

# TEACHERS' PERCEPTION ON THE IMPLEMENTATION OF DIGITAL GAMES-BASED LEARNING TO TEACH VOCABULARY: A CASE STUDY AT MUSLIM CENDEKIA ELEMENTARY SCHOOL KOTA BATU

## **THESIS**

BY KHAULA AMELIA KHUSNA NPM 22102073001



UNIVERSITY OF ISLAM MALANG POST-GRADUATE PROGRAM ENGLISH LANGUAGE EDUCATION JULY 2023



#### **ABSTRACT**

Khusna, Khaula Amelia. 2023. Persepsi Guru Terhadap Implementasi Pembelajaran Berbasis Digital Games Untuk Mengajar Kosa Kata: Studi Kasus di SD Muslim Cendekia Kota Batu. Tesis. Magister Pendidikan Bahasa Inggris. Program Pascasarjana. Universitas Islam Malang. Pembimbing: (I) Prof. Drs. H. Junaidi Mistar, M.Pd., Ph.D., (II) Dr. Dwi Fita Heriyawati, S.Pd., M.Pd

**Kata Kunci:** Pembelajaran berbasis game digital, kosa kata, guru sekolah dasar, persepsi

Bidang pengajaran dan pembelajaran bahasa mendapatkan manfaat dari teknologi secara signifikan. Pembelajaran Berbasis Game Digital adalah salah satu alat yang terkenal dalam Pengajaran Bahasa Inggris yang telah banyak diterapkan untuk memanfaatkan teknologi. Ini sering digunakan sebagai media pengajaran untuk membantu siswa meningkatkan kemampuan bahasa mereka. Untuk itu, SD Muslim Cendekia Kota Batu memanfaatkan keunggulan dalam mengintegrasikan teknologi dan kegiatan pembelajaran.

Penelitian ini bertujuan untuk empat tujuan utama (1) untuk mengeksplorasi implementasi pembelajaran berbasis game digital untuk mengajar kosa kata, (2) untuk mengetahui persepsi guru sekolah dasar terhadap penggunaan game digital, (3) untuk menemukan tantangan yang mungkin dihadapi selama proses pembelajaran (4) untuk mengeksplorasi bagaimana cara guru mengatasi masalah yang dihadapi ketika menggunakan game digital. Penelitian ini merupakan studi kasus yang mengamati kegiatan pembelajaran di SD Muslim Cendekia Kota Batu.

Terdapat empat guru sekolah dasar yang berpartisipasi dalam penelitian ini. Pengumpulan data melibatkan observasi kelas dan wawancara semi terstruktur. Peneliti melakukan observasi kelas untuk mengetahui bagaimana guru menerapkan pembelajaran berbasis game digital untuk mengajar kosa kata di kelas 1 – kelas 4. Selain itu, untuk menggali persepsi guru tentang penerapan pembelajaran berbasis game digital serta tantangan yang mungkin mereka hadapi dan bagaimana mengatasi masalah ini, wawancara semi-terstruktur dilakukan.

Temuan tersebut menunjukkan bahwa guru menerapkan permainan digital selama proses pembelajaran untuk mereview kosakata yang telah diajarkan. Mereka juga memiliki berbagai cara untuk mengimplementasikannya seperti secara individu, berpasangan atau dalam kelompok. Mereka menggunakan beberapa permainan digital interaktif seperti Quizziz, Wordwall, Twinkl dan English Room untuk mengajarkan kosa kata di kelas. Berdasarkan observasi kelas, siswa menunjukkan partisipasi aktif dan keterlibatan mereka selama bermain game. Semua responden penelitian ini berpendapat bahwa dengan menggunakan pembelajaran berbasis game digital untuk mengajarkan kosa kata dapat



