

The Influence of Duolingo Gamification in Teaching EFL of The Eight Grade Students of SMPN 8 Parepare

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ABSTRACT

This research explores the idea of using an already existing language learning app, Duolingo, to students at SMPN 8 parepare. These types of apps use adaptive learning technologies, which are able to tailor the tasks to the level of each student. In the case of this research, Duolingo was used as part of the media of studies in teaching EFL. The students used the app online, either in its android phone or IOS phone. The purpose of this research is to find out the use of Duolingo Gamification is able to influence the EFL students in learning EFL or not and to analyze the significant difference between the EFL learner's mastery in English language before and after being taught by using Duolingo Gamification.

The researcher applied quasi-experimental method, with two group pre-test and post-test design. The samples of this research consisted of 42 students from two classes taken from the population of the eight grade students of SMPN 8 Parepare.

Preliminary results shows that Duolingo Gamification is an easy-to-use app that is useful and has potential, although its main lessons are not based on communicative competence. It is enjoy learning process and can motivate the students because of several elements, such as the accessibility on a mobile device, its Gamification aspect, and the variety of tasks. The results of data analysis showed that there was significant difference between the EFL learner mastery in English language before and after being taught by using Duolingo Gamification. This is indicated by the mean score of the pre-test is 35.85 and the post-test is 66.42. The results of the data show the t-test value in the post-test is 5.751 and the t-table value is 2.021. The data shows that H1 is accepted and H0 is rejected and students who are taught through Gamification Duolingo media are better than students who are taught through the Picture media.

Keywords: Gamification, Duolingo, EFL

ABSTRAK

Penelitian ini mengeksplorasi ide menggunakan aplikasi pembelajaran bahasa yang sudah ada, Duolingo, kepada siswa di SMPN 8 parepare. Jenis aplikasi ini menggunakan teknologi pembelajaran adaptif, yang dapat menyesuaikan tugas ke tingkat setiap siswa. Dalam kasus penelitian ini, Duolingo digunakan sebagai bagian dari media pembelajaran dalam mengajar EFL. Para siswa menggunakan aplikasi online, baik di ponsel android atau ponsel IOS. Tujuan penelitian ini adalah untuk mengetahui penggunaan Gamifikasi Duolingo mampu mempengaruhi siswa dalam mempelajari EFL atau tidak dan untuk menganalisis perbedaan yang signifikan antara penguasaan EFL pelajar dalam bahasa Inggris sebelum dan sesudah diajar dengan menggunakan Gamifikasi Duolingo.

Peneliti menggunakan metode kuasi-eksperimental, dengan dua kelompok pre-test dan post-test design. Sampel penelitian ini terdiri dari 42 siswa dari dua kelas yang diambil dari populasi siswa kelas delapan SMPN 8 Parepare.

Hasil awal menunjukkan bahwa Gamifikasi Duolingo adalah aplikasi yang mudah digunakan dan memiliki potensi, meskipun pelajaran utamanya tidak didasarkan pada kompetensi komunikatif. proses belajar menjadi menyenangkan dan dapat memotivasi siswa karena beberapa elemen, seperti aksesibilitas pada perangkat seluler, aspek Gamifikasi, dan berbagai tugas. Hasil analisis data menunjukkan bahwa ada perbedaan yang signifikan antara penguasaan EFL siswa dalam bahasa Inggris sebelum dan sesudah diajar dengan menggunakan Gamifikasi Duolingo. Ini ditunjukkan dengan skor rata-rata pre-test adalah 35,85 dan post-test adalah 66,42. Hasil dari data menunjukkan nilai t-test dalam post-test adalah 5.751 dan nilai t-tabel adalah 2.021. Data menunjukkan bahwa H1 diterima dan H0 ditolak dan siswa yang diajar melalui media Gamification Duolingo lebih baik daripada siswa yang diajar melalui media gambar.

Kata Kunci: Gamifikasi, Duolingo, EFL

INTRODUCTION

In the globalization era, knowing a foreign language other than one's native language has evolved to be extremely beneficial (Biria & Farhadian, 2018). It is used in almost all aspects of human life, such as mass media, business, sports, science and

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technology, education, culture and so forth. Why do EFL learners have difficulty in learning English? Because from the children ages, interest and motivation of English language were never be cultivated on them. EFL learners are weak in vocabulary because they don't read a novel, magazines, story books and others when they in Kindergarten or elementary school. Vocabulary knowledge is often viewed as a critical tool for second language learners because a limited vocabulary in a second language impedes successful communication (AL-Qahtani, 2015). Thus, they don't know many vocabulary and native pronunciation. EFL learners in Indonesia also rarely listen to the use of English language because most movie, documentary and Tv show have been through to the dubbing process when they watch on local television. In fact, Children who are active listeners can incorporate the things they hear faster in their framework of knowledge than a more passive counterpart (Oduolowu & Oluwakemi, 2014).

