

# STUDENT'S GAMING EXPERIENCE IN MASTERING VOCABULARY

**Luqman Fariz<sup>1</sup>, Maman Suryaman<sup>2</sup>**

<sup>1,2</sup> University of Singaperbangsa Karawang

<sup>1</sup> 1810631060150@student.unsika.ac.id, <sup>2</sup> maman.suryaman@fkip.unsika.ac.id

## Abstract

Technological advances provide vast opportunities for second language learners to access various materials and methods to learn languages. In Indonesia, the 4.0 revolution creates numerous opportunities for educational innovation, especially in learning English as a foreign language (EFL). This study aims to reveal how a student's gaming experience can help him in mastering English vocabulary. The study used a Narrative Inquiry design to explore student's experience in playing video games that provide an alternative way of acquiring English vocabulary. Semi-structured interviews were used to explore student's learning experiences. Based on the thematic analysis, qualitative data showed that the student's learning experience has several positive impacts on the student's vocabulary acquisition. In addition, this study also revealed that the Role-Playing Game (RPG) and Story Rich genres greatly influenced the student's vocabulary acquisition.

**Keywords:** Gaming Experience, Vocabulary Mastery, EFL Student, Narrative Inquiry

## INTRODUCTION

In recent years, digital games have shown the potentials in enhancing students' vocabulary learning. Most studies in the available digital game-based vocabulary learning literature report positive effects of the digital game-based vocabulary learning tasks on both general and field-specific vocabulary learning. Those studies tend to discuss that the digital game-based vocabulary learning method could be advantageous over traditional methods that tend to focus on textbooks. There are numerous terms that describe video games as a media for assisting students in learning a language. Digital game-based learning (DGBL) is one of the most common terms. Digital game-based learning (DGBL), according to Coffey (2009), is an instructional method that integrates educational materials or learning principles into video games to engage learners. Digital game-based learning has the potential to engage and motivate students while still providing personalized learning experiences, long-term memory, and practical experience (Deubel, 2006 as cited in Coffey, 2009).

All students, teachers, materials writers, and researchers agree that vocabulary acquisition is a critical component in mastering a second or third language (Vahdat & Behbahani, 2013). Vocabulary mastery determines a person's communication skills. Difficulty in learning vocabulary often occurs in the case of learning foreign languages. Some of the factors that become problems in learning vocabularies are differences in spoken and written form, how to write and spell, difficulties in choosing the appropriate meaning of the words, and idiomatic expression (Rohmatillah, 2014). Moreover, the use of traditional teaching methods to teach English is also one of the factors that cause students to feel less interested in learning English (Marcellino, 2015). Therefore, an innovative method for teaching and learning vocabulary is required to overcome the complexity of vocabulary acquisition.

Learning English vocabulary is not an easy process. It requires motivation and a suitable method to be able to master vocabulary effectively. However, an EFL student has a unique way of learning vocabulary effectively when he is still a student in one of the senior high schools in Indonesia. To enrich his vocabulary acquisition, the student learns vocabulary through English-based video games. The researcher uses the narrative inquiry research method to explore how student's gaming experiences could assist him in mastering vocabulary.

Vocabulary is one of the essential aspects for language learners to learn any language. Most people acquire vocabulary accidentally through indirect exposure to words at school and home, either through listening or reading specific content. Hornby & Cowie (1995:1331) defined vocabulary as the number of words in a language; all the words recognized to a person or used in a particular book, subject, and so on; and a list of words with their meanings, particularly one that accompanies a book. Richards & Renandya (2002:255) viewed vocabulary as a core aspect of language proficiency that serves as the framework for how well learners speak, listen, read, and write. Nation (2011), as cited in Alqahtani (2015), argued that learning vocabulary items seem to be essential for all language skills in English as a second language (ESL) and English as a foreign language (EFL).

People cannot communicate effectively or express their ideas in written or spoken form unless they master the vocabulary. Kurniawati (2012) argued that vocabulary enrichment allows a person to listen, speak, write, and read more confidently and effectively. Rahmawati (2012) argued that vocabulary has evolved into one of the language aspects that influences macro skills. In other words, a person with rich vocabulary mastery will have a greater chance to develop their macro skills effectively. Enrichment of vocabulary also enables a person to comprehend foreign languages they learn. Language learners must understand the words they hear or read in a foreign language to expand their vocabulary. They should develop their vocabulary mastery to communicate their thoughts in the language learning process, whether through the spoken or written form (Kurniawati, 2012).

