



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT



[www.hrmars.com](http://www.hrmars.com)

ISSN: 2226-6348

## Pupils' Perception on Online Games for ESL Vocabulary Learning Among Primary School Pupils

Izzati Esa, Harwati Hashim, Muhamad Fizri Jamal

To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v10-i3/8997>

DOI:10.6007/IJARPED/v10-i3/8997

**Received:** 15 June 2021, **Revised:** 20 July 2021, **Accepted:** 07 August 2021

**Published Online:** 18 August 2021

**In-Text Citation:** (Esa et al., 2021)

**To Cite this Article:** Esa, I., Hashim, H., & Jamal, M. F. (2021). Pupils' Perception on Online Games for ESL Vocabulary Learning Among Primary School Pupils. *International Journal of Academic Research in Progressive Education and Development*, 10(3), 254–264.

**Copyright:** © 2021 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licences/by/4.0/legalcode>

Vol. 10(3) 2021, Pg. 254 - 264

<http://hrmars.com/index.php/pages/detail/IJARPED>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN PROGRESSIVE EDUCATION & DEVELOPMENT



[www.hrmars.com](http://www.hrmars.com)

ISSN: 2226-6348

## Pupils' Perception on Online Games for ESL Vocabulary Learning Among Primary School Pupils

Izzati Esa<sup>1,2</sup>

<sup>1</sup>Faculty of Education, Universiti Kebangsaan Malaysia, Malaysia, <sup>2</sup>Sekolah Kebangsaan Seri Binjai, Batu Pahat, Malaysia  
Email: izzatiesa@gmail.com

Harwati Hashim

Faculty of Education, Universiti Kebangsaan Malaysia, Malaysia  
Email: harwati@ukm.edu.my

Muhamad Fizri Jamal<sup>1,2</sup>

<sup>1</sup>Faculty of Education, Universiti Kebangsaan Malaysia, Malaysia, <sup>2</sup>Sekolah Kebangsaan Parit Lapis, Batu Pahat, Malaysia  
Email: fizrijamal@gmail.com

### Abstract

Pupils are exposed to technology ever since early age. Online games are one of the widely used leisure activities yet an amusing and exciting medium of learning to learners especially among primary school pupils. It is undeniable that learning second language is challenging. In learning the language, vocabulary learning is important as it is part of the language. As a young learner, pupil still need to apprehend and views English as an important language. Teachers need to persuade the pupils in learning second language but one of the most crucial problems is that pupils are lack of vocabulary. So online games expectantly will help pupils to learn vocabulary unconditionally. This paper discusses pupils' perception on online games for ESL vocabulary learning. The aim of this paper is to review the relationship between learning vocabulary through online games in ESL language classes. Significantly, pupils will be able to come across new words through games with pleasure. Future research can look into any potential gap that might exist to learn ESL vocabulary successfully.

**Keywords:** Online Games, ESL Vocabulary Learning, Technology Acceptance Model, Motivation

### Introduction

The Educational Transformation Plan 2013-2025 aimed to provide high quality education to all students. Education gives a great impact on individual's life quality as it is very important

(Idris et al., 2012). It is essential to prepare the pupils to face the challenges and to improve the dynamics of learning process in 21st century. They will be able to absorb learning easily without concern by learning in fun way. In Malaysia although Bahasa Malaysia is the official language, English plays a vibrant role in binding together a multicultural nation. The importance of the English language as a global lingua franca has always been a major factor in the learning mainly as a way to gain information (Tivaraju et al., 2017).

Yunus et al (2015, 184) stated that “vocabulary acquisition in a foreign language is a problematic and time-consuming task”. Acquiring words from a different language from our mother tongue is quite challenging especially for young learners. In the classroom, it is hard for the teacher to get pupils to remember the words on the spot. Usually, pupils are capable to memorize the words taught during the lesson but forget them all over again. The traditional way for instance, by listing them down or even by showing pictures on flash cards are not always effective. Therefore, the idea of using games in language learning classroom is put forward. By integrating those in the lesson might help learner to remember the words better due to the fact that children love games.

