



SNAP TO READ

## GAMIFICATION OF DUOLINGO IN RISING STUDENT'S ENGLISH LANGUAGE LEARNING MOTIVATION

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First received: January 29, 2021

Final proof received: November 5, 2021

### ABSTRACT

*This study aims to identify students' motivation in learning English through the Duolingo application, its effects, and what makes it different from conventional learning. The Duolingo application is free language acquisition and education for the world. The term acquisition itself is interpreted differently by language researchers. Some researchers distinguish between obtaining and learning. On the other hand, other researchers consider the term to be the same. In this study, researchers refer to the idea that they are the same. In conducting this research, researchers used case studies to analyze data. The researchers were selected five students of second-grade SMK Ngunut 1 Tulungagung who play of Duolingo application to get their second language motivation. Data was collected by direct observation and in-depth interviews with subjects who had two learning language experiences such as books and learning applications. The reason why choosing games as a factor in improving English learning in this study is because games have become one of the results of the development of popular technology in the community.*

**Key terms:** *English Foreign Language, Learning Motivation, Gamification*

## INTRODUCTION

Technology has an important impact on the human lifestyle. One of the effects on language learning patterns. Only because technology is developing rapidly, so many tools with certain functions are replaced by new tools resulting from technological developments that are considered more efficient (Kenning, 2007). Especially in the current pandemic Covid-19, cell phones or computers are needed for teaching and learning activities. Those valuable tool provided by technology in education that commonly used for virtual learning during pandemic Covid-19 includes; e-learning, internet learning, distributed learning, networked learning, tele-learning, virtual learning, computer-assisted learning, Web-based learning, and distance learning. It can be said that technological discoveries have supported the educational aspect by providing many applications or programs to support the educational process during pandemic Covid-19.

The problem of student motivation is indicated to be low motivation when the learning process in the classroom is only emphasized on the material provided by the teacher, or when online learning students are only asked to do the assignment from the book, and the rest learn independently. The learning process only focuses on how students understand the entire material, while language learning combined with various media is now very common. As stated by (Blake, 2016; Chun et al., 2016) that the integration of cellular technology in language learning can facilitate teachers to have authentic learning material and guide students to interact with other language learners or even native speakers. One of the new interesting media learning is the Duolingo app.

It is a mobile-based language application that uses a combination of visual, audio, and also questions about a grammar of a language. Nushi and Eqbali (2017) in Ananda (2019) describe the exercises in Duolingo that there are many types, such as 1) Translation exercises, participants translate from the language they know into the language they want to learn or vice versa, 2) Matching exercises, in which participants look at photos and match them

with the words given, 3) Pair practice, where participants are given an equal number of words from both languages and are asked to pair them, 4) Listening exercises, where participants listen to short phrases in the second language and must write them correctly, 5) Speaking exercises, in which participants must say what they hear.

The language skills learned in this application are quite complete, ranging from listening, writing, speaking, grammar, and vocabulary, and available on various platforms. This application is very light when used so it does not overburden the platform used. And there are almost no weaknesses in this application. However this application has some advantages and has some weakness, those are some activities could not be conducted on both PC and smartphone, lack of available language material for Asian learners and this application also requires an internet connection to use it, so it is quite difficult for the learner in a remote area (Kenny, 2014).

There are many studies of Duolingo which have been done (e.g. Yaqin, 2016. Vasselinov and Grego, 2012, Alvons Habibie, 2020, Munday, 2016, Heba Bahjet Essa, Ahmed, 2016, Addal Muddin, 2008). For example, Addal Muddin (2008) explained the effect of Duolingo application to improve students' ability in mastering vocabulary. The resulting appeal of this research explained that the Duolingo application successfully improves the student's vocabulary and gives a positive attitude toward the implementation of the application. However, there are very limited studies stated about rising English Language learning motivation. Duolingo is proved to motivate the subjects in learning English because the element of gamification from Duolingo application makes students want to keep playing, and show that many varied differences between learning by application and book. This application offers some interesting features, material, and tests to study. This application provides a lot of vocabulary and also grammar that can help students to construct an English sentence correctly. And the students are generally quite enthusiastic about using the applications and can greatly enjoy their flexibility and practicality.