Many studies in the past have shown that video games can also be excellent language learning tools. They provide some benefits at the same time, such as engaging conversation, a variety of grammar structures, new words, stress reduction, and the opportunity to make new friends. Games promote an environment in which education is primarily learner-centered, with a high potential of socialization when well-organized, and through stimulating a person's desire to win and compete (Uzun, 2009). While digital game-based learning seems to provide some advantages and can be fun for students, it also has some drawbacks. For instance, according to Coffey (2009), the goals of games might not always match up with the learning goals of the classroom. According to Deubel (2006), teachers must consider how the game's features may influence the students' cognitive and physiological development. In addition, Deubel also mentioned that teachers should also evaluate whether the game's content is suitable for specific age groups.

For an EFL learner, learning English does not have to involve formal education. In some situations, learning English can also be done independently without a formal education. There are many ways to learn English independently; one of them is learning English through a hobby. Rafidiyah et al., (2019) mentioned the three reasons why video game-based learning can be an effective way of learning English:

1. Video game graphics have recently become much more realistic, which aids immersive gaming experience.

2. The talent and work put into the model's voice, and character makes a significant contribution to an exciting narration that draws players into the gaming environment.
3. Video game control has been improved to the level where a player can play without thinking about the controller, allowing them to become wholly immersed in the game.

Using video games as a learning media might help students to learn the language as a communication tool rather than a set of rules. A pleasant environment can boost students' motivation, make them feel confident and safe, and promote positive attitudes against foreign language learning (Rafidiyah et al., 2019). Another advantage of games is that they are appealing, novel, provide a better environment, and help keep the learner focused on the task at hand (Heinich et al., 2012). Computer games can reach children's actual interests and needs, that they are the most popular computer activity, and provide an innovative model of interactions (Cheng & Su, 2012).

Some research done in the past has shown how video games could improve students' vocabulary acquisition significantly by implementing a particular treatment (Jhon, 2016; Rasti-Behbahani & Shahbazi, 2020; Ebrahimzadeh & Alavi, 2016; Vahdat & Behbahani, 2013; Rafidiyah, D., Adhitama, M. J., & Wianto, 2019). It appears that using video games as a language learning media could improve the students' focus, interest, and motivation towards the language learning process. Moreover, the use of research designs such as experimental research was commonly used to investigate this topic. Based on these considerations, the researcher wanted to explore student's gaming experience in mastering vocabulary. Hence, this research wants to answer the following questions:

1. How does student's gaming experience help him in mastering vocabulary?
2. What genres of video games do student think are influential in improving vocabulary acquisition?

## METHOD

This research used narrative inquiry to reveal student's experience in learning vocabulary by playing video games (Connelly & Clandinin, 2006). The participant in this study was an EFL student in the 6th semester majoring in communication in a university in West Java, Indonesia, and is an acquaintance of the researcher. The reason for choosing this participant is because of the emotional closeness factor and having a fascinating experience to learn English. To obtain data, researchers conducted interviews using semi-structured interview techniques. The interview was conducted in Indonesian to ensure that participant understood each question asked. Interviews were conducted twice, with an hour for each interview. It was conducted during leisure time to make sure the participant feel emotionally comfortable. The data collection was carried out from the end of April to early June 2021. Thematic text analysis was used to examine participant stories in learning vocabulary (Widodo, 2014). The data gathered through Zoom and WhatsApp interviews were recorded and organized into a written report. After reading the data several times, the researcher coded the data using different color codes in lexical, phrases, and sentences (Braun & Clarke, 2006). As a final step, the data are then analyzed and explained interpretatively.

## RESULTS AND DISCUSSION

### Results

*RQ1: How does student's gaming experience help him in mastering vocabulary?*

Based on the thematic analysis of a student's narrative, the researcher identified four themes related to student's gaming experience in vocabulary learning. Video games provide the student an incidental vocabulary learning, video games make student aware of the purpose of learning a foreign language, video games increase student's motivation in learning English, and video games assist the student in vocabulary memorization. The detailed findings are written below.

### **Video games provide student an incidental vocabulary learning**

At first, the participant did not realize the impact of playing video games on his English language skills. He also mentioned that playing video games is just for entertainment, not a medium for learning English. In this case, participants were completely unaware of the positive impact of playing video games. It can be seen from the results of interviews with the participant.

*“At first, I do not realized that playing video games could teach me English. It is because I play video games for entertainment and releasing stress. I didn't realize it until I was about 16 years old. But then, when I was faced with English material, I just realized that playing video games can help me in mastering vocabulary. I remembered several words that I know from video games and actually it exist in real-life context (in classroom activity).”*

The interview transcript illustrates how the student admitted that initially, he did not realize his English skills could be improved by playing video games. The purpose of the student in playing video games is just for entertainment and purely wants to know the storyline of the narrative presented in the form of digital games. However, he finally realized that the results of his gaming activities are beneficial and could be applied in the context of English subjects at school.

