

STUDENTS' PERCEPTIONS ON THE USE OF DUOLINGO GAMIFICATION

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Abstract: Gamification, game elements in non-game situations, is a common concept in the 21st century to convince people and solve problems. It can be used as an instructional tool to improve English learning outcomes as it is a captivating and creative learning experience. Gamification research has shown that it can make students more enthusiastic and inspired to develop their English skills. In this study, Duolingo, one of gamification, was explored by 15 second-semester students of the Grammar Class of the English Education Program of the Teacher's Training and Education Faculty at a private university in Bogor, Jawa Barat. Due to the Covid-19, the students have been working on Duolingo's exercises online from home for 4 days with predetermined topics. This analysis used a qualitative approach with a case study technique under which the open questionnaire was used to obtain the advantages and drawbacks of Duolingo on the basis of the students' perceptions. By understanding the advantages and drawbacks of Duolingo, researchers and other language teachers can decide if it is the right language learning application for their students. If it is, they can create an appropriate learning activity using Duolingo in order to get an effective and successful learning process. Additionally, language learners are also able to optimize the use of Duolingo to improve their English skills and knowledge. In conclusion, users can prepare the right strategy in using Duolingo according to the learning goals they want to achieve.

Keywords: *grammar, gamification, duolingo, advantages and drawbacks*

1. INTRODUCTION

Grammar teaching has evolved beyond the memorization of rules or dialogues, and is more deeply rooted in helping learners develop their communicative skills, challenging tasks that enable them to understand grammatical forms, their meaning and usage. Teachers should guide students to evaluate grammar in the context of a larger discussion as well as to involve in successful negotiations (Bikowski, 2018). However, "the teaching of grammar should be fun to provide learners with better performance" (Hashim et al., 2019). This must be done by understanding that today's learners are digital natives who have grown up on technological growth and have diverse learning strategies and higher levels of teaching and learning (Kiryakova et al., 2014).

In order to respond to the learning methods of digital natives, today's language classrooms are very different from those of the mid-20th century. The focus of language education in the 21st century is no longer on grammar, memorization and learning by rote, but rather on using language and cultural awareness as a way of communicating and engaging with others around the world (Parvin & Salam, 2018). In this current situation, teachers face new challenges and need to address important issues related to the process of learning in response to the needs, desires and passions of students. They

need to practice a range of teaching methods and techniques that enable students to be active participants with a good motivation and commitment to learning (Kiryakova et al. 2014).

Traditional ideas about education are giving way to newer, more innovative ways of thinking about how we learn, teach, and acquire knowledge. Parvin & Salam (2018) noticed that technology has been used to support and enhance language learning. It is now uncommon to find a language class that does not employ any sort of technology. The most obvious explanation for the use of technology in language classes is to make students more excited and inspired as well. Shyamlee & Phil (2012) argue that the last two decades have brought about a transition due to the incipient existence of technology which have changed the dynamics of different sectors and also influenced the sectors and the way people interact and function in society. This rapid growth and development in information technology has indicated a wider trend in discovery of the modern teaching paradigm. As a result, technology plays a very important role in teaching English.

Current educational paradigms and phenomena in education provide the basis for the implementation of new approaches and techniques for the incorporation of an active learning process. Gamification of learning is one such phenomenon. It is a ground breaking new approach or learning experience that has established the dedication and enthusiasm of students to evaluate their skills. The mobile application was released in October 2010 with the goal of facilitating the engagement of students in classroom activities and promoting specific behaviors (Bicen & Kocakoyun, 2018). Gamification is “the use of game design elements and game mechanics in non-game contexts in order to engage people and solve problems” (Su & Cheng, 2015). It can motivate and encourage students to complete the objectives of their English learning experience as it offers a creative and enthralling learning activity. It can also inspire them to play an active role in the learning process, thereby promoting constructive learning, skills development and problem-based learning (Martí-Parreño et al., 2016).

Tan (2018) claims that gamification is a creative pedagogical technique or method in which digital games are used in an educational setting and as a learning tool. Gamification is well-associated with a globalized and multicultural higher education English language class where student-centered approaches lead to a more culturally diverse and technologically focused learning atmosphere. The research of Bicen & Kocakoyun (2018) found that gamification made the learning process more appealing, so that students were more excited and motivated to achieve learning goals. In other words, encouragement is an essential factor that can make students more effective in the learning process. As a result, gaming that can boost students' motivation and expectations for achievement in the learning process can lead to a more successful learning process.