meningkatkan keterlibatan dan motivasi siswa dalam proses pembelajaran. Mereka dapat terlibat secara aktif dan lebih fokus. Karena game digital memberikan gambar berwarna dan animasi dengan berbagai fitur menarik, hal itu dapat meningkatkan kesenangan mereka. Selain itu, guru juga menekankan bahwa penggunaan permainan digital dapat menjadi alat yang efektif untuk mengajarkan kosa kata dan meningkatkan retensi kosa kata siswa. Di sisi lain, karena kurangnya sumber daya dan pengetahuan guru yang terbatas, para guru menemukan bahwa menggunakan permainan digital akan menjadi tantangan. Namun, juga diperlukan lebih banyak akses dalam game digital dan perangkat yang didukung agar dapat menggunakan game digital secara efektif. Oleh karena itu, sangat penting untuk memperhitungkan kemajuan integrasi teknologi dalam pendidikan.





## **ABSTRACT**

Khusna, Khaula Amelia. 2023. Teachers' Perception on the Implementation of Digital Games-Based Learning to Teach Vocabulary: A Case Study at Muslim Cendekia Elementary School Kota Batu. Thesis., English Language Education Study Program, Postgraduate Program. University of Islam Malang. Advisors: (I) Prof. Drs. H. Junaidi Mistar, M.Pd., Ph.D., (II) Dr. Dwi Fita Heriyawati, S.Pd., M.Pd

**Keywords:** Digital Games-Based learning, vocabulary, Elementary school teacher, perception, challenge

The field of teaching and learning languages has significantly benefited from technology. Digital Games-Based Learning is one of the well-known tools in English Language Teaching that has widely applied to make use of technology. It is frequently used as teaching media to help students improve their language proficiency. For this reason, Muslim Cendekia Elementary School Kota Batu took advantages in integrating technology and learning activity.

This study is aimed at four main purposes (1) to explore the implementation of Digital Games-Based Learning to teach vocabulary, (2) to investigate elementary school teachers' perception toward the use of digital games, (3) to discover the challenges that might be faced during the learning process (4) to explore how the way teachers overcome the problems. This present study was a case study which observe the learning activity in Muslim Cendekia Elementary School Kota Batu.

There were four primary school teachers who participated in this study. The data collection involved a classroom observation and semi-structured interview. The researcher carried out a classroom observation to know how the teachers' implemented Digital Games-Based Learning to teach vocabulary in the  $1^{\rm st}-4^{\rm th}$  grade classroom. Additionally, to explore the perception of the teachers' on the implementation of Digital Games-Based Leaning as well as the challenge that might they encountered and how to cope with these issues, a semi-structured interview was done.

The finding demonstrated that the teachers implemented digital games during the learning process to review the vocabularies that have been taught. They also had some various way to implement it such as individually, in pair or in a group. They used some interactive digital games such as Quizziz, Wordwall, Twinkl and English Room to teach vocabulary in the classroom. Based on classroom observation, students showed their active participation and engagement during the gameplay. All participants of this study believed that by using Digital Games-Based Learning to teach vocabulary, it can increase students' engagement and motivation in the learning process. They can actively involve and be more



focus. Since digital games provide colorful and animated picture with numerous interesting features, it can raise their enjoyment. Additionally, teachers also emphasized that using digital games can be an effective tool to teach vocabulary and to enhance students' vocabulary retention. On the other hand, due to a lack of resources and the teachers' limited knowledge, the teachers discovered that using digital games would be challenging. However, it is also required more access in digital games and supported devices in order to use the digital games effectively. Therefore, it is crucial to take into account the advancement of technology integration in education.









#### CHAPTER I

#### INTRODUCTION

This chapter discusses about the background of the study, research problems, research objectives, scope of the research and significance of the study.

## 1.1 Background of the Study

It is undeniable that teaching English to young learners is one thing that must be considered to enhance students language development as Cameron (2001) pointed out that there are many advantages in early language learning. Shabaneh and Farah (2019) also emphasized that young language learners comprehend languages more quickly than adults. When they are exposed to a linguistic input over time, they begin to connect the dots and become more proficient communicators. Additionally, Cameron (2001) argued that all children gradually develop their language skills through interaction with others and their environment. Young learners are naturally keen, enthusiastic, uninhibited, and easily motivated through their interaction with the environment. In reality, children learn at different rates, and the speed of learning is influenced by both innate abilities and environment.

