



TEACHERS' PERCEPTIONS OF DIGITAL GAME-BASED VOCABULARY LEARNING

**Poppy Shania M. Sihombing
Anna Riana Suryanti Tambunan**

**English Applied Linguistics Study Program
Postgraduate Program-Universitas Negeri Medan**

Submitted December; Accepted February; Published April

ABSTRACT

The most problem in teaching and learning English that faced by the teacher is the students' lacks of vocabulary. The problem caused by the media used in teaching and learning process that makes the students feel bored, less motivation when joining the class. So, it needs the novelty learning media especially in teaching vocabulary, such as: Digital Game-Based Vocabulary Learning (DGBVL). This study investigates how the elementary EFL teachers' perceptions of DGBVL. It is used the qualitative research method with a case study design. 3 EFL teachers who work in Ulul Ilmi elementary school in Medan were interviewed. Data collected through interviews was analyzed using the descriptive analysis method. The study's findings indicated that teachers have generally positive perceptions of DGBVL. For the appropriateness, it was very good, appropriate for use as a learning media, can create an effective, creative, innovative, and fun learning process. For the content, teachers expressed their perception that in general, the content was sufficient, although it may be simplified more and that it was transferable to students. For the assessment, teachers expressed generally positive about the assessment as it was based on implementation. Teacher revealed that the biggest problem was time constraints, some students were still unable to operate DGBVL.

Keywords: *Digital Game-Based Vocabulary Learning (DGBVL), Elementary EFL Teachers, Perceptions.*

How to Cite: Sihombing, Poppy Shania M. (2023). Teachers' Perceptions of Digital Game-Based Vocabulary Learning. *Jurnal Linguistik Terapan Pascasarjana Unimed.* 20 (1): 84-94.

INTRODUCTION

In recent years, digital game-based learning has become a significant issue in educational research, with many researchers focusing about the impact of digital game-based learning on student learning (Vanbecelaere et al., 2020; Yang & Lu, 2021). Rapid advancements in Computer Assisted Language Learning (CALL) and EFL learning and teaching have occurred during the last several decades (Colpaert, 2016). In such cases, a big amount of educational technologies have been used to assist students in enhancing their speaking, listening, reading, and writing abilities. Learning vocabulary is necessary for all English as a Foreign Language (EFL) language skills, namely speaking, listening, writing, and reading (Nation, 2001). More crucially, according to Alqahtani (2015), a restricted vocabulary in a second language limits effective communication. According to Laufer and Sim (1985), one of the most pressing demands of foreign-language learners is vocabulary. The most problem in the teaching and learning English that faced by the teacher is the students' lacks in vocabulary. The problem caused by the media that used in teaching and learning process that makes the students feel bored, less motivation when joining the class. So, it needs the novelty learning media especially in teaching vocabulary, such as: Digital Game-Based Vocabulary Learning (DGBVL). Game-based learning is more efficient than script-based learning in the classroom and has a strong positive motivating influence on student learning (Boeker et al., 2013). Goodman, Bradley, Paras, Williamson, and Bizzochi (2006) believed that Mobile game-based learning (MGBL) may improve learners' motivation, knowledge acquisition, and learning efficacy. Recently, a newly developed DGBVL–Roblox-iSL Collective– has attracted a lot of attention; it is characterized by immediate student-teacher interactions and ease of usage.

This study aims to investigate the elementary EFL teachers' perceptions about digital game-based vocabulary learning. Following then, a review of existing material on game-based vocabulary learning is conducted. Then, the article investigates elementary EFL teachers' perceptions about digital game-based vocabulary learning. Finally, there is a discussion at the end of the article. Digital game-based learning (DGBL) has been shown to be effective in the field of learning technology. Learning through games, according to Prensky (2001), is the way of the future. DGBL has long been used to assist students in reviewing language acquisition topics. Students had positive perceptions of learning vocabulary through mobile device games, according to Sukstrienwong and Vongsumedh (2013), they validated that students who used mobile devices for vocabulary acquisition exhibited considerable improvement in terms of vocabulary learning.

DGBL as language learning support is seen as a viable method for meeting the requirements of digital native learners. According to (Ferrer, 2017; Müller, 2018; Wei, 2018; Zou, 2020), DGBVL can increase learning motivation more than traditional methods. According to R. Li, Meng, Tian, Zhang, and Xiao (2019), game-based vocabulary learning improves EFL students' affective perceptions of intrinsic motivation, skill-difficulty balance, playability, enjoyment, satisfaction, and perceived learning.