Relevant game features can be used in gamification or non-game contexts to generate effective player communication as well as stamina and motivation to achieve or learn. The outcome of the specific game elements on the players explains the motivational aspects of the game's participation, and the investigation of the game elements may be responsible for raising the excitement for playing and participating in a grammar learning game (Zarzycka-Piskorz, 2016). This is related to the research of Hashim et al. (2019) explaining that gamified-learning has been shown to be able to enhance the ESL grammar of learners. Most of the participants got a better grade and were able to improve their grammar learning. Participants profit most from online language play, which is also a technology-based learning tool.

One of gamification that can be used to improve students' grammar skills is

Duolingo. This is supported by Syahputra (2019) in his research which examined the effectiveness of Duolingo in reducing student grammatical errors in writing the text of the paper. The study was attended by 25 second-grade students at Methodist Senior High School in Banda Aceh, Indonesia. The results suggested that the use of the Duolingo Gamification platform was adequate to minimize student grammatical errors in the text. Duolingo is a free application designed by Luis Von Ahn and Severin Hacker in November 2011 with a slogan of “Free language education for the world” (Munday, 2015). It is remembered from its website that it has more than 30 million registered users. It applies to many languages for English speakers as well as to non-English speakers. Jašková (2014) adds to her explanation that Duolingo is a free language learning software designed for users to make progress through lessons in which they can simultaneously help translate different websites and other documents. It has an outstanding learning technique because it has a highly motivational learning method that uses a game dynamics approach to inspire students to learn first and foremost.

In more depth, Munday (2015) stated in her research that her students seemed to find Duolingo an easy-to-use, helpful, and enjoyable app to practice Spanish. They appeared to like it more than regular, book based homework because of the ease it offered. They liked the fact that it can be accessed in a variety of formats, especially through smartphones. They also appreciated its gamification elements, eventually. Munday argued that this app was also successful because of the way the lessons were delivered, with brief, varied prompts and different skills interlinked. As she has seen with Brown, Roediger and McDaniel research in 2014, methods that are combined with spaced repetition can make learning more efficient.

In order to support the previous studies on the gamification of Duolingo, this current study was conducted to explore the advantages and drawbacks of Duolingo on the basis of the students’ perceptions, in this case the students from grammar class. By learning both items in advance, English learners are able to optimize the use of the gamification by preparing the right strategy in using Duolingo according to the learning goals they want to achieve.

2. METHODS

Qualitative approaches may be used to obtain nuanced descriptions of phenomena such as thoughts, thought processes, and emotions that are difficult to extract or learn by more traditional methods. Case studies shall be a research technique in which a researcher investigates a program, event, operation, process, or one or more individuals in depth. They are constrained by time and operation, and researchers obtain extensive information through a number of data collection methods over a prolonged period of time (Cresswell, 2013).

In view of the purpose of this current research and the nature of the issue, this research used a qualitative approach with the design of the case study, since the data in this study was analyzed in the form of a description. This research was carried out using the questionnaire in order to obtain the advantages and drawbacks of Duolingo based on the students’ perceptions. Participants were 15 second-semester students of the Grammar Class from the English Education Program of the Teacher's Training and Education Faculty at the private university in Bogor, Jawa Barat.

In response to the Corona-19 pandemic, the researcher used online data collection instead of direct (offline) data collection. The participants were invited to join the researcher's WhatsApp community and explore Duolingo from their smartphones by working on Duolingo’s exercises online from home for 4 days with predefined grammar

topics. On the last day of Duolingo's use, the questionnaire was submitted using the Google Form to be answered and sent back to the researcher on the same day to be analyzed in the form of a description. The open questionnaire consisted of two questions aimed at examining the students' perceptions relating to the advantages and drawbacks of Duolingo, one of gamification, which is at the core of this study.

Table 3.1. The questionnaire on the students' perceptions

No.	Questions
1	What are the advantages of Duolingo?
2	What are the drawbacks of Duolingo?