From the Independence Day, English has been a long-standing subject in Indonesian education. English as a subject in Indonesian schools has seen a rapid shift as a result of the development in the fields of culture, technology, and knowledge. Additionally, Indonesian education stakeholders are now considering English language teaching as one of a number of issues. Heriyawati



(2013) explained that from the elementary school level through the university level, English is taught in Indonesia. Here, English is increasingly being taught to all students at all levels of school as a required subject. Nufus (2018) also supported that, educational system in Indonesia is developing quickly. From preschool through university, many schools offer English as a subject to be taught in formal education. The school also decided to adopt bilingual instruction when educating young students, despite the fact that the government had not issued any regulations requiring the teaching of English in classrooms for young learners. In conclusion, English has been included in the curriculum as a subject. However, it is only included and introduced in the secondary school. In elementary school, English could be a local content subject or was taught in extracurricular. This makes English become a non-compulsory subject in the lower education.

Curriculum in Indonesia has changed over times and it affected the position of English lesson. Hawanty (2014) explained that currently, in the primary school curriculum in Indonesia, English becomes one of the local content subjects which is optional subject that can be taught or not. Since there is no standardized curriculum for English, which is as a local content subject, primary school curriculum development is frequently left to individual teachers in the classroom. According to the explanation above, there is an elementary school in Kota Batu, East Java, named Muslim Cendekia Elementary School that provided English as a compulsory program not as a local content. Muslim Cendekia Elementary School realized that it is important to provide students with excellent service in English language learning so that English is included

as one of the required subjects at this school. To support English language learning, students can learn English for the compulsory subject, a program which focus on speaking skill called Fun with Language and English Club. Here, the teachers facilitated students to master English very well. In 2022/2023 academic year, Muslim Cendekia applied Kurikulum Merdeka and allocated English lesson for 4 hours per week. Fun with language for 1 hour per week and English Club for extracurricular program which is optional for the students who interested in learning English more.

Muslim Cendekia Elementary School was established in 2017. Now, this school has five grades level and has not graduated the students yet. Although Muslim Cendekia has not already graduated the students, there is always increasing numbers of the students who are interested in registering at this school. It can be seen from the increasing numbers of school enrolment. Every year, this school accepts 75 students for the 1<sup>st</sup> grader. Based on the interview, one of the reasons why some parents were interested in registering their children to Muslim Cendekia is because this school included English as a compulsory subject. Most of the parents were eager to find out a school that English is taught in lower education. Since English was not taught in kindergarten, they wanted their children to be able to master English in early ages through elementary school.

There are five English teachers in Muslim Cendekia on each grade from the  $1^{\rm st}$  until  $5^{\rm th}$  grade. The teachers obtained English Education and English Literature undergraduate degree. However, they have been teaching English for about 1-5 years in both formal and informal institution. To increase



pedagogical knowledge and competence, the teachers regularly join a training, teaching development, discussion and lesson study. This is extremely helpful to overcome the problems that might be faced across the grade. Thus, it can build relationship among the teachers to carry out some discussions about teaching methods, teaching media as well as the assessment tools.

Muslim Cendekia is an elementary school which integrated technology in school system. Nowadays, people cannot be separated with the use of technology as Zakiyuddin et al, (2022) mentioned that technology can be utilized as a tool to accomplish tasks or deal with problems. Most people can't live their daily lives without using technology. For example, teaching English in Muslim Cendekia, the teachers tend to use digital media to deliver the material. In addition, to have effective communication with the parents such as report the students' progress, announce the assessment and many more, this school uses online application called Quintal. Teachers can announce everything related to the school agenda such as assessment, daily report, and personal feedback through this application.