This study aimed to identify at least discusses the gamification of Duolingo and EFL learning. Therefore this article addresses three main issues: (1) Students' Learning Motivation through Using Duolingo, (2) The Impacts of Duolingo on students' Learning EFL, (3) The differences between Duolingo and Conventional way of Learning.

## **DUOLINGO AND LEARNING ENGLISH AS A FOREIGN LANGUAGE**

Duolingo was launched by Carnegie Mellon University Professor Luis Von Ahn and CMU doctoral student Severin Hacker in November 2012. It all started in 2005 at Carnegie Mellon University where the graduated student Luis von Ahn had an idea of a game. Duolingo has a feature on the web called Duolingo for School where the teacher can create virtual classrooms to see the Duolingo's curriculum content, to monitor students' progress, and set assignments for in-class activity or homework (Stringer, 2016). Brigham (2015) also proposed the same idea where gamification is seen as the use of game-element in a non-game context to increase motivation, engagement in learning. The popularity of game-based applications prompted many educators to explore its potentials as an educational tool, and Duolingo is one of these educational applications that applies game elements in its concept. As reported by Shadiey et. al (2017) who reviewed literature from 2007 to 2016 (March) on mobile language learning, they found that the research trend in mobile language learning was increasing with various methods and analysis tools.

Meanwhile, Teske (2017) mentioned that "Duolingo is an online language-learning platform which launched in 2012 that offers courses in 27 different world languages." Duolingo itself can be accessed in mobile applications on Android or accessing the internet on computer devices. The four skills, reading, writing, listening, and speaking, are present during the learning process in Duolingo, through the elaboration of questions, affirmative and negative sentences, small texts and excerpts to be heard and transcribed, and it is also possible to the students to record their own pronunciation to

assess their oral performance.”

Therefore that Duolingo is either of English teaching-learning media which is able to assist the students in learning English more enjoyable because it can be used as educational technology in school. Duolingo has targeted there e-learning to individuals who are looking to learn a second language. This tool is for any user looking to learn how to speak from any of the following languages: English, Italian, French, Portuguese, Spanish, and German. The audience using this tool should be familiar and have accessibility to an iPhone, iPad, any Android device, or a computer to go online and use this online gamified e-learning.

#### **THE WAYS TO USE DUOLINGO IN LEARNING EFL.**

The way gamification is used in language learning applications is explained by Ketyi (2016) this study emphasized that the well-known mobile language learning application, such as Duolingo, uses the features of gamification (matching, pairing, and drills) to encourage the learner.

In the desktop version, the following different areas. Duolingo Tree is the language course you're taking, it indeed has a form of a tree, and exercises are its leaves. And reverse tree is the opposite course of the language course you're taking, for example, if you take Spanish for English speakers, the reverse tree for it will be English for Spanish speakers. which contains the skills and practice exercises, In Duolingo practice there are nodes that change color from gray (indicating that the exercise has not started), to a color such as red, blue, or green (you have started the exercise) and become gold (you have mastered all the lessons and vocabulary for that particular skill). Duolingo contains the skills and practice exercises, In Duolingo practice there are nodes that change color from gray (indicating that the exercise has not started), to a color such as red, blue, or green (you have started the exercise) and become gold (you have mastered all the lessons and vocabulary for that particular skill).

Note that the gold color can “turn” back to another color if the algorithm of Duolingo establishes that you need to go back and review

those nodes because you have forgotten the vocabulary or enough time has elapsed. Duolingo has not up to now published the content of the tree. The only way to find out is to complete the tree yourself. Thankfully, in the case of Spanish, there is a Google Doc, with its content (Author & Espinoza, 2014, web source). These are the components of the Duolingo tree:

- 66 Words Tree. Some examples of these are: Food, Animals, Plurals (for beginning nodes) to Modal Verbs, Subjunctive Past, or Past Imperfect (for the more advanced nodes).
- 329 Lessons. Each skill has several lessons, which can range from one to eleven. Each lesson covers about seven or eight words. Each completed lesson gives 10 XP (points).

Words is a list of the words the user has studied or already knew. Each word is accompanied by a strength bar, which indicates if the word is still strong in your memory or if it is time to practice again, according to Duolingo's algorithm. You can also review these words through flashcards.