*“I played games because I love the narrative story and role-playing features. I also love the English voice actor with various accent. It helped me to understand the meaning of the text that I read. At that time, I only focus on learning vocabulary and how to pronounce them. Therefore, I was only able to read and write in English and not yet able to speak.”*

While playing video games, the student used to listen to the sound of voice actors, as well as reading subtitles. It subconsciously helps him to practice reading and listening skills. He also mentioned that playing role-playing games helped him to improve his vocabulary acquisition as well as word pronunciation.

### **Video games make student aware of the purpose of learning a foreign language**

By playing video games, the student becomes aware of the purpose of learning English, which in its context is English as a Foreign Language (EFL). It can be seen from the interview transcription below.

*“I realized that English is just a language, not only consist of grammar, tenses, and things like that. When playing video games, I find a lot of conversations and texts that force me to understand the meaning of the content. If I don't understand it, it will be difficult to complete some quests/puzzles in the game. Then I realized that some of the texts and conversations between characters contained in the video games also exist in real-world contexts. However, some of my friends don't want to understand the meaning of the text and the conversation so they never understand the purpose of learning English.”*

Based on the interview transcript, it appears that video games could help him in raising the awareness of learning English. The student also added that some of his peers were not aware of

the function and purpose of learning English. He also mentioned that some of his peers only play video games, but they never want to find out the meaning of words in English.

*“Back then, when I studied English in the classroom, I felt insecure because I was afraid to make mistakes and felt ashamed. However, when playing video games, I can read subtitles and listen to the in-game characters talking, so that I was able to practice on my own how to pronounce and write the words in English correctly. After I had enough confidence, finally, I was brave enough to practice my English skills in class. That's when I first realized that the purpose of learning English is to be able to communicate, not always about perfection (in score).”*

The student also mentioned that at first, he felt insecure about his English skills. However, he finally realized that the most important thing about learning a language was to be able to communicate. After realizing this, he gain more confidence to keep learning and develop his skills in English.

### **Video games increase student's motivation toward English language learning**

One of the benefits of using video games for educational purposes is that video games could become a stimulus to increase student motivation in learning English. The student said that he had more motivation to learn English (to find the meaning of new words) while playing video games. It can be seen in the interview transcript.

*“When I was playing RPG and Story Rich games, I learned a lot of new words. Because I was curious about the story and the conversation, I felt like I had to understand the meaning of every words I read. Then, I feel excited to find the meaning of the new words. It motivated me to open the dictionary again and again because it was something I really wanted to know.”*

Based on the interview transcription, the student had great motivation to find out the meaning of new words that he found while playing games (RPG and Story Rich genres). It appears that the immersion of video games could promote student motivation in learning English.

### **Video games assist student in vocabulary memorization**

Through video games, students have more opportunities to practice their vocabulary memorization. In this case, video games act as a tool to facilitate students in remembering the vocabulary they find in the games. This can be seen from the transcript of the interview.

*“The two genres of games (RPG and Story Rich) that I have metioned before offer alternative ways of learning and memorizing new words in English with a very high intensity of repetition. This has greatly impacted my vocabulary mastery skills, so that it so that it gives me an advantage both inside and outside of school.”*

Referred to the interview transcription, it is clearly demonstrated that video games provide student with an alternative way of memorizing words in the form of repetition. The student discover new words that he can read and hear while playing RPG and Story Rich games. Therefore, student can learn vocabulary comfortably without being forced.

RQ2: What genres of video games do student think are influential in improving vocabulary acquisition?

The student pointed two genres that is become the most influential types of games to improve vocabulary mastery. Those are games with the RPG (Role-Playing Game) genre and the Story Rich genre.

*"It makes me curious about story of the game and I love the sounds of voice actor appeared in games. The voices of the characters in the game helped me learn the correct pronunciation. It forces the player to be able to understand the story narrated in English."*

The student argued that games with RPG and Story Rich genres were very influential in the process of mastering vocabulary for him. According to students, these two game genres are very helpful to enrich vocabulary in English. The reason is that these two genres provide a lot of vocabulary to learn, and the role of voice actors is very helpful in terms of pronunciation.

*"... Alternative methods of learning and memorizing new English words with a high level of repetition are also available in the two game genres I mentioned earlier."*

Based on interview transcription, the Role-Playing Games (RPGs) and Story Rich genres appears to be the most influential genre of games that helps student in memorizing vocabulary and its meaning through repetition of words (vocabulary appears repeatedly during the game). During the game, student find several words that appear repeatedly so that it helps him to remember both the meaning and pronunciation of each word.