According to previous study, teacher attitudes and views regarding digital games have a direct influence on their behavior (Sardone & Devlin-Scherer, 2010; Schrader et al., 2006). Others have observed that most teachers emphasize rewards over educational value when it comes to online gaming, gaming groups, or games as a communication tool (Schrader et al., 2006). This point of view came from their past experiences with using games in classrooms. As a result, researchers urged for the inclusion of gaming experiences in teacher education programs (Schrader et al., 2006; Wright, 2009). Hung, Yang, Hwang, Chu, and Wang (2018) carried out a scoping review of 50 papers on the use and effect of digital games in language teaching. The majority of studies found positive learning outcomes, with the most often reported ones being connected with the learners' affective or psychological states, closely followed by language learning (Hung et al., 2018). As a result, this investigation of teachers' perceptions of games and its use in schools can assist us in better comprehending game-based learning. Existing literature on teachers' perceptions about DGBVL may be divided into two categories: 1) teachers' perceptions of digital game-based vocabulary learning, and 2) types of digital game-based vocabulary learning.

Teachers' perceptions and attitudes about games have been highlighted as important factors in deciding whether or not games would be utilized in the classroom (Ketelhut & Schifter, 2011). Teachers' decisions to utilize the tool, for example, were influenced by whether or not the games were directly related to the curriculum. Teachers would need to assess their limited understanding of digital game-based learning, as well as the availability of technology and time (Ertzberger, 2009). Roblox, a popular digital game-based learning platform, was used in this study. Roblox is one of the top games ever made, having won several awards and been called the best game of 2006. (Roblox). Roblox claims to be the world's largest user-generated online gaming platform, with over 15 million user-created games. In a great family-friendly, immersive 3D environment, users may construct an adventure, play games, role-play, and study with their friends. Roblox employs an avatar, which a player may manipulate by using the keyboard's keys or the mobile

platform's settings. However, teachers must be aware of the game's purpose and goals in order to help the student use it successfully. iSL collective interactive video quizzes are multimodal texts that are very interesting and encouraging for English language students to acquire vocabulary and enhance their listening skills. Based on the explanation above, using roblox- iSL collective as a media particularly in teaching English is appropriate to face the demand 21st century education because of the skills gained from that game.

This study investigates how the elementary EFL teachers' perceptions of DGBVL. Teachers see the possibilities for applying and doing in this context. Specifically, the research question guide this study formulated as follow "How are the elementary EFL teachers' perceptions of digital game-based vocabulary learning?".

METHODOLOGY

This study used the qualitative research method with a case study design. It was conducted with 3 EFL teachers who work in Ulul Ilmi elementary school in Medan. They were asked to respond to the questionnaire based on semi-structured interview questions items in a written format. The researcher did questionnaire comprised of semi-structured interview questions. A semi-structured interview questionnaire form with five open questions intended to gather teachers' perceptions on the appropriateness, content, assessment, problems, and suggestions for DGBVL. Based on how they are done, interviews are divided into three types: structured, unstructured, and semi-structured (Merriam 1998; Ekiz 2003; Karasar 2004; Lichtman 2006). Interviews are a frequent method for gathering information about people's perceptions, opinions, experiences, and feelings (Yildirim and Simsek 2012).

FINDINGS AND DISCUSSION

The following models were used to present and evaluate the responses of teachers to questionnaire-based semi-structured interviews.

1. Teachers' Perceptions on the Appropriateness of digital game-based vocabulary learning

The teachers were asked the question "Do you think digital game-based vocabulary learning (DGBVL) is appropriate for use as a media for learning vocabulary in the classroom?" in order to collect their perceptions on the appropriateness of DGBVL. Teachers' expressed the perception that, in general, the digital game-based vocabulary is appropriate for use as a media for learning vocabulary in the classroom for elementary students, and that it create an effective,

creative, innovative and fun learning process. Interviewed teachers' Perceptions on the appropriateness of DGBVL are presented below:

I think it's feasible, because digital game-based vocabulary learning can create an effective, creative, innovative and fun learning process so that the learning atmosphere will be more active and not easily bored. (T1)

Yes, it is. Digital game-based vocabulary learning is pretty good to be applied in the class. Students tend to get bored easily, that's why somehow teacher needs to be more creative by bringing game as the way they learn the lessons. (T2)