In term of activity, Duolingo works similarly to a social network site. You can follow other students, and other people can follow you. The activity stream shows not only what you and the people you follow accomplish in Duolingo (levels opened) but also if you or they have made a comment in the discussion board. All the people you follow and you yourself appear on a "leaderboard" list, which shows the XP (Duolingo points) that you obtain weekly. This is reset every Sunday at 7:00 pm Eastern Standard Time (United States).

Next is discussion. In this area, users can post discussions about topics that interest them. A discussion will also be created if there are questions about any of the activities completed during the lessons, in which case users negotiate meaning among themselves. The discussions are divided according to the language you study, and there are also general discussion areas, like the one recently opened for educators (this will be discussed in more detailed later). Discussions are voted up or down (similar to places like Reddit), so the more popular ones are more visible. It is also the area where the creators

or moderators of Duolingo post important messages to the community.

Another area is Immersion: This area is for more advanced students. Anyone can upload a public document in any language and the community can start translating it. Users can offer suggestions for better translations or can just make general comments. Users get XP points for translating either their own documents or helping with other documents already uploaded to the site. They also get lingots (see below for a definition) if their translations are up-voted by other users.

The Lingot Store: “Lingots” are the currency that Duolingo uses to reward its users. You get lingots when you complete a skill node or maintain a streak of days using the site. Users can also “reward” other users with lingots in the Discussion area. With lingots, you can buy several things, like a “freeze streak” which will allow you to miss a day and not lose your streak, some silly outfits for the Duolingo owl (the program’s mascot), or, more important in my opinion, a progress quiz, which shows you on a scale of 0 to 5 where you currently stand in your studies.

The mobile version of Duolingo does not have these many areas. It is limited to the tree and the Lingot Store, although you still can see there the leaderboard with information about the people you follow. The app also informs you of your streak. You can set up daily goals (the minimum being 10 XP per day), and the app will send you reminders and notifications if your goal has not been completed that day.

The following description applies to this area exclusively: students can perform different types of activities on Duolingo. Once you click on a skill, you are presented with the available number of lessons for that particular skill. Each lesson lists the words (up to eight) that it will review.

In addition to the lessons, each skill can be just reviewed in general, once you have completed all the lessons or have tested out of that skill. That is called “practice” or “strengthening skills” within the app in order to differentiate it from regular lessons. You can choose general practice in order to review areas that the program considers have not been practiced,

rather than just one specific skill. Or you can choose to do practice within one skill once you have completed all the lessons. There is a symbol in each lesson that indicates the “strength” of that skill with a maximum “grade” of 5. Once you reach five, the symbol for the skill becomes gold.

Following is a list of the most common activities in each lesson (it may not be comprehensive, since the app is constantly being modified):

- ☐ Write a vocabulary word after seeing a picture that represents it.
- ☐ Translate a sentence into your native language. When words are first presented, the user can hover over the word to see its meaning.
- ☐ Translate a sentence into the language being studied.
- ☐ Dictation: write a sentence that you hear. There are two speeds, normal and slow, which you can click to hear the sentence more clearly.
- ☐ Pronouncing a sentence. Through voice recognition software, the app can detect whether your pronunciation is correct.
- ☐ Match pairs of words.
- ☐ Put a series of scrambled words in order.
- ☐ Choose from three sentences in the target language to see which ones fit the sentence in the native language.

Activities are presented sequentially, and the lesson “extends” itself if you get wrong answers, as indicated by the strength bar at the top of the lesson. If there are no mistakes, it takes seventeen short activities like the ones described above to complete a lesson. This generally takes five to ten minutes. This time may vary, however, since new activities are added if you make mistakes.

Duolingo incorporates some gamification elements to motivate and engage learners. Some examples of this are the lingots as awards given when you complete a skill; the inclusion of a weekly leaderboard, where you can “compete” against friends to see who has the highest XP; a symbol of a flame next to your name with the numbers of days of your streak on the site; the aforementioned strength bar, which appears when a user is completing a lesson, to indicate how close they are to finishing it, etc. These elements



make the app more enjoyable, although the exercises themselves are quite traditional, as we have seen.