In Muslim Cendekia Elementary School, the teachers are also familiar with the implementation of Digital Games-Based Learning to teach vocabulary. They used some digital games such as Wordwall, Quizziz, Kahoot and Twinkl. Those teaching media totally helpful to introduce new vocabulary as well as to conduct vocabulary review and assessment. Using digital games to teach vocabulary in Muslim Cendekia Elementary School also show the students' enjoyment and excitement during the learning process since the digital games has colorful animated games as well as having amazing background music. Due to the implementation of Digital Games-Based Learning to teach vocabulary, the

teachers found that the students' have adequate vocabulary which enable them to use English as daily communication. Therefore, they can use English when they talk to their friends and their teachers for example when asking for a help, borrowing things and other daily expression. In addition, having adequate vocabulary can help students mastering listening, writing, reading and speaking skills. Because the students have better vocabulary retention, it makes them do exercise given by the teachers very well. Moreover, the students also had excellent achievement in storytelling and scrabble competition. It can be seen achievements obtained by the students from the Muslim Cendekia Elementary School as the evidence of the successful learning process. Here, it can be assumed that the teaching method is one of the factors affecting the success of achieving English mastery. As a result of the previously given factors, the researcher is interested in discovering how the teachers handles its

As mentioned above that Digital Games-Based Learning brings potential effects on Muslim Cendekia Elementary School students' English proficiency, especially in vocabulary development, the researcher intended to explore the teachers' perception toward the utilization of Digital Game-Based Learning as media to teaching vocabulary. Since there is lack study about the use of Digital Game-Based Learning to teach vocabulary in Elementaryschool EFL context in Indonesia, so that the researcher examined the perception of the Elementary school teachers on the implementation of this media in teaching vocabulary. In addition, the challenge might be encountered by the teachers during the use of Digital Games-Based Learning as teaching media and how to cope with this

instructional methods.



University of Islam Malang

issue also being discussed.

## 1.1 Research Problems

Based on the background of the study above, the researcher states the research problems as follow:

- 1. How do Muslim Cendekia Elementary School teachers implement the Digital Games-Based Learning in teaching vocabulary?
- 2. What are Muslim Cendekia Elementary school teachers' perception on integrating Digital Games-Based Learning into vocabulary teaching?
- 3. What are the challenges encountered by Muslim Cendekia Elementary school teachers in implementing Digital Games as a teaching media in vocabulary teaching?
- 4. How do Muslim Cendekia Elementary School Teachers overcome the challenges?

# 1.2 Objective of the Research

Based on the formulation of the research problem, the objective of the research can be described as follows;

- To explore the implementation of Digital Games-Based Learning in teaching vocabulary in Muslim Cendekia Elementary School.
- To investigate Muslim Cendekia Elementary school teachers' perception on the implementation of Digital Games-Based Learning to teach vocabulary.
- To discover the challenges occurred when using Digital Games-Based Learning to teach vocabulary based on Muslim Cendekia Elementary school teachers' perception and experience.



4. To explore how the way Muslim Cendekia Elementary School Teachers to overcome the challenges that they encountered during the implementation of Digital Games-Based Learning.

# 1.3 Scope and Delimitation of the Research

The purpose of this research is to explore the Elementary school teachers' perception toward the implementation of Digital Games-Based Learning to teach vocabulary in English for Young Learners (EYL) context. In addition, this research aims to discover some challenges faced by the teachers during the implementation of Digital Games-Based Learning in teaching vocabulary and how they cope with this issue. The delimitation of this study was only focus on teachers' perception. The researcher did not include students' point of view when they experienced learning activity in the classroom using digital games.

# 1.4 Significance of the Research

The researcher expects that this study can help both students and teachers in theoretically and practically to carry out interesting and enjoyable learning activity. Theoretically, the researcher hoped that this finding can help to understand how Digital Games Learning can engage students in the learning process and improve student vocabulary development.

Practically, it is expected that the result of this study can be beneficial for teachers to develop effective teaching methods that can be applied in the classroom in order to enhance students' engagement, activeness, and excitement during learning process. Then, it is hoped that this study can be beneficial for teachers to improve students' vocabulary mastery to increase their English proficiency. For students, it is also expected that by using Digital



Games-Based Learning to teach vocabulary, it makes the students become highly motivated and enjoy the learning activity through integration of education and technology.

