

Playing Duolingo Level-Up Game to Assist Students' Vocabulary Mastery (A Mix Method Study at the Seventh Grade of a Junior High School in Ciamis)

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ABSTRACT

This research had the purpose to discover the effectiveness of Playing the Duolingo level-up game to improve students' vocabulary mastery. This research was carried out using a mixed method. Students with good English vocabulary competence at seventh-grade junior high school in Ciamis are still low. The average of pre-test value in the experimental group is 61,1 while the minimum criteria of mastery learning (KKM) for seventh-grade junior high school is 67. The sample consisted of two classes with a total number of 37 students taken out of the total population using the random sampling technique. One class as the experimental group was taught using the Duolingo game and the other class as the control group was taught using conventional strategy. The instrument for data collection was pre-test and post-test with 15 numbers of multiple choices tests consisting of 5 items of essays and questionnaires. The data were processed using the mean of the test, the t-test formula, and questionnaires. Data results showed that the t-observed value was higher than the t-table value (>2.000) at a level of significance 0.05 with the degree of freedom (df) 35. Since the t-observed value was higher than the t-table value, it means H_a was accepted and H_o was rejected. Therefore, the finding of the first research question revealed that teaching vocabulary mastery using Duolingo is effective because the score of the experimental group is highest than the one of the control group. It is recommended for English teachers practice Duolingo as teaching media to improve students' vocabulary mastery.

Keyword: *DGBL (Digital Game-Based Learning); Duolingo game; vocabulary mastery*

Introduction

People from all over the world communicate in a variety of languages. One of which is English. As we know, English is a language for international communication. Mastering the four abilities necessary for oral and written communication demonstrates the success of learning English. These language skills consist of listening, reading, speaking, and writing. To be successful in English skills there are three components requirements include grammar, vocabulary, and pronunciation.

According to Yoku Jonova (2020, p.68) “we can't understand a language speaker not knowing how to acquire vocabulary.” Learning English is not only for us to know the rules of grammar, but the increasing vocabulary is also important to assist in English skills. Vocabulary has an important role to play in the acquisition of a new language, and that role is especially crucial in the early stages of learning a foreign language. According to Stuart Webb & Paul Nation (2018, p.1) “while it has long been honored that vocabulary knowledge is an important element of L2 proficiency, vocabulary tutoring and literacy appears to be (re)gaining traction in the area of alternate language (L2) education.” According to Alabsi (2016, p.27), “vocabulary is an important component of students' comprehension and communicative ability in any language”.

Vocabulary helps students make their reading comprehension much better, particularly students with low-level achievement who need to "catch up" with their peers their age (McQuillan, 2019). Yanti (2018, p.3), moreover, argued that learning vocabulary items is important in all language skills (listening, speaking, reading, and writing) in English as a second language (ESL) and English as a foreign language (EFL). Meanwhile, increasing vocabulary is very important because it is the main capital for learning sentence structure and other language skills, especially for EFL students.

Learning a lot of vocabulary will make EFL students easier to read, write, listen and speak English. Albodakh, M. K. K. & Cinkara, M. (2017, p.280) defined the other hand, students in EFL classrooms, maybe bored and fearful of communicating in the target language with their teachers. As a result, they find it challenging to maintain long-term conscious concentration on explicit vocabulary learning. Motivation is so closely linked to students' learning, that problems relating to learner motivation have long piqued the interest of educators and motivation researchers (Tuan, 2012, p.431).

According to Zin, N. A. M., Jaafar, A., & Yue, W. S. (2009, p.323) “digital games is an interactive technology within a multimedia learning environment, could help young learners learn more successfully and interestingly”. To encourage students to be motivated in learning English, especially vocabulary, the researcher chose the use of a fun digital game. Nowadays, students are dissatisfied with traditional educational techniques, and they are looking for more fascinating, exciting, inspiring, and engaging learning experiences (Anastasiadis et al., 2018). Belda Medina (2021, p.1) defined the widespread of smartphones and tablets, as well as the novel interactive options they provide, academic interest in DGBVL (Digital Game-Based Vocabulary Learning) has expanded in lockstep with the proliferation of commercial games, and the growing number of

players.