## **STUDENTS' LEARNING MOTIVATION THROUGH USING DUOLINGO**

### ***a. New experience in learning English through using Duolingo***

Learners, nowadays, can easily access numerous sorts of language learning apps, especially with the existence of smartphones. However, Duolingo was created in 2010 as an online web, and then it became available on Android and IOS. Its rapid development led to the registration of over 100 million users (Duolingo, 2016). According to Vesselinov & Grego (2012), the motivation for learning a new language plays a primary role in the progress of the learners' levels. To illustrate, people who are motivated are more likely to follow the program's regulations. 196 participants were included in the study. The researchers set certain criteria to choose suitable subjects, such as the age of 18, native speakers of English, and live in U.S. (Vesselinov & Grego, 2012). The participants had to learn English for two months by depending on Duolingo though some of them were not committed to the program. The findings displayed that the majority of learners developed over time without any external sources or assistance. The results indicate the importance of being determined and having an incentive in order to learn energetically and independently by using online websites and apps, such as Duolingo.

Garcia (2012) claims that the main approach to learning a language in Duolingo is translation. The translation method was rejected, and now it returned to be used in software programs. In Duolingo, this method succeeded primarily for beginners, but as leveling, it becomes more challenging. What makes this app distinctive is the human's control of the translation process as opposed to the translation machine. Thus, it was proven that Duolingo is one of the leading programs that help users learn the language effectively. This study gives evidence of the limitations of language learning applications though they have improved recently. These programs are a valuable step to improve the teaching methods and to give the learners an incentive to learn

since they are accessible.

According to Gilson, Wells, & Tatro (2012), a large number of people have been recently dependent on smartphones, tablets, and computers to learn a new language. Duolingo is one of the most popular applications for learning languages among people in addition to Babbel and 24/7 Tutor. These types of apps have advantages that traditional teaching lacks. For instance, Duolingo motivates the learners to learn independently without the teacher's instructions. It encourages the users to review what they have learned as well as relearning what they have forgotten. However, teaching language applications still have some limitations, for example, Duolingo does not provide the English language. Moreover, it shows that using applications for learning the second language is beneficial for different ages though these apps do not substitute the teacher's role. To conclude, it was demonstrated that Duolingo is a useful app for beginners as they can step ahead in learning autonomously.

### **Gamification On Duolingo Motivates Students To Learn English**

Gamification, as defined by Kapp (2012), is a practice that uses game-based methods and game thinking to engage people, motivate action, promote learning, and solve problems. Brigham (2015) also proposed the same idea where gamification is seen as the use of game-element in a non-game context to increase motivation, engagement in learning. Gamification is the implementation of the game element in a certain context; in this case, it is language learning. Gamification is a term that refers to the use of game-based elements such as mechanics, aesthetics, and game thinking in non-game contexts aimed at engaging people, motivating action, enhancing learning, and solving problems, (Deterding, et al, 2011, Kapp, K.M. 2012).

As mobile phones are practically everywhere (Burston, 2014), the majority of people have smartphones for their daily tasks to communicate with other people no matter how old they are, including junior high school students. However, the utilization of technology in the teaching and learning process is still lacking despite its potential in aiding students to develop

their skills and to learn a new vocabulary of a foreign language, especially English. Connolly et al. (2012) proposed an idea for educators to integrate smartphones as an aid in learning a foreign language by using gamification. It is the use of game-like elements in a non-game context to make greater user's engagement and improve user's experience (Giannetto et al., 2013). One of the well-known software or sites that use gamification to learn a foreign language is Duolingo.

Game refinement theory has been proposed earlier by Lida et al (2003), to measure the attractiveness and sophistication of games under consideration. A game refinement measure is derived from a game information progress model and has been applied in various games. The classical game theory concerns the optimal strategy from the viewpoint of players, whereas game refinement theory concerns the optimization from the game developer's point of view. The game refinement theory was successfully applied in the domain of board games, (Lida et al, 2003).