Yes, DGBVL can help me to deliver the material easily, it can attract students' attention to study. Because in this era, children prefer to playing game on mobile phone/PC than studying, so why we don't use digital game-based vocabulary learning as a learning media that makes students are learn while playing. (T3)

2. Teachers' Perceptions on the Content of digital game-based vocabulary learning

The teachers were asked the question "How about your opinion, is it easier to teach vocabulary through digital game- based vocabulary learning (DGBVL) than other media? Please, give the reasons?" in order to collect their perceptions on the content of DGBVL. Teachers expressed their perception that in general, the content was sufficient, although it may be simplified more and that it was transferable to students. Below are some of perceptions about the content of DGBVL:

In my opinion, teaching vocabulary using DGBVL can help me in transferring material to students. and the use of DGBVL is also quite easy, students can also operate it. So, I think the use of DGBVL is better than other media, both in terms of usage and content. (T1)

I think it is easier to teach vocabulary through digital game-based vocabulary learning. As we need to understand that kid is still a kid, we need to give the best approach to make them comprehend things, by playing any game for example? I'm pretty sure that students are way more comfortable doing the learning process through games, it's fun, it's easy, and it's taught them two things--how to work on the technology by using some specific devices, and they learn vocabulary through a fun way! (T2).

Yes, teaching vocabulary using DGBVL is more practical and easier than other media. Students will also prefer to interact with technology, because this is not what they used to do before. and they are also easier to understand the material presented using this technology compared to other media. (T3)

3. Teachers' Perceptions on the Assessment of digital game-based vocabulary learning

The teachers were asked the question "After the teaching and learning process, how did the students feel when they learned vocabulary through digital game- based vocabulary learning

(DGBVL)? Are they interested or not? and how did the students' skill in vocabulary?" in order to collect their perceptions on the assessment of DGBVL. Teachers expressed generally positive about the assessment as it was based on implementation. It is understood that the assessment of DGBVL is noticeably clear, and the acquisitions are mostly based on reading and listening. On the other hand, the teacher said that some students had difficulty operating digital game-based vocabulary learning using mobile phones. Below are the perceptions of teachers' concerning the assessment element of DGBVL:

When the student learn vocabulary through DGBVL, they are having fun and interested in it, so it can motivate them in learning. It also can improve their vocabulary skill, because the DGBVL contains quizzes/ worksheets and also provide the answer/feedback when the students match the answer both right and wrong answer. It can be their practice especially in learning vocabulary. (T1)

The students were liked and interested to the DGBVL. Students also got new vocabulary by watching and playing the DGBVL. beside it, they think this game is really interesting that can increase their motivation for learning because of the design such as pictures, illustrations, colors, and sounds. I think for the assessment, obtained from the reading skill and listening skill, because to answer the question in the DGBVL, the students used their reading skill and also their listening skill. (T2)

Some students feel interested in using DGBVL as their learning media, but some students have difficulty operating the game, due to limited ability to use technology. but I believe, this DGBVL is very good to be used as a learning media, especially in teaching vocabulary. many students got high score when answering the quizzes in the DGBVL, and I also asked the students about the vocabulary in the game, they were able to answer my questions correctly. So, it can be concluded that this DGBVL can improve students' vocabulary skills. (T3)

4. Teachers' Perceptions on the Problems of digital game-based vocabulary learning

The teachers were asked the question "What are the obstacles faced by students in learning vocabulary through digital game-based vocabulary learning (DGBVL)?" in order to collect their perceptions on the problems of DGBVL. Concerning the problems, they have experienced in the implementation of the DGBVL, the teacher revealed that the biggest problem was that some students were still unable to operate DGBVL, these students were still unable to use technology. on the other hand, to operate a DGBVL requires a stable internet network connection. Below are the perceptions of teachers on the problems experienced in the implementation of the DGBVL:

One of the obstacles faced by students in learning vocabulary through DGBVL is time constraints. Of course, students need more time in learning DGBVL because it is something new

for them. (T1)

The obstacle is the network. A stable network is very important to access this digital game-based vocabulary learning. (T2)

The obstacle faced by students in learning vocabulary through digital game-based learning is some students were still unable to operate digital game-based vocabulary learning, these students were still unable to use technology, especially PC. Some students are just don't really understand how to playing/run it on their devices. (T3)

5. Teachers' Requests and Suggestions of digital game-based vocabulary learning

The teachers were asked the question “In your opinion, what are the obstacles found in the process of learning vocabulary through digital game- based vocabulary learning (DGBVL)? and give your suggestion!” in order to collect their perceptions on their requests and suggestions about the obstacles found in the process of learning vocabulary through DGBVL. The analysis of the teachers' suggestions about the obstacles encountered in the process of learning vocabulary through DGBVL in general reveals that they mostly come up with solutions to the problems they encountered during the implementation of the DGBVL. The teacher said that the obstacle faced was about the limitation of computer infrastructure, the classroom conditions are a little less controlled and conducive, and the ignorance of some students about operating DGBVL.