## 1.5 Definition of Key Term

In order to avoid misperception in this study, the researcher clarifies the term used as follows:

**Digital Games-Based Learning** means a learning activity which involved the integration of technology. In this learning activity, teachers ask students to play interactive digital games that engage students such as Quizziz, Wordwall, Web-based games and Twinkl.

**Perception** means teachers' ability to understand about the implementation and the advantages of Digital Games-Based Learning to teach vocabulary in elementary school level based on their point of view and personal experience.



## **CHAPTER VI**

## CONCLUSION AND SUGGESTION

In this chapter, the conclusion on the forms of implementation of DGBL to teach vocabulary, the primary teachers' perception on the use of DGBL and the primary teachers' challenge on implementing the DGBL and how to cope with it. Also, this chapter included some suggestions both for language teachers and future researcher.

#### **6.1 Conclusion**

Based on the findings of this present study, it was found that elementary teachers implemented DGBL during the learning activity in order to review the vocabularies that have been taught. Based on their preference, they used Wordwall, Quizziz, English Room and Twinkl to review vocabulary. Then, they asked students to play the digital games individually, in pair or in a group. All of the students showed their active participation during the activity because they were eager to play as they were interested in the features of the digital games. Furthermore, the teachers showed favorable responses on the use of DGBL to teach vocabulary. They believed that teaching vocabulary using digital games are effective to be applied in elementary school EFL context. This is a promising way to make students more engaged and actively involved in the learning activity especially when learning vocabulary. They seem to be highly interactive and motivated as the digital games provide interesting visual and features. Moreover, digital games also enable students to enhance their vocabulary development and retention as they can play and learn simultaneously. On the other hands, using digital games would be challenging since there were teachers'

UNISMA UNISMA

inadequate knowledge of digital games and inaccessible application in certain lesson. In addition, technical issues such as unavailability device and unstable internet connection can be unpredictable problems during the gameplay. To overcome those challenges, teachers have a discussion forum to share each other about teaching methods as well as teaching resources. Then, to deal with technical issues, teachers change the learning activity into traditional way.

## **6.2 Suggestion**

After drawing conclusion, the researcher brought some suggestions for English teachers, future researchers and material developers.

# **6.2.1 Suggestion for English Teachers**

In this study, the researcher found various ways and types of digital games as a media to teach vocabulary. All of the teachers also showed their positive attitude and acceptance toward the implementation of DGBL. Therefore, this study is expected to bring more insight about the advantages of integrating technology and education. It is also hoped that EFL teachers can improve their knowledge about the digital games; media and application, so that they can integrate technology in language learning. The last, it is very recommended teaching media to be used in enhancing students' vocabulary development.

## **6.2.2 Suggestion for Future Researchers**

This present study found that DGBL can be advantageous both for teachers and students especially in Elementary School level. The researcher suggests to the next researchers who interested in the similar topic can conduct research in other higher level. Additionally, it is also hoped to further researchers to elaborate students' point of view about the implementation of DGBL across



level. It is expected that the result of this study is going to lead the next writers who conduct the same topic of research as the reference or comparison that might be relevant to their research.

# **6.2.3** Suggestion for Material Developers

Based on this finding, it has implication to the material developers and course designers to consider being involved in collaborative projects of digital games production to provide more application that appropriate and applicable for the teachers.