Duolingo has some features that resemble a game, which will engage learners in learning the language. First, it has a skill tree that consists of some lessons that users can go advance through and unlock the next skill. Each lesson contains 10 to 15 exercises with various types of exercise. Another feature of Duolingo is the leader board, which is activated if the user adds a friend to his list. Duolingo has a store, which the currency is called Lingot, which users can use to purchase additional skills, bonuses such as freeze or customize the appearances of Duo, the owl mascot. Duolingo also has a feature on the web called Duolingo for School where the teacher can create virtual classrooms to see the Duolingo's curriculum content, monitor students' progress, and set assignments for in-class activity or homework (Stringer, 2016). In this study, Duolingo is seen as an application with a gamification feature for learning a language.

There are several advantages of Duolingo as a medium of learning in the classroom. The advantages include:

- a. Duolingo is a language learning media that can be used to increase

levels of active learners in the teaching-learning process. It can be because Duolingo incorporates some gamification aspect in learning with, it can motivate and engage learners in learning with Duolingo (Munday, 2015, p.88). The material which learning for the game usually difficult to forget, it can be because the learners enjoy learning.

- b. Duolingo can create homework so besides learning in the classroom, Duolingo also can support make students practice to improve their vocabulary with Duolingo at their home. Based on research done by Munday (2015, p.93-94) shows that if the A1 student 84.8% agreed if homework with Duolingo better than other types of homework.
- c. Duolingo can be accessed anywhere and everywhere, so the teachers are not difficult to implement it in indoor learning or outdoor learning. It is a media learning language as well which allows the learners to learn wherever they have an internet connection and whenever they feel like it.

In a study conducted by Addal Muddin (2018), every media for learning definitely has positive and negative sides according to the situation and condition of learning. There are some disadvantages of using Duolingo as media in learning English: Duolingo is an online media learning, so it is hard to implement in classroom if there is no internet connection.

- a. If a teacher wants to use Duolingo in the classroom, they must use the projector. It will make students more active and they will participate in the learning-teaching process.
- b. It needs more preparation for the teacher for time allocation and tools if it does in the regular classrooms, such as time to prepare projector, loudspeaker, and notebook.
- c. In terms of grammar, Duolingo does not offer any explanations whatsoever on grammatical use. For language learners, grammar is an essential part of language learning and there are not direct grammar lessons. There should be a way to incorporate it along with vocabulary.
- d. In listening exercises, the way the sentences are spoken is not a

representative way of native people speaking that language. The machine can never really provide the learners with a great listening activity when it is automatic.

The format that presented the message and information which is adapted by Duolingo called Drill and Practice. According to Arsyad (2011, p.95), Drill and Practice give students examples to increase their ability which it will make them practice directly. The important thing about this concept is the student will not continue the lesson and practice if they do not understand the lesson.

### **The Impacts Of Duolingo Towards Students' Learning EFL**

Duolingo has been studied by some researchers regarding its effectiveness in helping students learn a language. A study by Rachels et al. (2017) showed that Duolingo has a good effect on students' language achievement. More evidence of Duolingo's positive impact comes from a study reported by Guaqueta et al (2018), where it was proved to help learners increase their English and developed a better attitude for language learning due to the fun and dynamic nature. The authors of Duolingo skillfully apply gamification into their system in order to engage and motivate their users. They have used some game-elements in their system. They are shown as follows :

- Reward: In Duolingo, lingot is a reward. Users can easily collect dozen of lingots by completing their lesson or skill.
- Leader-board: which shows users how they are doing compared to their friends, these are some great motivators to help the users coming back and learning.
- Level-system: providing a way to track users' daily activity and compete with their friends, XP (experience point) also determines users language “level”, which is displayed on their profile page and above their comments in discussions.
- Badges: Duolingo has some achievement tokens which are the skills a user has gained. They are displayed on the user's profile. A badge

is an excellent tool for making people feel invested in their studies.

Although Duolingo has used many game elements in their platform, we specifically analyze only “badges” in this study because the important part of successful gamification is content and learning material (Scepanovic et. al, 2015). Moreover, the main purpose of learners in Duolingo is learning a second language, while badges are used to lift up the motivation of learners when they study. Therefore, “badges” are an important element in the platform. The game element “badges” is combined in harmony with learning content to construct the main structure of a language course. The structure of a language course includes some elements as follows. The core element in a course is its lessons. The lesson is well-designed, drilling skills of user with several different kinds of challenges. They do not get too repetitive, and they are just easy and fun to do.