Vocabulary is the core in the process of teaching and learning a language. In order to enhance language comprehension and production abilities, effective and appropriate strategies are needed to be imply to pupils. In traditional ways to teach vocabulary, teachers will be the person who provide the main source of vocabulary information other than dictionaries (Amal Shehadeh AlNatour & Dima Hijazi, 2018). Pupils do not involve in the process of learning as they are expected to memorize as immediate ways to practice vocabulary. Costica (2015) asserted that modern ways in teaching vocabulary are verified to be more appropriate and motivating rather than the traditional method. Muhanna (2012) claimed that learners’ attention could be captured more efficiently through game-like format than conventional media such as text books.

The layout for games for language learners has changed drastically over the years. There are various selections that integrate the use of technology and interactivity. Teachers need to integrate their teaching gradually with numerous games to create fun and engaging learning environment for learners (Milczynski, 2011). According to Celements and Sarama (2003), the use of suitable technological resources can be beneficial for learners (Ahmadi, 2018). The use of online games is an essential gear to facilitate learners’ learning and to support learning process. Games are the one of the interesting types because learning English through games is to urge learners to have a good attitude towards the instruction. Learners will be able to play and learn and they will not feel that they are forced to learn in conformity (Kunnu et al., 2016). They will be easily engaged in learning while playing.

Getting familiar with new vocabulary is not just important but crucial in a foreign language environment. Improving vocabulary not only promotes positive impacts directly but also building up language proficiency entirely. Amuse amount of vocabulary makes listening, speaking and writing skills to accomplish easily. Acquiring vocabulary is the centre tasks for second language learners and it is essential for communicative competence. Therefore, the first step in acquiring any language remains the process of learning the words (Alghamdi, 2018). Learners need a good knowledge if they tend to acquire the vocabulary. Learners should gain efficient knowledge of vocabulary in order to be able to determine the meaning of new words (Askar, 2016). It is also noted that majority of learners have vocabulary sizes falling below average which often lead to difficulties in expressing ideas and overall poor academic learning (Mutalib et al., 2014).

Thus, this research aims to identify pupils' perception on using online games in learning ESL vocabulary among primary school pupils. This research is crucial to several stakeholders. It is valuable and significant to teachers, pupils, parents and future researchers. Teacher will have another alternate way to help pupils learning vocabulary through online games. In the classroom, teacher needs to be creative as well. They need to prepare and provide engaging activities for pupils. Through online games not only the lesson will be fun, teacher will be able to encourage pupils to take part and they will learn easily. Hence in order to improve language learning, teacher might use games in teaching.

Pupils will enrich their vocabulary while having fun. Through games, pupils will be able to come across new words and instore new collection of vocabulary. Wide collection of vocabulary helps pupils to understand phrases, sentences and information. Besides when they are able to understand, they will be able to share and explain to another person as well.

### **Constructivist (Active learning theory)**

It is a basic principle of constructivist theory that pupils are learning when they have gained experience from what they have learnt (Suhendi & Purwarno, 2018). Learning is an active process. Active learning is implicit to imply pupils' engagement in a meaningful learning activity (Knight, 2015). It will benefit in pupils' learning. All activities in learning, pupils must be able to collect and dig new information and process it according to their necessities (Olusegun, 2015). Constructivists highlight that individuals build new meanings upon previous meanings that they have attained through life experiences. Constructivism is widely touted as an approach to view pupils' level of understanding (Mvududu & Thiel-Burgess, 2012). ESL understanding and higher-level thinking will increase when pupils practice and involve in the learning themselves. According to Picciano (2017), John Dewey perceive learning as a series of practical social experiences. Pupils learn by doing, collaborating and reflecting with others. Using online games, they have the aids and materials. Pupils can think logically and the materials can be taught effectively by linking to their prior knowledge that they had learn earlier. Pupils construct and build their own understanding of the learning. Teachers should allow the pupils to put their knowledge into practice by considering pupils' prior knowledge with the guideline of Constructivism as an educational theory. Constructivism theory highlights on pupil's emphasis. Thru online games, pupils are actively develop their knowledge and be responsible for their learning outcomes (Suhendi & Purwarno, 2018).