## Discussion

### a. The student had an incidental vocabulary learning through gaming experiences

In applied linguistics, the term "incidental learning" refers to the acquisition of a word or expression without conscious intention to memorize it, such as "picking up" an unknown word while listening to someone or reading a text (Hulstijn, 2012). While Kerka (2000), defined incidental learning as unintentional or unplanned learning that occurs when there is no deliberate intention to learn or analyze language. Students are encouraged to get used to reading dictionaries if they find new vocabulary when playing video games. Schmitt (2010) mentioned that good language learners carry dictionaries rather than grammar books with them. It can stimulate students to get used to finding out the meaning of new words they find anywhere. By getting used to this, students indirectly experience a learning process called incidental vocabulary learning. Based on the interview transcription, the participant also explained how he acquired new vocabulary, and how he pronounces it effectively. He learned it by listening to the voice actor when he spoke and reading the subtitles at once. It is in line with Brown et al., (2008), who mentioned in their study that "reading-while-listening mode" was assumed the most comfortable and promoted better comprehension for students. In other words, it appears that listening to in-game narrative stories and voice actors could help the student comprehend what he read.

### b. Video games help student to raise awareness on the purpose of foreign language learning

The presence of video games helps students to increase awareness of the purpose of learning english. Rahmi & Erlinda (2014) mentioned that language awareness, which is essential for effective language use, is closely linked to language acquisition. They also added that language awareness includes how languages work, how people learn and use them, and when to use them in various situations. Based on the interview transcription, the participant stated that at first, he felt less confident with his english skills (especially in pronunciation and speaking). The participant also mentioned that he felt ashamed and afraid to make mistakes

when learning english in class, which resulted in unsatisfactory academic performance. It is in line with a study conducted by Souriyavongsa et al., (2013), who mentioned the presence of factors such as students have lack confidence to use english because they are feeling shy, unsuitable curriculum and learning strategy, and students are not well-motivated and encouraged is the reasons why efl students get poor english performance. Eventually, the participant found a method for self-studying without any coercive intervention from external parties (Ziyu & Jing, 2019).

**c. Video games increase student's motivation level in learning english**

Video games always present rapid developments in terms of quality. The graphics quality in video games that are increasingly realistic, interesting narrative story, and great sound quality makes the players immersed into the game. According to Richard-Amato (1996), while games are frequently associated with entertainment, we should not lose perspective of their pedagogical value, especially in second language teaching. According to Tomlinson (2012:9), relaxed and self-assured learners learn faster. Based on interview transcription, the student mentioned that video games significantly motivated him in mastering vocabulary. Video games offer students a motivation boost, lower the stress level, and create a positive attitude toward English. It is closely related with Baturay, Yildirim & Daloglu studies as cited in Derakhshan & Khatir (2015) "using computers and the internet in language teaching offers more effective learning than traditional methods, enhances learner motivation, promotes positive attitudes in students, and improves retention".

**d. Video games assist student in vocabulary memorization**

Rich and interesting vocabulary resources from RPG and Story Rich genre games make students get used to learning new words that they find while playing games. The role of video games is also very important considering student statements regarding video games as an alternative way of memorizing words. Language learners, particularly those who mostly grew up in the digital age, find vocabulary learning to be boring (Derakhshan & Khatir, 2015; Yue, 2017). To relieve boredom during the vocabulary memorization process, a language learner may need other alternatives to overcome it. In this context, vocabulary memorization through RPG and Story Rich games might be an alternative option instead of using the traditional method which can lead students into boredom. A previous study conducted by Cornillie et al., (2012) investigated the cognitive benefits of digital role-playing games for foreign language learning, paying particular attention to the role of focus-on-form approaches and language-directed feedback. They argued that digital games provide opportunities to explore how technology facilitates language learning in the forms that traditional language learning settings may not have recognized.