Besides, some successful gamification applications, many studies presented a gamification mechanic and its effect when applied to the system. Muntean (2014), has shown a theoretical analysis of gamification as a tool to engage users in e-learning platforms. In Fogg's Behavior Model, gamification mechanics is used to motivating and triggering desired behaviors in learners. He has provided a list of gamification elements and explained how they could apply to an e-learning course. Recently, Scepanovic et al, (2011), also give a discussion and evaluation of gamification mechanics based on literature review and analysis of implementing gamification concepts in Higher Education learning.

### **The Differences Between Duolingo And Conventional Way of Learning**

#### ***a. A new e-learning portal***

As stated by (Blake, 2016; Chun et al., 2016) that the integration of mobile technology in language learning can facilitate teachers to have authentic learning materials and to guide learners to interact with other language learners or even with the native speakers. One of the new and interesting m-learning is the Duolingo application. Duolingo is one of the

most popular writing learning media. (Wilbert et al., 2016) defines Duolingo as the future of language learning and global communication. Duolingo is a mobile-based language application that uses a combination of visual, audio, and also questions about a grammar of a language. The advantages that exist on the Duolingo website according to (Putri & Islamiati, 2018) are the method of delivering learning material that is very enjoyable with a system such as a game that makes users feel learning while playing, then a very attractive visual display that is supported by audio. The language skills learned in this application are quite complete, ranging from listening, writing, speaking, grammar, and vocabulary, and available on various platforms, this application is very light when used so it does not overburden the platform used. And there are almost no weaknesses in this application. However this application has some advantages, this application also has some weakness, those are some activities can not be conducted on both PC and smartphone, lack of available language material for Asian learners and this application also requires an internet connection to access it, so it is quite difficult for the learner in a remote area (Kenny, 2014).

There are several studies to investigate this application in language learning such as (Kenny, 2014; Kusumadewi & Widyaštuti, 2018; Putri & Islamiati, 2018; Taalas et al., 2018; Wilbert et al., 2016). However, these studies focus on the improvement of English language skills in general. Even though students' motivation in language learning also needs special attention, because when students are motivated to learn, of course, the positive effect caused is an increase in student learning outcomes going forward. The current study focuses especially on the motivation of students to learn English and their desire to use the application independently to learn English.

E-learning reached and is still reaching a significant expansion in terms of new technologies, modern teaching, and also lifestyle habits and trends of this modern age. It entered into education as well as in other areas of our life. It is worth mentioning that the growth of e-learning goes hand in hand with the growth in the importance of lifelong learning. “Relevant features

of this movement are:

- o the need to update knowledge and skills;
- o the need to retrain, as job-for-life has all but vanished; and
- o the need to maintain currency in the face of exploding information on the Internet”, Mason, R. a Rennie, F. (2006).

***b. The learning aspects e.g. motivation of learners, continuity of the learning material, correcting the mistakes, evaluation and feedback.***

There are a number of differences between traditional learning and e-learning. The first relates to a linear and predefined organization of the pedagogical path and has no immediate link with the operational activities; the second is aimed at the adaptive progression of each one of them, depending on the situation and it is integrated with the operational activities (idem, p. 78); in traditional learning, the results are the ones that matter, while in e-learning the interaction process is considered more important than the results (Dillenbourg, 1999; Mercer & Howe, 2012). If the aspects of planning, monitoring, and evaluation are the attribute of the teacher in traditional learning, in e-learning these also include the student and can be seen as part of the socio-emotional development (Volet, Summers, & Thurman, 2009). If the content was important before, it is now a pretext for training.

The process of learning and teaching in this era is inseparable from technology. the benefits of technology most felt in the learning process, especially language is the efficiency of time and energy. Other facilities offered to learners are the availability of attractive features that arouse curiosity and motivation to learn more. There are a number of research focused on the teaching and learning process using techniques such as (cheng, n.d.; Gangaiamaran, R., & Pasupathi, 2017; Rossing et al., 2012; Taalas et al., 2018). All studies revealed that teaching language using technology was helpful for both teachers and students. In reality, language teachers today face so many interesting opportunities for technology-enhancing language learning that it can be daunting. Because most of us are reluctant



to experiment with emerging technologies, it may be difficult to determine which resources, tools, or websites are ideally suited to a specific lesson, exercise, or desired outcome. Many of the most promising prospects lie within the same global trends in society and technology which have become common in our daily lives, including social media, machine learning, data mining, and virtual reality (Kessler, 2018).