While accomplishing the games, ESL language knowledge and skills are constructed (Yoong et al., 2019). Pupils are going through guided learning and being familiar with the knowledge as they have to create learning from their experience. Pupils experience learning situation through the knowledge and the learning process (Ohn, 2018). Pupils can access vocabulary words any time through online games instead of been given vocabulary list. While playing games, pupils are encouraged to work with problem solving in what they are engaging in.

### **Affective Filter Hypothesis**

Steven Krashen had established semantic and comprehensive theory of Second Language Acquisition. Affective Filter Hypothesis is one of five main hypotheses in Krashen's (1985) Monitor Model. The model consists of five main hypothesis which are the Acquisition-Learning Distinction, Natural Order Hypothesis, Monitor Hypothesis, Input Hypothesis and Affective Filter Hypothesis. Krashen (1982) states that "second language acquisition is a

subconscious process and the features of L2 acquire are simply the result of them being exposed to it" (Nath et al., 2017).

Affective filter is like a mental block which can control the access of comprehensible input for acquisition (Liu, 2015). It is an invisible psychological filter that either can facilitate or hinder language learning. According to Min (2016) "learners' acquisition of comprehensive input is affected by affective filter including motivation, self-confidence and anxiety". When the filter is high learners will feel reluctant, disinterested, tense or are in a negative environment. Hence, the effort to give input will be pointless. When the filter is low learners are in a positive environment, more relaxed and the output will be more understandable. In order to lower the filter, motivation is the best way (Abukhattala, 2013). Low filters will facilitate and increased learning as more input is allowed to pass through while high filters will decrease the learning process.

Pupil's motivation is important to determine whether the activity is successful or not. If they have motivation, they will ensure to do the task successfully. For young generation nowadays who had widely exposed to technology, technology application in teaching and learning can boost interest and motivation to learn (Pazilah et al., 2019). In learning ESL, it is important for the pupils to have right motivation. Motivation to learn happen when a person wants to learn the language because they want to do so. He or she gains satisfaction from their experienced on the task. When the pupils are lack of motivation, they might face some difficulties in learning. Without desire to learn, it is very difficult for learners to gain effective learning (Al Othman & Shuqair, 2013). Online games will lower affective filter as games provide more convenient and attractive learning process (Masrop et al., 2019). Games help pupils to have fun while learning as it helps to ease stress. Low affective filter will promote more successful vocabulary acquisition as it is welcoming to keep learning.

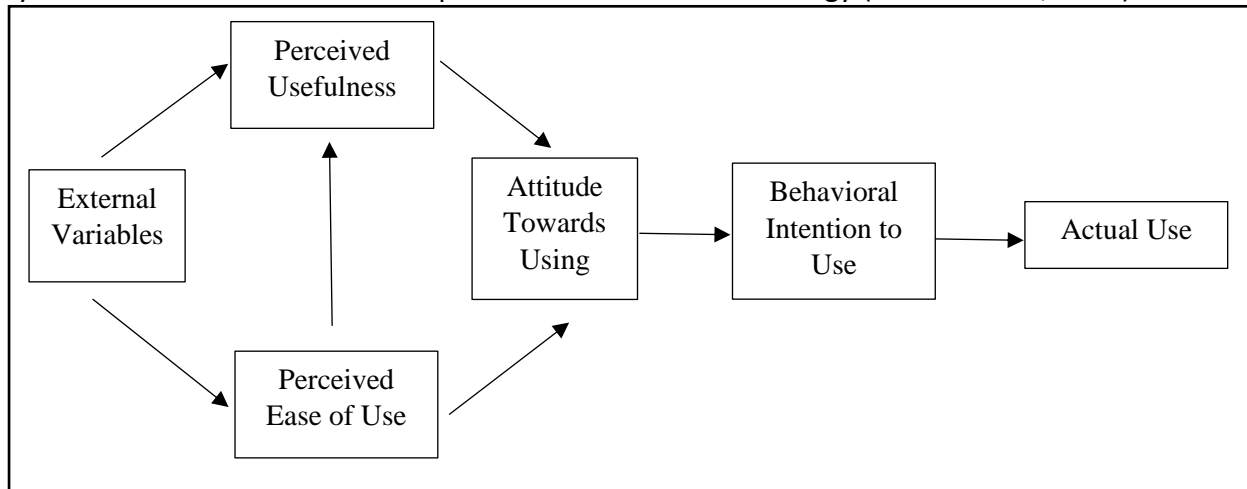
### **Technology Acceptance Model (TAM)**