3. RESULTS AND DISCUSSION

In view of the research questions which decide the students' perceptions on the advantages and drawbacks of Duolingo, the results of the questionnaire will be presented in this chapter. The data will be categorized on the basis of two questions in the questionnaire.

a) The Advantages of Duolingo

Since the questionnaire is open to the students to share their thoughts, their responses are so diverse and different. The advantages of duolingo highlighted by the respondents are about the ease of accessing the application. 6 out of 15 students agree that duolingo is an easy-to-use application. Accordingly, 2 out of 15 students state that duolingo is simple, practical and uncomplicated.

They also find that Duolingo is interesting (4 out of 15), creative and innovative (1 out of 15), gives maximum features (1 out of 15), and has the features of the league and the achievements (1 out of 15). This can inspire students to keep playing duolingo, since learning with Duolingo is not tiresome. Duolingo is also versatile (3 out of 15). They can use it whenever and wherever they want, and they can comprehend Duolingo's exercise questions without a time limit.

The above findings are linked to the gamification features used in Duolingo. Two respondents endorsed the results by saying:

"Duolingo is easy to use, practical, and innovative. It does not make learning tedious." (R10)

"There are features of achievements and leagues. This makes me motivated to keep playing." (R6)

As far as grammar learning is concerned, 5 out of 15 students note that Duolingo can help them practice grammar, such as tenses, words, phrases, clauses and sentences. This is supported by the responses of the second and third respondents:

"..... It could help us learn grammar." (R2)

"It really corrects every word in a sentence, as well as the phrases and clauses that make me use English more extensively." (R3)

Besides being able to support grammar learning, Duolingo can improve students' vocabulary and pronunciation skills as stated below:

"It can add new vocabulary, make us more focused on answering the questions, and improve our English pronunciation." (R5)

One of the students also claims that Duolingo can help students develop their knowledge of English in general. This is in line with the other student's opinion that Duolingo's exercises range from speaking, listening to grammar. Their claims are as follows:

"This application can help us improve the knowledge of English. We can also choose which level or what lesson we want to learn. This is interesting because it doesn't make you bored in learning." (R8)

"The exercise questions are varied from speaking, listening, and grammar. The time is flexible, so we can understand the exercise question first without a time limit." (R14)

Another benefit of Duolingo in enhancing English learning is the recurrence of questions that students do wrong. 1 out of 15 students feels that through this repetition, students will gain a comprehension about the lesson material appears on Duolingo's exercise questions. Here is the following statement of support:

"When we answer a question incorrectly, then the question will be repeated until we can answer correctly." (R4)

Finally, there are several other good aspects of Duolingo mentioned by the following statements:

"Duolingo is a free language learning application....." (R7)

"Duolingo is not only used to learn English, but also to learn other languages." (R9)

"There is no advertisement in Duolingo....." (R11)

"Materials in Duolingo's exercises are quite easy for new English learners, so they will feel happy and helped by this application." (R15)

Some advantages of Duolingo found in this research are related to the previous studies. *First*, Duolingo is easy-to-use, simple, practical, uncomplicated, interesting, and innovative. It is similar to the research of Munday (2015) showing that her students found Duolingo an easy-to-use, helpful, and enjoyable app to practice Spanish. They liked the fact that it can be accessed in a variety of formats, especially through smartphones. They also appreciated its gamification elements, eventually. *Second*, Duolingo can help them increase English grammar knowledge. It is supported by Syahputra (2019) who examined the effectiveness of Duolingo in reducing student grammatical errors in writing the text of the paper. The results suggested that the use of the Duolingo Gamification platform was adequate to minimize student grammatical errors in the text. *Third*, Duolingo can help students develop their knowledge of English in general (since its exercises range from speaking, listening to grammar). It is also in line with Munday (2015). She argued that this app was also successful because of the way the lessons were delivered, with brief, varied prompts and different skills interlinked. Lastly, Duolingo has a repetition system that can enable students to gain comprehension to the subject matter appears on the questions. It is also supported by Munday (2015). She saw with the research from Brown, Roediger and McDaniel (2014) that the methods combined with spaced repetition can make learning more efficient. This is one of the benefits of Duolingo in enhancing English learning.

b) The Drawbacks of Duolingo

Since Duolingo is an online program, there may be disadvantages around the internet connection. This is illustrated by the views of 8 out of 15 students relating to items related to the internet connection, such as:

"We need to use a decent internet connection to access the application." (R5)

"If the connection is not secure, the loading process is going to take a very long time." (R12)

"If the signal is poor, it will have a great effect on the pronunciation problem because the answer to the Duolingo translation will be very long." (R4)

The use of gadgets is a must in connection with an online application. 2 out of 15 students have views on the subject.