Based on the researcher's observation, the researcher got information that the student did not have high motivation to study English and 80% students did not like the old media that have been used in their classroom. Considering the fact above, it was important to find out the way to influence the EFL learners. So the researcher suggested used Duolingo Gamification as the way that expected to motivate the EFL learners to learn an English language. Furthermore, Gamification media is the best media to make the EFL learners more diligent to study because when they use the Duolingo Gamification media, they are not only can study in school but they can study anywhere and anytime. In addition, the Indonesian EFL learners acquired English Vocabulary through the dictionary, reading English book, listening to and watching English songs and movies, playing the game, the internet, and reading English advertisement (Patahuddin, Syawal and Bin-Tahir, 2017).

The Duolingo Gamification is an educational game that will motivate students to learn by using video game design and game elements in learning environments. Duolingo, which can be accessed either through the web on a desktop computer or through a cell phone or a tablet (Munday, 2016). Duolingo provides written lessons and dictation, with speaking practice for more advanced users. It has a Gamified skill that users can progress through and a vocabulary section where learned words can be practiced. It consists of two major components: grammar and vocabulary exercises and an interface to translate articles from the web (Magnuson, 2014). Duolingo is been used in schools. For example

in Costa Rica and Guatemala, Duolingo has been used in public schools as a pilot project run by the government.

METHOD

This research describes teaching and learning activities using different media, namely Duolingo Gamification and Pictures to two classes of the eight grade students of SMP 8 Parepare. The researcher took a sample by using cluster random sampling technique. The researcher took VIII 4 class as experimental class and VIII 5 class as the control class. In this research, the researcher used the simple form of multiple choices test. The materials consist of 35 questions, which were 15 questions were structure test, 5 translation test, and 15 listening test.

In this reserach, the data were collected by using a procedure that consisted of two stages; they were pre-test and post-test. In the first meeting, the researcher was gave pre-test. The researcher conducted pre-test by asking the students to answer the EFL test then, at the last meeting, the researcher was gave post-test for the students that same with in pre-test to find out the students' achievement after the treatment. The data collected through the test were analyzed quantitatively. This quantitative analysis employs statistical calculation to test the hypothesis. To analyzed the data collection, the researcher used multiple choice test.

In the treatment, the researcher stimulated students to learn EFL by using Duolingo Gamification to experimental class and the researcher was used pictures as media in control class. In this case, the researcher was giving treatment four meetings, each meeting run for 2 x 45 minutes (90 minutes). Both classes were treated with same topic and the researcher will give the treatment in four meetings.

FINDINGS

This research support some previous research findings such as conducted by Rhomdhoni and Wibowo (2014), in their research about Application of Gamification in interactive applications SQL Learning through Web-based found that, SQL learning App allows users to interactively learn SQL and directly the taught material by running SQL statements on applications. The second, Sari, Utami, and Fatta (2015), in their research about Application of Gamification concept on learning English tenses through web-based found that, learning English tenses with the Gamification concept where learning as playing a game make feels interesting and not boring. Third is Alsulami (2016), in her

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research about the Effects of Technology on Learning English as a Foreign Language Among Female EFL Students at Effatt College: An Exploratory Study found that students prefer using technology to enhance their speaking, reading, writing, and listening skills, which is mainly because they view technology as a crucial tool in developing their creativity. The last is Gunter et al. (2016), in their research about Language learning apps or games: an investigation utilizing the RETAIN model found that Language learning apps with game elements, like Bussu and Duolingo, offer learners opportunities to develop skills that can be transferred to other contexts, be they the language classroom or other real world social practices. Those research findings shown similarity with presentations and performance media that researcher applied in experimental class. Moreover, the students also able to understand more about English lessons and have a much time to learn English. Duolingo also make the student more interested and motivate to learn English because they only need a Smartphone to learn.

In this research, it was found that the students' achievement in EFL skills was categorized more better for both classes, its proved by the percentage of the total score of score of post-test for two classes (experimental and control class) and the students' mean score from the post-test. Although, the mean score of experimental class which taught by using Duolingo Gamification was 66.42, better that control class which taught by using pictures as a media was only 49.28. It showed that the achievement of the students who were taught using Duolingo Gamification were better than using pictures as a media.

The findings of this research show the result of the treatment implementation for the students' EFL skills in experimental class and control class.