The use of technology expectantly will benefit ESL learners especially primary school pupils in understanding and retaining their vocabulary. Technology Acceptance Model (TAM) proposed by Davis in 1986 explains user's behaviour towards technology. According to TAM, the use of a technology is influenced directly or indirectly by the user's behavioural intentions, attitude, perceived usefulness of the system and perceived ease of the system (Ibrahim, 2018). It was designed to measure the adoption of new technology based on perceive usefulness, perceive ease of use, attitudes towards using and behavioural intention of use. Perceive ease of use will influence perceive usefulness. Perceive ease of use and perceive usefulness will create either positive or negative attitudes. Behaviour attention happened when the learner thinks technology is easy to use. Hence, they tend to practice the system when they feel it is convenient.

Moakofhi et al (2019) had conducted a survey exploring students' acceptance of e-learning using TAM and their findings shows that pupils who find e-learning system as easy to use may find the system useful. According to Davis (1993), Nair (2011) and Saade & Bahli (2005), a person is apparently to obtain and utilize new technology if he or she perceives the technology as easy to use (Deslonde & Becerra, 2018). In ESL classroom, pupils who find online games are relatively easy functions will get benefits. Perceive usefulness will be a positive influence on the pupils' attitude towards ESL vocabulary learning through online games and their behavioural intention. Pupils will learn and remember new words without difficulty as games provide relaxation and it is pleasurable. Through online games, it is hoped to optimise



the ESL learning among the pupils. Most of the teachers and educators believe that the dynamics of their classroom transpose with the use of technology (Hashim et al., 2016).



Technology Acceptance Model

### The Important of Vocabulary in English Learning

Vocabulary is the core of all languages (Ashraf et al., 2014). Askar (2016) states that vocabulary knowledge plays a vital role in learning English as a Second Language. Without vocabulary, nothing can be voiced. It is essential to recall and know to use the vocabulary of second language if we want to learn the target language. Learning vocabulary is one of the fundamental issues in all phases of language learning and teaching. It can be regarded as the main for any successful communication to take place (Jalali & Dousti, 2012). Recent research indicates that ESL learners depend heavily on vocabulary knowledge and the lack of vocabulary is the prime interference for them to overcome in conquering the language (Sabit & Hadi, 2017).

Acquiring and mastering new vocabulary is challenging and can be very difficult for ESL learners (Alghamdi, 2018). Pupils classify learning vocabulary as mind-numbing and the process is difficult for the reason that learning a foreign word takes gradual action. Learning a second language requires mindful work and continual repetition (Baskin et al., 2017). It is because they have to memorize unfamiliar words and spelling as well. With limited collection of words, it will be difficult to convey meanings and express thoughts. The communication will poorly be understood. Pupils will encounter difficulties in language learning when they have limited vocabulary knowledge (Saengpakdeejit, 2014). Research has shown that the lack of knowledge is the foremost and the largest hurdle for ESL learners to overcome. Thus, the ESL learners depends on a great amount of vocabulary knowledge to function effectively in the four language skills which are listening, speaking, reading and writing (Wang & Yamat, 2019).

In a primary level context, it is important for pupils to learn English vocabulary not only to understand instruction and to respond but to absorb new knowledge that beneficial for imminent use. It is undeniable that in mastering the language, English vocabulary is a key. It is indispensable for pupils to put an effort in learning vocabulary (Astika, 2016). ESL learners should be alert on the importance of English vocabulary since primary level and need to surge vocabulary knowledge as earlier as possible. In the process of learning English, vocabulary plays an essential part to connect the four language skills together (Aslanabadi & Rasouli,

2013). Recently, the importance of vocabulary learning is being spotted widely by language teachers and applied linguists and they are scrutinising ways of upholding it well. The interest to study can be increased if the pupils possess a wide range of vocabulary because they can comprehend the input better.