I found the obstacle during the learning process is the limitation of computer infrastructure. In my opinion, both teacher and students need headsets and speakers to listen to the sounds. But, the computers available in the classroom are not equipped with headsets and speakers. So, it becomes an obstacle to the learning process for students who use computers and for teacher in explaining the material. (T1)

It is difficult to direct students because of their curiosity and enthusiasm. The class situation is a little less controlled and conducive. It is better to carry out learning activities with digital game- based vocabulary learning, which are carried out together with partners so that they can monitor the conduciveness of the activities and the teacher must also keep an eye on how students answer the questions. (T2)

The obstacle faced is about the ignorance of some students about operating DGBVL, this is related to the ability to use technology. My suggestion is that from now on students should be more accustomed to learning to use technology, considering that nowadays technology is developing rapidly, and there are many research studies which have proven that students are more interested in learning using technology or similar media than using books. (T3)

In this study, teachers were asked questions concerning digital game-based vocabulary learning and requested to provide suggestions, and data was collected on this. The findings obtained from the overall elementary EFL teacher's perception of DGBVL in general indicate that

the use of DGBVL in teaching vocabulary is a positive thing in improving vocabulary and motivation according to Y. Huang (2015), and T. Wu (2018) stated that the game-based learning approach improved vocabulary learning achievement and motivation. This is in line with Sukstrienwong and Vongsumedh (2013) validated that student had positive perceptions of learning vocabulary through mobile device gameplay, and they confirmed that students who use mobile devices for vocabulary acquisition showed significant improvement in terms of vocabulary learning. According to R. Li, Meng, Tian, Zhang, and Xiao (2019), game-based vocabulary learning improves EFL students' affective perceptions of intrinsic motivation, skill-difficulty balance, playability, enjoyment, satisfaction, and perceived learning, this is in accordance with the teacher's perception in this study. In general, teachers said that DGBVL can create an effective, creative, innovative, and fun learning process so that the learning atmosphere will be more active and not easily bored. It can be understood from the teacher's perception that the content of DGBVL in general, the content was sufficient, although it may be simplified more and that it was transferable to students.

DGBVL is feasible because it can help the teacher to deliver the material easily and attract students' attention. In this study, regarding the elements of assessment, Teachers expressed generally positive about the assessment as it was based on implementation. It is understood that the assessment of DGBVL is noticeably clear, and the acquisitions are mostly based on reading and listening. The students were liked and interested in the DGBVL. Students also get new vocabulary by watching and playing the DGBVL. Besides that, they think this game is really interesting that can increase their motivation for learning because of the design such as pictures, illustrations, colors, and sounds. For the assessment, obtained from the reading skills and listening skills, because to answer the questions in the DGBVL, the students used their reading skills and also their listening skills.

Concerning implementation issue, teachers generally stated that the most significant problem was that some students were still unable to use DGBVL, and therefore also were unable to use technology. This is in line with teachers would need to assess their limited understanding of digital game-based learning, as well as the availability of technology and time (Ertzberger, 2009). In this research, it also found that the obstacle faced by students in learning vocabulary through DGBVL is time constraints. Students need more time in learning DGBVL because it is something new for them. According to these findings, the availability of computer infrastructure is needed to

implement DGBVL. it also requires headsets and speakers to listen to the sounds. On the other hand, students' ability to operate technology is also needed in implementing DGBVL. therefore, from now on, the students should be more accustomed to learning to use technology. In short, it can be concluded that according to the findings of this study, there are some obstacles to applying DGBVL, and it may be utilized more effectively if these ideas to overcome these obstacles are implemented.

CONCLUSIONS

Based on the results of the study, the teacher stated that the DGBVL was very good, appropriate for use as a learning media, and can create an effective, creative, innovative and fun learning process. In the content, Teachers expressed their perception that in general, the content was sufficient, although it may be simplified more and that it was transferable to students. For the assessment, Teachers expressed generally positive about the assessment as it was based on implementation.

