#### **CHAPTER 2**

## LITERATURE REVIEW

### 2.1 Theoretical Framework

#### 2.1.1 Mobile Devices

In line with technological development, people now prefer using mobile devices for daily needs. Mobile devices, small and portable computing devices, became available to the general public in the 1990s and became more valuable as speeds and coverage increased in the 2000s (Ok & Ratliffe, 2018). The most popular mobile devices are laptops, tablets, and smartphones. Mobile device features have significantly improved due to current internet services. Handheld devices are now portable and provide a wide range of multimedia content and internet connectivity (McQuiggan et al., 2015). Balfag (2017) summarized some services offered by mobile devices:

- Voice service is the primary service provided by mobile phones for inter-person communication. Although mobile devices are now used for various purposes, the primary function of such devices is to make phone calls.
- 2. SMS: SMS is an abbreviation for Short Messaging Service. It enables the user to exchange short messages of up to 160 characters between mobile terminals. This is an efficient communication method without disturbing others because the message can be read when they are free to respond to the SMS.
- 3. Multimedia Messaging Service: This service allows users to send multimedia messages, such as pictures and music, via mobile devices.
- 4. Location-Based Services: These services enable mobile phones to track people's locations using GPS and other technologies.
- 5. Mobile Software Applications: These services are highly interactive and run on various software platforms. Numerous mobile software

- applications are easily accessible and can be downloaded and installed on mobile devices when necessary.
- 6. Data Services enable users to connect to the Internet using their mobile devices. The Internet provides users with access to an infinite source of information and allows them to collect and download the information they require.

Besides having several features that can benefit people's needs, mobile devices also have drawbacks. Kukulska Hulme (2007) summarized some mobile technology usability issues, such as physical device features (small screen size, insufficient memory, and short battery life), content and software application limitations, network speed and reliability, and physical environment issues. However, given the rapid advancement of mobile products, with advanced functions and a wide range of applications and accessories now available, the technical limitations of mobile devices may be a passing phase.

### 2.1.2 Mobile-Assisted Language Learning (MALL)

With the development of mobile devices and the availability of online and telecommunication technologies, there has been an increasing interest in participating in language learning more flexibly. This approach is known as Mobile-Assisted Language Learning (MALL) (Çakmak, 2019). Mobile-assisted Language Learning refers to mobile technologies in language teaching and learning (MALL). Some experts define the MALL concept as follows: According to Kukulska-Hulme & Shield (2008), MALL emphasizes internet access sustainability or spontaneity and different applications in terms of "use personal devices, portable ones enabling new forms of learning." MALL is concerned with the application of mobile technology in language learning. Students may learn it using mobile devices whenever and wherever they want. One of the strategic educational goals for improving student achievement and supporting the differentiation of learning needs is to provide a more suitable environment for people to learn

English(Miangah & Nezarat, 2012). In line with Sutrisna, Ratminingsih, and Artini. (2018) Mobile-assisted language learning is language learning that involves mobile devices and technology. Mobile-Assisted Language Learning devices include cell phones, tablets, and laptops(Kukulska-Hulme & Traxler, 2005). These devices are called mobile technology because they allow users to move around and are portable. It means that these devices are lightweight and easy to carry, allowing teachers and students to learn wherever and whenever they want (Nariyati et al., 2020)

Key components of MALL consistently include (a) flexibility in time and location of study; (b) continuity of study on different devices, such as mobile phones, tablets, and laptop/desktop computers; (c) easy accessibility of information; and (d) adaptability to personal study habits. As a result, students can study whenever and wherever they want, and their study materials are accessible across devices (Duman et al., 2015; Kukulska-Hulme, 2012; Pegrum, 2014; Petersen & Sachs, 2016; Reinders & Pegrum, 2015 as cited in Loewen et al. (2019)

Mobile-Assisted Language Learning has proven to be beneficial in language learning. According to Chiu et al. (2015), using a mobile device in language learning could increase students' language skills. It's because mobile devices have features and apps that help language learners enhance their skills. MALL could also maintain an effective learning environment, provide meaningful learning opportunities tailored to students, and promote student-centeredness and collaborative learning outside the classroom (Hazaea & Alzubi, 2018). According to Ali Sadikin (2012), as cited in Putri (2020), MALL has limitations, especially regarding learning devices/media. Processor Capabilities, Memory Capacity, Display Screen, Power Supply, and Input/Output Devices are limited, and Users must have advantages in the technology field.