In language instruction, technology now has its role in the teaching and learning process. Instructors or educators are now experiencing the effects of technological growth in both marketing education and practice. For example, the Internet has grown exponentially over the last few years (Clarke et al., 2001). Access to technology, ownership, and connectivity are among key success factors for integrating mobile learning in higher education (Naismith, L., & Corlett, 2017). Mobile learning or m-learning has recently emerged as a new type of learning model that enables learners to access learning materials anywhere and at any time using mobile devices and the Internet (Lan & Sie, 2010).

The social-psychological method of Gardners was one of the most influential in establishing the L2 motivation principle (Csizér & Dörnyei, 2005; Dörnyei et al., 2006; Lai, 2013). In this definition, motivation was regarded as the combination of three complex components, including enthusiasm, the desire to learn the language, and the attitude towards language learning. These three components belong to the motivation concept should be included when studying students' motivation. Despite the fact that mobile technology offers inherent powerful motivational potential through its sophisticated features, language learners possibly have different perspectives concerning the use of mobile technology for learning L2/FL. Stockwell (2013) argued that the motivation of students can essentially be divided into two categories. First, students are particularly interested in technology and thus turn it into a means of learning English. Second, students are interested in learning English and technology will help them learn English.

## CONCLUSION

This study shows that Duolingo can motivate EFL students in learning their second language although the rate of improvement is varied. It is based on many factors. Some of them are learners' internal factors, such as interest, curiosity, or a wish to succeed. For external factors, such as the influence of the learning contexts, the learning situation, and the influence of other people. The researcher claimed that Duolingo has a very significant impact on students, because it has interesting elements of gamification such as leader board, achievement, points, and levels that make them willing to keep learning by playing Duolingo.

Moreover, Duolingo provides varied lessons that make students not get bored in playing, such as translating, checking grammar, listening, and speaking. With these variations, students become easy to master English because they often listen to Duolingo's way of pronouncing it word by word. Playing Duolingo is not only making them more enjoyable in learning but also getting a lot of benefits. From the analyses above, the researcher aimed that learners who like to play a game would tend to like Duolingo so much. On the other side, those who like reading would tend to like Duolingo too although their interest in Duolingo is different.

The Duolingo contains a lot of varied materials and exercises. So, students do not need to bring thick books to learn English. Learners don't have to worry if all the exercises have been answered, because there will be new questions every time they start a new challenge. If using conventional way, students are always in need of new books for the new material and a set of exercises to be answered. Other differences are found on Duolingo is when a student makes a mistake when answering a question, then it will automatically give the correct answer. Unlike books, some English books contain exercises but most are without answer keys. It makes it difficult for them to know whether the answers in the practice book are correct or not, especially if they are studying on their own.

Gamification of Duolingo can increase students' motivation to learn

English, Duolingo is unlike any other English textbook, Duolingo has to see how the words are pronounced. At Duolingo, students can listen to the pronunciation several times. This is a feature not in textbooks. Textbooks can tell them how to pronounce words with phonetic transcription. However, to practice speaking skills are sounds that must be heard, such as pronunciation. Another aspect that makes Duolingo improve their learning mood is the abundance of pictures. Actually, English books also contain pictures, but that's not as much as in the Duolingo app. At Duolingo, pictures are almost always given to describe words, especially nouns. The advantage of learning by looking at pictures increases motivation. In other words, looking at pictures doesn't get bored easily. Pictures can also describe something in more detail.

Mobile phone applications can be used at any time the learner finds comfortable and provide most of the learning requirements and experiences the learner may find more motivating than restricted classroom settings (Turloiu and tef nsd ttir, 2011). For instance, there may be limited books available on some language instructions or their specific topics of interest and this makes it difficult for the learner to access them. Moreover, books may be uncomfortable to carry around compared to phones containing learning applications and online interaction platforms (Heil et al., 2016).

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