### **The Use of Online Games for ESL Learning**

Rather than the talk-and-chalk method, numerous teachers choose a more stimulating way in teaching to ensure pupils attain a maximized learning experience (Hashim et al., 2019). Learning activities should be valuable to pupils. Game is an activity to have pleasurable and provides gratifying learning experience. Education through games has widely been acknowledged to engage and motivate learners when it is used well (Lee & Hammer, 2011). According to Roy (2019) cited in Pazilah et al (2019), in the process of learning ESL, the implementation of several types of technology equipment is needed for a sense of freedom, motivation and encouragement. The pupils' interest will increase if the games are fun, relaxing, motivating and confidence boosting (Ashraf et al., 2014). As pupils normally love to play games, they will definitely feel comfortable and not forced to learn. By willingly playing games can lower pupils' anxiety. That will make the acquisition of input more likely because pupils are highly motivated and amused. Pupils play games in an entertaining learning environment and the learning process becomes interesting and enjoyable (Saha & Singh cited in Shabaneh & Farrah, 2019).

Games can be tools that will provide many advantages for teachers and the pupils in learning ESL as well. As games are enjoyable, it attracts ESL learners to learn the language. Pupils are able to have experiment, discover new interesting information and interact with their environment. Some experts have also figured out characteristics of games that make ESL learning more effectively. According to Shabaneh & Farrah (2019), online games exploit learners' motivation and interaction as they discover opportunities to practice language in meaningful contexts.

### **Online games for ESL vocabulary learning**

Pupils have difficulties in translating words especially those who have a limited range of vocabulary. A diversity of teaching and learning process will help pupils feel better and teachers need to produce a conducive situation in teaching and learning (Hidayat, 2016). Primary pupils are more creative and understand language easily. They start making connections effectively when they are exposed to a language input for a period of time (Shabaneh & Farrah, 2019). Therefore, teachers can provide information in a variety of modest yet stimulating and informative ways. Through technology, pupils have unlimited access to facilitate language learning (Hashim et al., 2016). The use of online games has been proven to be beneficial in vocabulary because they boost students' ability to memorize words, embolden student's interaction, develop their communicative skills and cultivate students' motivation (Derakhshan & Khatir, 2015). Rahamat et al (2012) cited in (Dedo & Hashim, 2019) stated that the use of ICT not only engaging and active but as tools and strengthen the relevance of education as well. Pupils will absorb vocabulary effortlessly without realizing while focusing in playing online games. According to Hansen (1994) cited in Aslanabadi & Rasouli (2013), through online games will give shy pupils more chance to express their thought and feelings as they are vastly entertaining.

It is advantageous and effective in learning vocabulary. When pupils involved in the process of learning properly, they can learn more. According to Amal Shehadeh AlNatour & Dima Hijazi (2018), learning in a relaxing environment will increase pupils' motivation and self-confidence. Since games bring amusement for the pupils, they may acquire new words naturally in a normal way. They are motivating because they usually involve friendly competition.

### **Conclusion**

It is important for the pupils to learn vocabulary effectively so that ESL will be more interesting to them. Great attention needs to be taken in several issues in game design for different learning styles and pupils by means of pupils are from different backgrounds with various needs and expectations (Di Carlo et al., 2018). Teachers need ample knowledge and clear understanding on how to conduct online games to pupils effectively so that the learning will take place smoothly. Online games could be a method for vocabulary learning strategy especially English as second language. Teachers and parents are needed to guide the pupils so that they are able to learn better ways in motivating the pupils. It is important to create awareness among pupils and teachers on the benefits of the use of online games to learn vocabulary. Pupils are able to encounter new words easily and that help teachers in explaining the words as pupils have encounter the words earlier. There is limited research conducted on perceptions among primary school pupils. Therefore, more research should be led among primary school pupils' perception in learning ESL vocabulary through online games and future research can look into any potential gap that might exist to learn ESL vocabulary successfully, using a qualitative method with a large-scale survey study. That could help to unveil pupils' perceptions on online games for ESL vocabulary learning among primary school pupils in order to get precise result with good statistical significance.