## 2.1.3 Mobile Application for MALL

When discussing mobile devices and their closer relationship with teaching-learning innovation, it is impossible to overlook the importance of mobile applications as valuable tools in achieving and acquiring specific learning. A mobile application, also known as a mobile app, is software designed to run on mobile devices such as smartphones, tablets, and PDAs (Liu & He, 2014). English language learning enters a new era with the help of mobile applications. Users of mobile devices can now freely select and download smartphone/mobile apps from hundreds of thousands of apps available in app stores such as Apple's App Store and Google Play. Among a great variety of apps, there is a considerable number of apps facilitating second/foreign language learning (Hui Guo, 2015)

Several mobile applications available for language learners can be accessed via smartphones or computers with internet access. Virtual classes, for example, can use Google Classroom, Edmodo, and Schoology services, as well as instant messaging apps like WhatsApp. Mobile learning applications connect students with learning resources (databases, experts/instructors, libraries) that are physically separated or far apart. Still, they can communicate, interact, or collaborate (directly/synchronously and indirectly/asynchronously (Sadikin & Hamidah, 2020). Many mobile applications have been created to help with English learning, such as listening, speaking, reading, writing, and learning vocabulary and grammar. These applications, typically designed with sounds, images, and other interactions, are certainly appealing to students, and the emphasis on language learning should not be overlooked. While paid apps provide more comprehensive features, free apps can also be invaluable learning tools, especially if they are carefully selected based on criteria that lead to meaningful language learning, such as being easy to use, engaging, culturally appropriate, relevant to student needs, allowing students to share and collaborate, provide feedback, and develop thinking skills.

Mengorio & Dumlao (2019) explain the effects of the Mobile Application on language learners and teachers in several terms. Regarding instructional material, Although the students used the Mobile App to learn the subject, all the methods provided were appropriate. The mobile app was an innovation, whereas ICT is a modern teaching method. Some of the activities included on the mobile app could be traditional, particularly group or individual activities. In terms of evaluation/assessment, mobile apps can decrease paper-and-pencil assessments. Paper-and-pencil work was reduced because students and teachers would eventually rely on the app. After all, it contained everything the teacher needed. In terms of an overall learning experience, the mobile application in MALL is helpful, easy, and enjoyable. Regarding the development of language competencies.

## 2.1.4 English Language Teaching

English is widely used as a communication tool in many countries and people, especially in education. In most countries, including Indonesia, English courses are widely used as a compulsory subject that students must learn. The concept of English language teaching is defined by some experts as follows. According to Brown (2000), the following is a definition of language: Language is systematic, it is used for communication, it is inherently human, although it is not limited to humans, and all individuals acquire it in the same way that language and language learning are universal. Brown (2000:7) also states that teaching is the process of guiding and encouraging understanding. In addition to enabling learners to learn, teaching also sets the conditions for learning. While according to Richards (1985:11), language teaching is a complicated subject that includes sociocultural linguistics, psycholinguistics, curriculum, and instructional factors. Teaching a language is a "multidimensional process" in which "teachers should give enough attention to all skills of students, such as reading, writing, listening, and speaking" (Derakhshan & Shirmohammadli, 2015, p. 103). To put it another way, language teaching is a complex process

in which teachers must go above and beyond to assist students in grasping these skills. Before teaching these abilities, teachers should also know their students' aptitude and readiness.