## **REFERENCES**

- Ahmed, A., A., Ampry, E. S., Komariah, A., Hassan, I., Thahir, I., Ali, M. H., Faisal, A. F., & Zafarani, P. (2022). Investigating the effect of using game-based learning on efl learners' motivation and anxiety. *Education Research International*, 2022, 1–9. https://doi.org/10.1155/2022/6503139
- Ary, D., Jacobs, L.C., Sorensen, C., Razavieh, A. (2010). *Introduction to Research in Education (8<sup>th</sup> edi.)*. Nelson Education, Ltd.
- Behnamnia, N., Kamsin, A., Ismail, M. A., & Hayati, S. A. (2022). A review of using digital game-based learning for preschoolers. *J. Comput. Educ*. https://doi.org/10.1007/s40692-022-00240-0
- Belda-Medina, J., & Calvo-Ferrer, J. R. (2022). Preservice teachers' knowledge and attitudes toward digital-game-based language learning. *Education Sciences*, 12(3), 182. https://doi.org/10.3390/educsci12030182
- Blume, C. (2020). Games people (don't) play: An analysis of pre-service EFL teachers' behaviors and beliefs regarding digital game-based language learning. *Computer Assisted Language Learning*, *33*(1–2), 109–132. https://doi.org/10.1080/09588221.2018.1552599
- Cameron, L. (2001). *Teaching languages to young learners*. Cambridge University Press.
- Chai, K. N., & Yunus, M. M. (2020). Elementary pupils' challenges and benefits offame-based learning strategies in vocabulary learning: A literature Review. *International Journal of Academic Research in Business and Social Science*. 10(10), 877-886.
- Creswell, J. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 4th ed. SAGE Publications.
- Dashtestani, R. (2022). The winding path towards implementing digital game-based learning (DGBL) in an Educational Context: the voices of preservice teachers. *Computer Assisted Language Learning*, 23(3), 70-93. http://callej.org/journal/23-3/Dashtestani2022.pdf
- Degirmenci, R. (2021). The use of quizizz in language learning and teaching from the teachers' and students' perspectives: a literature review. *Language Education and Technology (LET Journal)*, 1(1), 1-11.
- Dixon, D. H., Dixon, T., & Jordan, E. (2022). Second language (L2) gains through digital game-based language learning (DGBLL): A meta-analysis. *Language Learning & Technology*, 26(1), 1–25. http://hdl.handle.net/10125/73464
- Dzulfikri, D. (2016). Application-based crossword puzzles: players' perception and vocabulary retention. *Studies in English Language and Education*, *3*(2), 122-133.
- Elfiondri, M. F., & Yusuf, Y. Q. (2022). Workshop activity module in e-learning for maximum vocabulary exposure in an efl classroom. *Computer-Assisted Language Learning*, 23(2), 6-17. http://callej.org/journal/23-2/Elfiondri-Mustafa-Yusuf2022.pdf
- Foster, A., & Shah, M. B. (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



- Godwin-Jones, R. (2014). Games in language learning: opportunities and challenges. *Language Learning & Technology*, *18*(2), 9–19. https://eric.ed.gov/?id=EJ1034892
- Hawanti, S. (2014). Implementing Indonesia's English language teaching policy in primary schools: the role of teachers' knowledge and beliefs. *International Journal of Pedagogies and Learning*, 9(2), 162–170. https://doi.org/10.1080/18334105.2014.11082029
- Harmer, J. (2007). The Practice of English Language Teaching, Fourth Edition. Pearson Longman: Harlow.
- He, S. (2022). Review of digital games and language learning: Theory, development and implementation. *Language Learning & Technology*, 26(1), 1–4. http://hdl.handle.net/10125/73459
- Heriyawati, D. F. (2013). Authentic assessment in literal and inferential reading comprehension for university students. *Journal on English as a Foreign Language*, *3*(1), 49-52.
- Jazuly, A., Indrayani, N., & Prystiananta, N. (2019). The teaching of english in indonesian primary schools: a response to the new policy. *Linguistic*, *English Education and Art (LEEA) Journal*, *3*(1), 17–25. https://doi.org/10.31539/leea.v3i1.609
- Li, K., Peterson, M., & Wang, Q. (2022). Out-of-school language learning through digital gaming: a case study from an activity theory perspective. *Computer Assisted Language Learning*, 1–29. https://doi.org/10.1080/09588221.2022.2067181
- Li, R., Meng, Z., Tian, M., Zhang, Z., & Xiao, W. (2021). 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
- Ling, N. S., & Aziz, A. A (2022). The effectiveness of game-based learning strategies on elementary esl learners' vocabulary learning. *International Journal of Academic Research in Progressive Education and Development.* 11(2), 845 860.
- Linse, C., & Nunan, D. (2005). *Practical English Language Teaching : PELT Young Learners*. English as a second language.
- Mahayanti, N. W. S., Kusuma, I. P. I., & Wibawa, S. (2020). Digital game—based learning in efl: its effect on young learners' self-regulated learning. *The Asian ESP Journal*, 5, 5-30.
- Medina, B, J., & Ferrer, C, J. R. (2022). Preservice teachers' knowledge and attitudes toward digital-game-based language learning. *Education Sciences*, 12(3), 182.
- Miles, M.B., Huberman, A.M. & Saldana, J. (2014) *Qualitative Data Analysis: A Methods Sourcebook*. Sage, London.
- Mustofa, M & Sari A.S (2020) Video subtitle to teach listening skill of junior high school students. *J. Eng. Educ. Society.* 5:2. doi:10.21070/jees.v5i2.874
- Nufus, T. Z. (2018). Teaching English to young learners in indonesia (pros and cons). *English Language in Focus (ELIF)*, 1(1), 65–70.