The study of the relationship between online games and vocabulary achievement could offer explanatory accounts and consequently yield more useful pedagogical implications. According to Najar (2014), online games have verified to have plusses and value in learning vocabulary in innumerable ways. Online games boost motivation and stimulate pupils' opportunity to express opinion and feelings. Pupils always excited and immerse in online games as it is interesting and comprehensible. According to Ignacio & Orso, (2016), pupils' concentrates and think intensively while learning and playing games at the same time. The acquisition of the vocabulary inputs is enhancing unconsciously. Pupils are always eager to play games while learning when they successfully operating the games. Vasileiadou and Makrina (2017) confirmed that games are motivating and it is an effective resource. The resource will assist the pupils in improving ESL vocabulary and keep them interested with full of excitement (Vasileiadou & Makrina, 2017).

Teaching and learning can take place at anywhere and in anytime. Online games are flexible and learning can happen not only inside but outside of the classroom. Real world context been implemented in online games so that pupils can gasp vocabulary wherever easily. Teachers can always observe pupils' achievement although they are not in the same location. Pupils fill their leisure free time in playing beneficial games while installing vocabulary indirectly into their mind. Normally, online games' layout and strategy will attract pupils more rather than memorizing words by words with plenty of boring exercises on paper.



They can choose anytime that they are comfortable with. When the pupils are ready to play, means that they are ready to absorb new vocabulary.

## References

- Abukhattala, I. (2013). Krashen's five proposals on language learning: Are they valid in Libyan EFL classes. *English Language Teaching*, 6(1), 128–131. <https://doi.org/10.5539/elt.v6n1p128>
- Al Othman, F. H. M., & Shuqair, K. M. (2013). The Impact of Motivation on English Language Learning in the Gulf States. *International Journal of Higher Education*, 2(4), 11–15. <https://doi.org/10.5430/ijhe.v2n4p123>
- Alghamdi, H. H. (2018). Exploring Second Language Vocabulary Learning in ESL Classes. *English Language Teaching*, 12(1), 78. <https://doi.org/10.5539/elt.v12n1p78>
- Ashraf, H., Motlagh, F. G., & Salami, M. (2014). The Impact of Online Games on Learning English Vocabulary by Iranian (Low-intermediate) EFL Learners. *Procedia - Social and Behavioral Sciences*, 98, 286–291. <https://doi.org/10.1016/j.sbspro.2014.03.418>
- Aslanabadi, H., & Rasouli, G. (2013). The effect of games on improvement of Iranian EFL vocabulary knowledge in kindergartens. *International Review of Social Sciences and Humanities*, 6(1), 186–195.
- Astika, I. G. (2016). Vocabulary Learning Strategies of Secondary School Students. *IJOLTL: Indonesian Journal of Language Teaching and Linguistics*, 1(1), 1. <https://doi.org/10.30957/ijolti.v1i1.1>
- Baskin, S., Iscan, A., Karagoz, B., & Birol, G. (2017). The Use of Vocabulary Learning Strategies in Teaching Turkish as a Second Language. *Journal of Education and Practice*, 8(9), 126–134. <http://ezproxy.lib.uconn.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1138831&site=ehost-live>
- Dedo, F. S., & Hashim, H. (2019). Interactive ICT Language Games in Encouraging Active Learning among the Suburban ESL Learners. *International Journal of Academic Research in Business and Social Sciences*, 9(12), 640–650. <https://doi.org/10.6007/IJARBS/v9-i12/6764>
- Derakhshan, A., & Khatir, E. D. (2015). Journal of Applied Linguistics and Language Research. *Journal of Applied Linguistics and Language Research*, 2(3), 39–47. [http://jallr.com/index.php/JALLR/article/view/40/pdf\\_38](http://jallr.com/index.php/JALLR/article/view/40/pdf_38)
- Deslonde, V., & Becerra, M. (2018). The Technology Acceptance Model (TAM): Exploring School Counselors' Acceptance and Use of Naviance. *The Professional Counselor*, 8(4), 369–382. <https://doi.org/10.15241/vd.8.4.369>
- Di Carlo, S., Kayaalti, M., Serafin, M., Adeleye, J. O., Yoong, Y. Y., Kaur, S., Keat, P. H., Askar, W. A., Tivaraju, J., Md Yunus, M., Badusah, J., Ahmadi, M. R., Shabaneh, Y., Farrah, M., Amal Shehadeh AlNatour, Dima Hijazi, Sigurðardóttir, S. D., Tunchalearnpanih, P., Lui, S., ... Benoit, J. M. (2018). A Literature Review on the Impact of Online Games in Learning Vocabulary. *Procedia - Social and Behavioral Sciences*, 9(2), 1–14. <https://doi.org/10.4304/tpis.2.4.843-849>
- Hashim, H., Rafiqah M. Rafiq, K., & Yunus, M. (2019). Improving ESL Learners' Grammar with Gamified-Learning. *Arab World English Journal*, 5, 41–50. <https://doi.org/10.24093/awej/call5.4>
- Hashim, H., Yunus, M. M., & Embi, M. A. (2016). Pre-University English as Second Language

