy is the capacity for the learner to take more responsibility for their learning and 'political' autonomy is defined as the concept in terms of control over the process and content of learning (Kanto et al., 2020; Sa'adah et al., 2019; Shofwan et al., 2019). In other words, autonomous learning can be (1) consciously learn on their own, (2) have the responsibility of what they learn, (3) consciously know and be responsible for the process and the content of learning.

The importance of autonomous learning is related to the success of the learner and technology as the media. Carbe in Benson (2011) said, "The learning autonomy has become increasingly relevant because it is related to the effective growth of learners; communication skills in foreign languages curricula. Moreover, with the advent of emerging technology, learner autonomy has been closely related. Autonomous learning refers to the ability of the learner to resolve what to learn. This concept includes being conscious to learn of their will, having a responsibility to take time to learn, and also knowing the content of what they learn. Thus, an autonomous learner is important since it can lead to successful learning. It also cannot be separated from technology as media.

#### 3. Methodology

Case studies are used to investigate the use of smartphones by students for language learning. Yin (1984) states that case studies investigate contemporary phenomena in real-life contexts, when the boundaries between the phenomenon and the context are not clear, and where various sources of evidence are used (p. 23). In addition, this study aims to find out the applications used in English language learning.

There were five participants in this study who were active users of smartphones to learn English. To find out the kinds of applications, the researcher used a smartphone log and to clarify the data used an interview. The data were analyzed using thematic analysis.

#### 4. Results and Discussion

The use of smartphones to learn English is widely used these days. Smartphone is a device to help develop autonomous learning. With a variety of sophisticated features, students can easily access applications that support learning English. With a small display, smartphone can be easily carried anywhere so that learning can be carried out without restrictions on time, place, and even the presence of the teacher. In this study, participants were given a smartphone usage log for a week to report their language learning activities using a

smartphone. The components that are asked to the participants include the applications used and their usage, the language skills learned, and the language elements that are learned.

Based on the log filled by the participants, there are 51 applications used, among other are: Urban Dictionary, Google, Azar, Webtoon, Wattpad, My dictionary, BBM, Music Match, Quick Office, PhotoGrid, Instagram, Facebook, LINE, Offline Dictionary, Podcast, Smule, Twitter, WPS office, Youtube, Mini Lyrics, Adobe Reader, Docs to Go, Google translate, iBook, Joox, Line Dictionary, Music, Al-Quran English, Pdf Viewer, Line Play, MP3 Player, English Grammar Test, UC Browser, Tradukka, TOEFLCMedia, Mondly, Firefox, Speak English, Blogger, Viki, Opera Mini, Fanfiction, Recorder, Moodle, Baidu Downloads, WPS office, Video recorder, Criminal Case, Kingsoft office, Ask. Fm, and Cannon Webster Dictionary. Several language skills can be learned from the 51 applications including reading, spoken writing, listening, and speaking. Language components that can be learned include vocabulary, grammar, and pronunciation.

There are many benefits of using various kinds of applications among other are; looking for new vocabulary, slang vocabulary, references, reading a song lyric, searching information about Prezi, Kshow-Drama streaming and downloading Korean Drama with English subtitles, reading an article, searching for poetry translation, and any blog writing about grammar, joining E-Learning, reading a journal, searching for journals, having a conversation with strangers, reading comic in English, etc.

#### 4.1 Language Skills

There are four language skills that can be learned using various applications via smartphones, namely reading, listening, writing, and speaking. 47% of participants used smartphone applications for reading activities. Meanwhile, listening 20% was the second most widely practiced activity with the aim of entertaining. YouTube is widely used for listening to and watching videos, both movies, and music. Saputra and Fatimah (2018) mention that the use of YouTube is beneficial for providing authenticity and easiness where the students can have numerous authentic English input that is suitable with their interest. The use of applications writing skills is only around 23% of the total who use smartphones for learning while for speaking skills there is only 10% of the total partitions use this. This is due to the lack of speaking learning applications that can be accessed by participants. However, based on the data contained in the smartphone log, it shows that smartphone is used to talk to strangers and with friends using the target language. The detailed percentage of Participants' Language Skill is can be seen in Table 1.

Language Skills	Percentage
Reading	47%
Listening	20%
Writing	23%
Speaking	10%

Table 1. Percentage of Participants' Language Skills

#### **4.2 Language Elements**

Several language elements are learned using smartphone applications including; vocabulary, pronunciation, and grammar. As many as 60% of participants use smartphones to access applications to learn vocabulary, such as dictionary applications. They use the applications for translating L1 to L2 and vice versa and looking up slang words. 27% of participants use grammar applications, while 13% use them for learning English pronunciation. They were not able to find applications that could help them learn pronunciation so only a few participants did this. They think that there are still few applications specifically used for learning English pronunciation. The detailed data related to the percentage of Participants' Language Element, shown in Table 2.

Table 2. Percentage of Participants' Language Element

Language Element P	ercentage
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Vocabulary	60%
Grammar	27%
Pronunciation	13%

Students take charge of their learning means that the language learning process is without coercion. The log shows that students consciously know what they have to learn by choosing the learning language activity of their own will. This relates to what Benson (1997) stated that the significant characteristics of autonomous learning are: (1) consciously learn on their own, (2) having the responsibility of what they learn, (3) consciously know and be responsible for the process and the content of learning.

Ramamuruthy and Rao (2014) summarized the advantages of smartphones for learning; personalized and informal learning, the smartphone provides participants to design, create, and decide the way they learn. The result shows that it gives them enjoyment in learning language activities.

#### 5. Conclusion

Smartphones use for language learning is widely used by most people, even it has become a daily routine for students. Besides functioning as a communication tool, smartphones can now be used as a tool in learning English. Through smartphones, students can access applications that can be used in learning English wherever and whenever they want, both in the classroom context and outside the classroom. Without realizing it, they have become autonomous learners when using smartphones to learn English. The smartphone is a tool to make it easier for them to learn English the way they want. Thus, it can be concluded that smartphones can be used as a means of autonomous English learning, therefore, Smartphone-Assisted Language Learning is a breakthrough for the autonomy of learning English.

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