It is understood that the assessment of DGBVL is noticeably clear, and the acquisitions are mostly based on reading and listening. On the other hand, the teacher said that some students had difficulty operating DGBVL using mobile phones. regarding the obstacles faced by the students in the implementation of the DGBVL, the teacher revealed that the biggest problem was time constraints, students need more time in learning DGBVL because it is something new for them. Then, some students were still unable to operate digital game-based vocabulary learning, these students were still unable to use technology. on the other hand, to operate a DGBVL requires a stable internet network connection. The obstacles found in the process of learning vocabulary through DGBVL were the limitation of computer infrastructure, the classroom conditions are a little less controlled and conducive, and the ignorance of some students about operating DGBVL. Analysis of teachers' suggestions about implementing DGBVL in general reveals that they provide more suggestions about solutions to the problems they experience in implementing DGBVL.

REFERENCES

- Chen, C. M., Liu, H., & Huang, H. B. (2019). Effects of a Mobile Game-Based English Vocabulary Learning App On Learners' Perceptions and Learning Performance: a case study of Taiwanese EFL learners. *ReCALL*, 31(2), 170 – 188.

<https://doi.org/10.1017/S0958344018000228>.

- Foster, A., & Shah, M. (2020). Principles for Advancing Game-Based Learning in Teacher Education. *Journal of Digital Learning in Teacher Education*. 36(2), 84-95. <https://doi.org/10.1080/21532974.2019.1695553>.
- Hartt, M., Hosseini, H., & Mostafapour, M. (2020). Game on: Exploring the Effectiveness of Game-based Learning. *Planning Practice & Research*. 35(5), 589-604. <https://doi.org/10.1080/02697459.2020.1778859>
- Hebert, C., Jenson, J., Terzopoulos, T. (2021). Access To Technology Is The Major Challenge”: Teacher Perspectives On Barriers To DGBL In K-12 Classrooms. *E-Learning and Digital Media*. 18(3), 307–324. <https://doi.org/10.1177/2042753021995315>
- Kahila, J., Valtonen, T., Tedre, M., Makitalo, K., & Saarikoski, O. (2019). Children’s Experiences on Learning the 21st-Century Skills With Digital Games. *Games and Culture*. 15 (6). <https://doi.org/10.1177/1555412019845592>
- Li, R. (2021). Does Game-Based Vocabulary Learning APP Influence Chinese EFL Learners’ Vocabulary Achievement, Motivation, and Self-Confidence?. *SAGE Open*. <https://doi.org/10.1177/21582440211003092>
- Li, R., Meng, Z., Tian, M., Zhang, Z., & Xiao, W. (2019). Modelling Chinese EFL Learners’ Flow Experiences In Digital Game-Based Vocabulary Learning: the Roles of Learner and Contextual Factors. *Computer Assisted Language Learning*. 34(4), 483-505. <https://doi.org/10.1080/09588221.2019.1619585>
- Sung, H. Y., & Hwang, G. J. (2017). Facilitating Effective Digital Game-Based Learning Behaviors And Learning Performances of Students Based on a Collaborative Knowledge Construction Strategy. *Interactive Learning Environments*. 26(1), 118-134. <https://doi.org/10.1080/10494820.2017.1283334>
- Tang, J. T. (2020). Comparative Study Of Game-Based Learning on Preschoolers’ English Vocabulary Acquisition in Taiwan. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2020.1865406>
- Tsai, Y. L., & Tsai, C. C. (2018). Digital Game-Based Second-Language Vocabulary Learning and Conditions of Research Designs: a Meta-Analysis Study. *Computers & Education*. 125, 345-357. <https://doi.org/10.1016/j.compedu.2018.06.020>

- Wu, T. T. (2018). Improving the Effectiveness of English Vocabulary Review by Integrating ARCS with Mobile Game-Based Learning. *Journal of Computer Assisted Learning*. 34(3), 315-323. <https://doi.org/10.1111/jcal.12244>.
- Yang, K. H., & Chen, H. H. (2021). What Increases Learning Retention: Employing the Prediction-Observation-Explanation Learning Strategy in Digital Game-Based Learning. *Interactive Learning Environments*. <https://doi.org/10.1080/10494820.2021.1944219>
- Zou, D., Huang, Y., & Xie, H. (2019). Digital Game-Based Vocabulary Learning: Where Are We and Where Are We Going?. *Computer Assisted Language Learning*. 34(5-6), 751-777. <https://doi.org/10.1080/09588221.2019.1640745>