- (ESL) Learners' Attitude towards Mobile Learning. *Creative Education*, 07(08), 1147–1153. <https://doi.org/10.4236/ce.2016.78119>
- Hidayat, N. (2016). Improving Students' Vocabulary Achievement through Word Game. *Journal of English Educators Society*, 1(2), 95. <https://doi.org/10.21070/jees.v1i2.446>
- Ibrahim, T. A. (2018). The Role of Technology Acceptance Model in Explaining University Academics' Acceptance and Behavioural Intention to Use Technology in Education. *KnE Social Sciences*, 3(6), 1162. <https://doi.org/10.18502/kss.v3i6.2443>
- Idris, F., Hassan, Z., Ya'acob, A., Gill, S. K., & Awal, N. A. M. (2012). The Role of Education in Shaping Youth's National Identity. *Procedia - Social and Behavioral Sciences*, 59, 443–450. <https://doi.org/10.1016/j.sbspro.2012.09.299>
- Ignacio, J., & Orso, D. (2016). *No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析*Title. 12, 76–83.
- Jalali, S., & Dousti, M. (2012). Vocabulary and grammar gain through computer educational games. *GEMA Online Journal of Language Studies*, 12(4), 1077–1088.
- Knight, V. (2015). Playing Games: A Case Study in Active Learning Applied to Game Theory. *MSOR Connections*, 14(1), 28. <https://doi.org/10.21100/msor.v14i1.254>
- Kunnu, W., Uiphanit, T., & Sukwises, A. (2016). The Development of Vocabulary Memorization by Using Games. *International Journal of Social Science and Humanity*, 6(6), 419–422. <https://doi.org/10.7763/ijssh.2016.v6.683>
- Lee, J. J. C. U., & Hammer, J. C. U. (2011). Gamification in Education: What, How, Why Bother? *Academic Exchange Quarterly*, 15(2), 1–5. <http://www.mendeley.com/research/gamification-education-bother-2/>
- Liu, D. (2015). A Critical Review of Krashen's Input Hypothesis: Three Major Arguments. *Journal of Education and Human Development*, 4(4), 139–146. <https://doi.org/10.15640/jehd.v4n4a16>
- Masrop, N. A. M., Ishak, H., Zainuddin, G., Ramlan, S. R., Sahrir, M. S., & Hashim, H. (2019). Digital Games Based Language Learning for Arabic Literacy Remedial. *Creative Education*, 10(12), 3213–3222. <https://doi.org/10.4236/ce.2019.1012245>
- Min, X. U. (2016). *The Application of Input Hypothesis and Affective Filter Hypothesis in Colleges English Listening Teaching*. *Etmhs*, 82–86.
- Moakofhi, M. K., Phiri, T. V., Leteane, O., & Bangomwa, E. (2019). Using Technology Acceptance Model to Predict Lecturers' Acceptance of Moodle: Case of Botswana University of Agriculture and Natural Resources. *Literacy Information and Computer Education Journal*, 10(1), 3103–3113. <https://doi.org/10.20533/licej.2040.2589.2019.0407>
- Mutalib, A. H., binti A., Kadir, R., binti A., Robani, R., binti, & Majid, F. A. (2014). Vocabulary Learning Strategies among Malaysian TEVT Students in German-Malaysian Institute (GMI). *Procedia - Social and Behavioral Sciences*, 123, 361–368. <https://doi.org/10.1016/j.sbspro.2014.01.1434>
- Mvududu, N. H., & Thiel-Burgess, J. (2012). Constructivism in Practice: The Case for English Language Learners. *International Journal of Education*, 4(3). <https://doi.org/10.5296/ije.v4i3.2223>
- Najar, A. A. M. M. Al. (2014). The Effect of Using Word Games on Primary Stage Students Achievement in English Language Vocabulary in Jordan. *American International Journal of Contemporary Research*, 4(9), 1–14.
- Nath, P. R., Mohamad, M., & Yamat, H. (2017). *The Effects of Movies on the Affective Filter*