- UNISMA UNISMA
- Pradini, P. A., & Adnyayanti, N. L. P. E. (2022). Teaching English vocabulary to young learners with wordwall application: an experimental study. *Journal of Educational Study*, 2(2), 187–196. https://doi.org/10.36663/joes.v2i2.351
- Rabu, S. N. A., & Talib, Z. (2017). The effects of digital game-based learning on primary school students' english vocabulary achievement and acceptance. *Innovative Teaching and Learning Journal*, *I*(1), 61–74. http://161.139.21.34/itlj/index.php/itlj/article/view/11
- Raghbir, R. S. A. B. S., & Yi, C. S. (2022). Connecting the dots: acquiring language via game-related tasks in online games. *Computer Assisted Language Learning*, 23(4), 187-204. http://callej.org/journal/23-4/Ng-Raghbir-Yi2022.pdf
- Rasti-Behbahani, A., & Shahbazi, M. (2020). Investigating the effectiveness of a digital game-based task on the acquisition of word knowledge. *Computer Assisted Language Learning*, *35*(8), 1920–1945. https://doi.org/10.1080/09588221.2020.1846567
- Richards, J. C., & Renandya, W. A. (2008). *Methodology in Language Teaching: An Anthology of Current Practice*. http://ci.nii.ac.jp/ncid/BA56703971
- Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching*. Cambridge University Press.
- Rich, S. (Ed.). (2014). *International perspectives on teaching English to young learners*. Springer.
- Robbins, S. P., & Judge, T. (2022). Organizational Behavior. Pearson.
- Shabaneh, Y., & Farrah, M. (2019). The effect of games on vocabulary retention. Indonesian Journal of Learning and Instruction, 2(01). https://doi.org/10.25134/ijli.v2i01.1687
- Tao, Y., & Zou, B. (2021). Students' perceptions of the use of Kahoot! in English as a foreign language classroom learning context. *Computer Assisted Language Learning*, 1–20. https://doi.org/10.1080/09588221.2021.2011323
- Thornbury, S. (2002). How to Teach Vocabulary. London: Longman.
- Tsai, Y., & 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
- Xu, Z., Chen, Z., Eutsler, L., Geng, Z., & Kogut, A. (2019). A scoping review of digital game-based technology on English language learning. *Educational Technology Research and Development*, 68(3), 877–904. https://doi.org/10.1007/s11423-019-09702-2
- Zakiyuddin, Z., Mustofa, M., & Yunus, M. (2022). The effect of using computer-assisted reading with inquiry-based learning on student reading comprehension. *English Education Journal*, *13*(1), 122-139.
- Zou, D., Huang, Y., & Xie, H. (2021). 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