Students should develop listening, speaking, reading, and writing skills while learning English from primary through high school. Those basic skills can then be divided into two categories: receptive (hearing and reading) and productive (speaking and writing). The curriculum will create each one at each level of education. Students are expected to build four skills to converse in English at a particular literacy level: performative, functional, informational, and epistemic. Students must read, write, listen, and communicate utilizing symbols at the performative level. Students must use language in their daily lives, such as reading newspapers, manuals, or directions, at the functional level. Students are expected to be able to access knowledge at the informational level. However, students are expected to articulate their understanding using target language at the epistemic level (Wells, 1987, as cited in Soko, 2017). In essence, English language teaching is a dynamic and comprehensive process that requires teachers to navigate various linguistic dimensions, cater to individual student needs, and foster the acquisition of diverse language skills across literacy levels.

# 2.2 Study of the Relevant research

There are several related pieces of research in mobile-assisted language learning. Ali et al. (2019) studied Pakistani Learners' perceptions of mobile-assisted language learning in ESL classrooms. This study explores the perceptions of Pakistani ESL learners on integrating MALL in the English language classroom. The findings revealed that Pakistani students have a positive opinion about using MALLs in ESL classrooms. Another benefit of MALL, according to the study, is that it not only facilitates learning but also stimulates learners to learn in a collaborative environment. MALL, if implemented correctly in Pakistani classrooms, can be a powerful tool for language learning. Pakistani students took studying seriously through MALL, believing that using and implementing MALL in

their language classrooms will significantly increase English language learning. MALL is seen as incredibly relevant and valuable by Pakistani students because it offers a variety of benefits and learning opportunities.

Ali et al. (2020) does another research: An Analysis of Teachers' Voices from The Application of Mobile Assisted Language Learning in Pakistani ESL classrooms. The findings showed that Pakistani ESL teachers know this technology and find it interesting, captivating, and appealing to use and improve ESL learners' learning. This research has practical implications because it can be a starting point for conducting MALL studies. It can also raise awareness among researchers that MALL is a well-known idea that can be used to help students.

Another study conducted by Hoi & Mu (2021)researched Perceived teacher support and students' acceptance of mobile-assisted language learning: Evidence from Vietnamese higher education context. The result of the research showed that teachers play an essential role in helping students adapt and use MALL effectively for language learning. Teachers' encouragement and recommendations for good mobile learning resources and detailed demonstrations of how to utilize those resources in the classroom should fulfill these roles; nevertheless, these actions alone may not generate the desired results. These findings have important implications for Vietnamese policymakers in providing language teachers with knowledge and skills in using mobile resources in their classrooms and awareness of how teachers can influence students' use of those resources.

The previous study about MALL was also conducted in Indonesia. Among them is the research undertaken by Nariyati et al. (2020) that investigated EFL pre-service teachers' perception of the use of mobile-assisted language learning in teaching English foreign languages. As a result, EFL pre-service teachers showed positive perceptions toward using MALL in Language teaching. It demonstrates that EFL pre-service instructors know and understand MALL when teaching English. Darsih & Asikin (2020) also investigated EFL learners' perceptions of using MALL

in learning English. It was stated that all participants use MALL to enhance their learning by downloading and using English mobile applications. Participants' top six mobile applications were Kamusku, Google Translate, Elsa Speak, Youtube, Zoom, and Google Meet. The findings also revealed that their perceptions of MALL, in this case, the English mobile application, helped their learning and was incredibly easy to use.

There is also research similar to this: How Mobile-Assisted Language Learning (MALL) is implemented by senior high school English teachers conducted by Inggita et al. (2019). This study describes how Senior High School English teachers implement MALL in three ways: high, medium, and low. Teachers with a high, medium, or low MALL implementation are aware of the potential and prospective uses of mobile devices for language learning. Their perspectives on the advantages of MALL in the classroom reflect this. Although they are familiar with MALL principles and characteristics, they have minimal experience with mobile devices. It has a restricted number of mobile applications because not all teachers use a variety of apps in their classrooms. In terms of learning activities, it is also limited. Based on that study, the Researcher wants to research to fill the gap in the implementation of Mobile Assisted Language Learning (MALL) in the Junior high school context. Also, the study's novelty is that this research explored the implementation of MALL in a variety of apps and learning activities, complementing the shortcomings of previous research that is still limited to the use of a variety of apps and activities in the classrooms.