- and English Acquisition of Low-Achieving English Learners*. 1357–1378.  
<https://doi.org/10.4236/ce.2017.88096>
- Ohn, M. H. (2018). Gamified Online Active Learning Theory. *2018 IEEE International Conference on Artificial Intelligence in Engineering and Technology (IICAJET)*, 1–4.
- Olusegun, S. (2015). Constructivism Learning Theory: A Paradigm for Teaching and Learning. *IOSR Journal of Research & Method in Education Ver. I*, 5(6), 2320–7388.  
<https://doi.org/10.9790/7388-05616670>
- Pazilah, F. N. P., Hashim, H., & Yunus, M. M. (2019). Using Technology in ESL Classroom: Highlights and Challenges. *Creative Education*, 10(12), 3205–3212.  
<https://doi.org/10.4236/ce.2019.1012244>
- Picciano, A. G. (2017). Theories and frameworks for online education: Seeking an integrated model. *Online Learning Journal*, 21(3), 166–190.  
<https://doi.org/10.24059/olj.v21i3.1225>
- Sabit, A., & Hadi, A. (2017). Significance of Vocabulary in Achieving Efficient Learning. *American Scientific Research Journal for Engineering, Technology and Sciences (ASRJETS)*, 29(1), 271–285.
- Saengpakdeejit, R. (2014). *Awareness of Vocabulary Learning Strategies among EFL Students in Khon Kaen University*. 4(6), 1101–1108. <https://doi.org/10.4304/tpls.4.6.1101-1108>
- 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>
- Suhendi, A. P. (2018). Constructivist Learning Theory: The Contribution to Foreign Language Learning and Teaching. *KnE Social Sciences*, 3(4), 87.  
<https://doi.org/10.18502/kss.v3i4.1921>
- Vasileiadou, I., & Makrina, Z. (2017). Using Online Computer Games in the ELT Classroom: A Case Study. *English Language Teaching*, 10(12), 134.  
<https://doi.org/10.5539/elt.v10n12p134>
- Wang, F., & Yamat, H. (2019). Identifying English vocabulary levels of Malaysia year 5 primary school students. *International Journal of Academic Research in Business and Social Sciences*, 9(12), 62–76. <https://doi.org/10.6007/IJARBSS/v9-i12/6669>
- Yoong, Y. Y., Kaur, S., & Keat, P. H. (2019). Constructivist Learning, Vocabulary Learning Strategies and Motivational Theories for English Vocabulary Acquisition Tool Using Cloud Computing. *International Journal of Academic Research in Business and Social Sciences*, 9(13). <https://doi.org/10.6007/ijarbss/v9-i13/6485>
- Yunus, M. M., Salehi, H., & Amini, M. (2015). Impact of Using CALL on Iranian EFL Learners' Vocabulary Knowledge. *English Language Teaching*, 9(1), 173.  
<https://doi.org/10.5539/elt.v9n1p173>