As Zin, N. A. M., Jaafar, A., & Yue, W. S. (2009, p.322) rightly argues, Digital Game-Based Learning (DGBL) strategy makes use of games as a means of delivering learning materials. This study shows that DGBL activities can provide unique chances for vocabulary learning that are superior to traditional vocabulary learning tasks and methodologies. The effect of DGBL on EFL can become the research topic only in terms of students' developmental stage because students at different school levels study other aspects of English, starting from simple to sophisticated ones (Wang & Cai, 2021). Research has shown that teachers' roles (teachers must be trained), in-game instructions, and prior knowledge have all been demonstrated to be crucial elements in the effectiveness of DGBL for EFL learners who utilize it.

According to Huynh et al., (2016, p.270) “Duolingo is an application or website for the free language-learning platform. Users can study languages while also assisting Duolingo with document translation”. On its website, Duolingo is the most outstanding platform for language learning in the world, with over 150 million users. Jiang et al. (2020, p.1) said that Duolingo is a language-learning platform that provides free online classes through its website and mobile apps, as well as cutting-edge vocabulary acquisition techniques. So, the researcher used the Duolingo game because one of the strategies of vocabulary mastery is Digital Game-Based Learning (DGBL).

There is a previous study from the United States (Jiang et al., 2021) “How well does Duolingo teach speaking skills?” said Duolingo has already been proven to be an excellent tool for training receptive listening and reading comprehension abilities. This study observed students with speaking proficiency who had finished the beginning level of Duolingo course in Spanish and French. Another research was implemented by Jordán Buenaño, C. D. R. (2021) entitled “Gamification Strategy and The English Learning Vocabulary”. The purpose was to find out the effectiveness of the proposed gamification strategy (Duolingo learning platform) in language acquisition.

An overview of Vocabulary

According to Eshonqulova M. T., (2021,p.27) “one of the most crucial abilities for teaching and studying a foreign language is vocabulary, it serves as the foundation for the improvement of all other skills consisting of reading, listening, speaking, writing, spelling, and pronunciation”. The primary tool for students to use English effectively is vocabulary. Vocabulary enables students to

improve their reading comprehension, especially low-achieving readers who required to "catch up" with the peers of their age (McQuillan, 2019).

Teachers in senior high school and junior high school do not place a high priority on teaching vocabulary, which makes it easier for their students to improve their ability to understand the language because mastering vocabulary is required for all language skills. For example, in reading, students will have difficulty understanding or comprehending the text if they are not familiar with the meaning of the words in the text. If they only know a few vocabularies, it will be difficult for them to converse in a foreign language. It is difficult to learn a new language without first mastering the vocabulary, and mastering a language is not easy if you do not begin with the easiest.

An overview of DGBL (Digital Game-Based Learning)

According to Zin, N. A. M., Jaafar, A., & Yue, W. S. (2009, p.322) "Digital Game-Based Learning (DGBL) strategy makes use of games as a means of delivering learning materials". This study shows that DGBL activities can provide unique chances for vocabulary learning that are superior to traditional vocabulary learning tasks and methodologies. Digital Game-Based Learning (DGBL) is defined as a teaching method that engages in incorporating educational content or learning values into video games to motivate students (Deubel, 2006).

Digital Game-Based Learning (DGBL) is a way of learning that employs games and game applications that are specifically developed to aid in the learning process. We can stimulate three crucial aspects of learning, namely emotional, intellectual, and psychomotor, by adopting game-based learning. The constructivist philosophy of education is used in the applications of digital game-based learning. DGBL advocates for expanded Internet connectivity for the four billion people throughout the world who do not have it.

In (Wang & Cai, 2021), did research that saw the effect of DGBL on EFL can become the research topic in terms of students' progress phases because students at different school levels study other different aspects of English, starting from simple to sophisticated. The result of the research is that teachers' roles (teachers must be trained), in-game instructions, and prior knowledge have all been demonstrated to be crucial elements in the effectiveness of DGBL for EFL learners who utilize it.