1. The frequency and percentage the students' EFL skills in experimental Class and Control Class

a. Experimental class

Table 1: Students' classification score in experimental class for pre-test and post-test

o	Classificat ion	Score	Pre-test		Post-test	
			F	%	F	%
	Very Good	86-100	-	-	1	4 %

Good	71-85	-	-	5	2 4%
Fair	56-70	1	4 %	1 5	7 2%
Poor	41-55	1 4	6 7%	-	-
Very Poor	<40	6	2 9%	-	-
Total		2 1	1 00%	2 1	1 00%

In pre-test for experimental class, The data indicated that the score of the students was low before giving a treatment. It means that the students were difficult to answer the question. It proves by most of the students were in poor and very poor classifications. After giving the treatment, the students' ability in EFL skills were increased. This indicated that using Duolingo Gamification media improved the students' ability in EFL skills. It proved by most of the students were classified in good and fair classifications.

b. Control class

Table 2: Students' classification score in control class for pre-test and post-test

o	Classific ation	Sco re	Pre-test		Post-test	
			F	%	F	%
	Very Good	86- 100	-	-	-	-
	Good	71- 85	-	-	1	4 %
	Fair	56- 70	-	-	2	9 %
	Poor	41-	2	9%	10	4

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	55			8%
Very		91	3	
Poor	<40	19	8	9%
		%		
Total		100	1	
		%	21	00%

Table 2 showed that In pre-test for control class, the data indicated that the score of the students was low before giving a treatment. It means that the students were difficult to answer the question. It proves by most of the students were in very poor classifications. After giving treatment, the score of students were increase but most of the students were classified in poor classifications.

2. The mean score and standard deviation in experimental class and control class

The result of the students' pre-test and post-test, after calculating the mean score and standard deviation were presented in the following table:

Table 3: The mean score of the students in pre-test and post-test

Group	Pre-test	Post-test	Different mean score
Experi	35.8		
mental	5	66.42	30.60
Control	31.8	49.28	17.43
	5		

Table 3 explain about the mean score both of class between experimental and control class, score of the post-test in experimental class was the higher then post-test in control class. The mean score of the pre-test and post-test in both experimental class and control class was significant different that is 30.60 in experimental class and in control class is 17.43. It means that the EFL skills of the students both in experimental class and control class have different ability after giving treatment. However, the highest difference is in experimental class that used Duolingo Gamification as a learning media. Its prove

that using Duolingo Gamification as a learning media can increase student learning motivation more than using picture as a media.

Table 4: The standard Deviation of students in pre-test and post-test

Group	Pre-test	Pos t-test	Different Standard Deviation
		8.7	
Experimental	8.64	0	0.06
Control	7.84	11. 04	3.20

The table above shows that the standard deviation in post-test of the experimental class (8.70) are low than control class (11.04). Its proves that using Duolingo Gamification as a learning media can reduce variation in student scores in experimental class.

3. T-Test students in Pre-test

In testing the hypothesis, the researcher applied T-test formula at the level of significance with 0.05, degree of freedom ($N_1 + N_2 - 2$) = 40

Table 5: The T-test of students Pretest

Level of Significant	t-test value	T-table value
0.05	1.619	2.021

The table shows that the t-table (2.021) is higher than t-test value of the students pre-test (1.619). The analysis shows that the H_0 was accepted. It means that before doing treatment the ability of students in EFL skills is still low.

4. T-Test of Student in Post Test

In testing the hypothesis, the researcher applied T-test formula at the level of significance with 0.05, degree of freedom ($N_1 + N_2 - 2$) = 40

Table 6: The T-Test of the students Post test

Level of Significant	t-test value	T-table value
0.05	5.571	2.021

After giving treatment to the students, there has been a significant difference in the ability of student in English. Table 4.6 showed that the table that t-table (2.021) is lower than t-test value of the students in post-test (5.571). Based on the result, using Duolingo Gamification can influence the students in learning EFL and the results of data analysis showed that there was significant difference between the EFL learner mastery in English language before and after being taught by using Duolingo Gamification.

CONCLUSSION AND SUGGESTION

The researcher concluded that, using Duolingo Gamification can influence the students in learning EFL. It was enjoy learning process and can motivate the students because of several elements, such as the accessibility on a mobile device, its Gamification aspect, and the variety of tasks. Furthermore, the results of data analysis showed that there was significant difference between the EFL learner mastery in English language before and after being taught by using Duolingo Gamification. This was indicated by the mean score of the pre-test is 35.85 and the post-test was 66.42. The results of the data show the t-test value in the post-test was 5.751 and the t-table value was 2.021.

In teaching EFL, the researcher gives some suggestions about the English teachings' media as follows:

1. For English teachers they should prepare new media in teaching EFL skills. It can make the students feel fun and more interesting in learning process but they still focus on the material, and also the researcher suggest them to apply Duolingo Gamification media in teaching EFL.
2. For the students they should to use a Duolingo Gamification in their daily routine exercise to improve their EFL skills and more serious to learn EFL.
3. For the next researcher, they should find a new media to increase the interest of the student to learn EFL especially on technology-based.

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