"Using Duolingo means that we need to be online with a high degree of battery usage. If it is used for a long time, it makes our mobile phones hot and wasteful of the battery." (R9)

"We need to have enough cellphone power to install the Duolingo application." (R4)

The following weaknesses refer to the features of gamification in Duolingo related to the language learning process, in this case the learning process of English grammar. 4 out of 15 students observe that Duolingo does not have explanations for grammatical exercises. If their answers are incorrect, the application can only have the correct answers without specifying the reasons. The score system also looks less straightforward since it just displays a percentage of the score (1 out of 15). Here are the following supporting answers:

"Duolingo does not provide reasons whenever my response is incorrect." (R1)

"There is no explanation for the wrong answers, particularly in the case of grammar content". (R10)

The students' perceptions on the Duolingo's repetition feature have differences. 1 out of 15 students believes that the feature is useful to gain comprehension about the lesson material appears on the questions. Otherwise, 5 out of 15 students assume that the repetition is one of the drawbacks. This is backed up by a range of opinions:

"The exercise questions given by Duolingo are minimal and only replicated over and over again." (R5)

"The questions placed go back and forth on the previous question." (R13)

"The questions that have been answered incorrectly will continue to be repeated in such a way that often I get irritated by doing them." (R7)

There are also differences on the students' perceptions toward grammar lessons as the learning purpose of the students in this study. 5 out of 15 students find that Duolingo has an advantage in terms of improving their grammar. In contrast, 1 out of 15 students see this thing as a drawback because Duolingo only excels in grammar (R1). From this situation, it can be inferred that Duolingo can potentially be used as an acceptable alternative if English learners just want to focus on improving grammar.

Finally, there are several other drawbacks of Duolingo stated in the following statements:

"The display of Duolingo is too simple for me, so sometimes it's boring." (R2)

"We must have free time to be able to concentrate on the questions that have been

posed." (R4)

"Duolingo is less receptive to the voice of its consumer for speaking activities. If I repeat or pronounce the text that I hear from my phone, even if I try it as hard as I can, Duolingo cannot be able to detect it well, so I'm considered incorrect." (R8)

4. CONCLUSION

Every language learner is different, and online courses are not one-size-fits-all, and this is for Duolingo. From the students' perceptions investigated in this study, it is found that Duolingo has advantages and disadvantages. Most students agree that Duolingo is a free, easy-to-use, simple, interesting, innovative, non-advertising application. Its features can inspire students to continue to play for learning. It is also versatile; they can use it whenever and wherever they want. Duolingo can help students develop their English (or other languages) in general since its exercises range from vocabulary, speaking, pronunciation, listening to grammar. Specifically, it can help them increase grammar knowledge, such as word classes, tenses, words, phrases, clauses and sentences with several general topics. In enhancing English learning, Duolingo provides the repetition of questions that students do wrong, so they can gain comprehension about the lesson material appears on its exercises.

Since Duolingo is an online program, there may be several disadvantages around the internet connection. If the connection is not secure, the loading process is going to take a very long time. The use of gadgets is a must. Using Duolingo needs to be online with a high degree of battery usage. If it is used for a long time, it makes mobile phones hot and wasteful of the battery. The next weaknesses refer to the features related to the learning process, in this case the learning process of English grammar. Duolingo does not provide explanations for grammatical exercises. If a student's answer is incorrect, the application only shows the correct answer without specifying the reasons. The score system also looks less straightforward since it just displays a percentage of the score.

Knowing the advantages and drawbacks of Duolingo will help the researchers and other language teachers determine if it is the right language learning app for their students. If it is, they can create an appropriate learning activity using Duolingo in order to get an effective and successful learning process. Additionally, language learners are also able to optimize the use of Duolingo to improve their English skills and knowledge. In conclusion, users can prepare the right strategy in using Duolingo according to the learning goals they want to achieve.

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