Playing Duolingo game in teaching vocabulary

According to Jiang et al. (2020, p.1), “Duolingo is defined as a language-learning platform that provides free online classes through its website and mobile apps. It contains a variety of up-to-date language learning strategies, particularly for vocabulary”. It provided gamification in the learning process, it made it easier for students to understand and recall the words. It also increased their interest, enjoyment, and happiness in studying.

Duolingo is seen as the future of language learning. It is quite useful for those who wish to learn a new language because it is simple to use and delivers a large amount of information. Duolingo provides several elements that can assist students in learning a language more readily, including a daily list of words, interaction with other users so that learners can share their knowledge, the Lingot store, and immersion for more advanced learners.

Duolingo's learning strategies are diverse and comfortable for beginners who are learning a new language from the ground up because the procedures are straightforward. Duolingo's target audience includes people of all ages, including children, teenagers, parents, and others. According to Alvons Habibie (2020, p.1 4), “the fact that mobile technology has great motivational potential due to its advanced features, language learners may have differing views on the usage of mobile technology for L2/FL study”. It means that Duolingo is easier to use and more exciting, making it a good fit for use as a classroom resource. In (Qaddoura & Mustaffa, 2020), did research that saw the effectiveness of Duolingo in learning a language. Duolingo was the medium that was the highest and best platform applied according to most respondents than any other apps for teaching English vocabulary.

METHOD

This research was conducted using mixed methods with pre-test, post-test, and questionnaire. The sample of this research was a random sampling technique taken from the seven grade students of MTs in Ciamis. Class VII consisting of 17 students was the experimental group treated with the Duolingo game as a teaching method and class VII consisting of 20 students was the control group taught without using any particular strategy. The data were obtained from the pre-test and post-test managed for both groups. The instrument was questions completed with 15 multiple choices completed with five essays and questionnaires. Creswell (2012, p. 297) said that a pre-test measures some attributes or characteristics assessed for the research participants before the treatment is handed out. The result data from the pre-test and post-test were processed and analyzed

using the t-test formula.

FINDINGS AND DISCUSSION

Based on the previous elaboration, the objective of this research was to discover the effectiveness of playing Duolingo as a teaching method in vocabulary class. To obtain that objective, the hypothesis was formulated as H_a was accepted if the t-observed value $>$ t-table, then H_o was accepted if the t-observed value $<$ than t-table. The tests were carried out to find out whether the hypothesis was accepted or rejected. During the research, pre-test and post-tests were distributed to both groups before and after the treatment. The result of the test calculation for both groups revealed that the experimental group's mean score was greater than the control group's. The mean score of the experimental group in the pre-test and post-test was 23.5. The mean of the control group in the pre-test and post-test was 6.25.

The calculation of the t-test formula showed that the score of observed was 5.983 while the t-table was 2.030 at the level of significance 0.05 with a degree of freedom (df) = 35. So, the result of computing the test showed that the t-observed value was higher than the t-table value. It meant that H_a was accepted and H_o was rejected or there was a significant effect of playing the Duolingo game as a learning platform for students' vocabulary mastery.

CONCLUSIONS

The finding of this research showed that playing Duolingo level-up game as a learning medium significantly gave an impact on the student's vocabulary mastery. There was a significant difference in the mean score obtained from the experimental group (23.5) and control group (6.25). The t-test showed that the t-observed was higher than the t-table ($5.983 > 2.030$) with the degree of freedom ($df=35$) at a level of significance 0.05 which meant that H_o was rejected and H_a was accepted. Therefore, this research revealed that Duolingo level-up games gave effect students' vocabulary mastery significantly.

Hence, it is suggested that the teacher applies appropriate strategies in teaching language skills and elements, particularly the teaching process of vocabulary mastery. Duolingo level-up game is an applicable strategy that can improve students' vocabulary mastery. Other researchers also can use the result of this research as one of the references to carry out future research about the Duolingo game.

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