**e. The influence of Role-Playing Games (RPGs) and Story Rich genres on student's vocabulary mastery skills**

As technology and science advance in education, many studies have examined the effectiveness of using converted video games as a tool for learning and learning languages. Referred to the interview transcription, the student mentioned that Role-Playing Games (RPGs) and Story Rich genres considerably affect his English proficiency, especially in terms of vocabulary mastery. Rahman & Angraeni (2020), mentioned that the level of students' motivation plays important role in successful vocabulary learning. They also assumed that the more appealing and innovative the learning media, the easier it is for students to learn vocabulary, and the more interesting the media, the more motivated students are to learn it. A previous study conducted by Irfan et al., (2016) revealed that using the RPG video game to increase the students' vocabulary achievement was effective. It showed by the comparison

between the pre-test and post-test that showed a significant improvement. In addition, they also mentioned RPG video games are one of the video game genres that rely heavily on the use of words to play the game. It means that a player who was motivated to complete an RPG video game would discover new words unconsciously while enjoying and attempting to complete the game. Therefore, it seems that vocabulary memorization through RPG and Story Rich games might be an effective alternative option instead of revert to using the traditional learning method.

## CONCLUSION

This study reveals how video games could assist the participant in mastering English vocabulary. 1) Video games provide incidental language learning that creates enjoyable, meaningful and active learning experiences. 2) It helps the student to raise awareness of the purpose of foreign language learning. Language awareness is essential for effective language use. Language awareness includes how languages work, how people learn and use them, and when to use them in various situations (Rahmi, M. M., & Erlinda, 2014). 3) Video games increase student's motivation level in learning English. 4) Video games provide student motivation boost, reduce stress, and create a positive attitude toward English. And the last, video games provide the student an alternative way of vocabulary memorization instead of revert to the conventional method. This study also reveals that the genres of Role-Playing Games (RPGs) and Story Rich genres greatly influence students in mastering vocabulary.

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## REFERENCES

- Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, III(3). <https://doi.org/10.20472/te.2015.3.3.002>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2). <https://doi.org/10.1191/1478088706qp063oa>
- Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign Language*, 20(2).
- Cheng, C. H., & Su, C. H. (2012). A Game-based learning system for improving student's learning effectiveness in system analysis course. *Procedia - Social and Behavioral Sciences*, 31. <https://doi.org/10.1016/j.sbspro.2011.12.122>
- Clandinin, D. J. (2006). Narrative inquiry: A methodology for studying lived experience. *Research Studies in Music Education*, 27(1). <https://doi.org/10.1177/1321103X060270010301>
- COFFEY, H. (2009). Digital game-based learning. *Learn NC*.
- Cornillie, F., Clarebout, G., & Desmet, P. (2012). The role of feedback in foreign language learning through digital role playing games. *Procedia - Social and Behavioral Sciences*, 34. <https://doi.org/10.1016/j.sbspro.2012.02.011>

- Derakhshan, A., & Davoodi Khatir, E. (2015). The Effects of Using Games on English Vocabulary Learning. *Journal of Applied Linguistics and Language Research*, 2(3).
- Deubel, P. (2006). Game on! Now Educators Can Translate Their Students' Love of Video Games into the Use of a Valuable, Multifaceted Learning Tool. *T.H.E. Journal*, 33(6).
- Ebrahimzadeh, M., & Alavi, S. (2016). Motivating EFL students: E-learning enjoyment as a predictor of vocabulary learning through digital video games. *Cogent Education*, 3(1). <https://doi.org/10.1080/2331186X.2016.1255400>
- Heinich, R., Molenda, M., Russell, J., & Smaldino, S. (2012). Instructional Media and Technology for Learning. *International Journal of Distributed and Parallel Systems*, 3.
- Hornby, A. S., & Cowie, A. P. (1995). Oxford advanced learner's dictionary. Oxford: Oxford University Press, Vol. 1430, 1331.
- Hulstijn, J. H. (2012). Incidental Learning in Second Language Acquisition. In *The Encyclopedia of Applied Linguistics*. <https://doi.org/10.1002/9781405198431.wbeal0530>
- Irfan, I., Ihsan, D., & Petrus, I. (2016). Using RPG Video Games to Improve English Vocabulary Achievement of the 8th Graders of SMP LTI IGM Palembang. In *Sriwijaya University Learning and Education International Conference*, Vol. 2, No.
- Jhon, A. (2016). Vocabulary Learning in Digital-Game Based Learning Using Sega Genesis Video Games. *Proceeding of International Conference on Teacher Training and Education (ICTTE) FKIP UNS 2015*, 1(1).
- Kerka, S. (2000). Incidental Learning. Trends and Issues Alert No. 18. In *ERIC Clearinghouse on Adult, Career, and Vocational Education*.
- Kurniawati, E. D. (2012). The Use Of Internet-Based Song To Improve Students' vocabulary Mastery. *Doctoral Dissertation, SEBELAS MARET UNIVERSITY*.
- Marcellino, M. (2015). English Language Teaching In Indonesia: A Continuous Challenge In Education And Cultural Diversity. *TEFLIN Journal - A Publication on the Teaching and Learning of English*, 19(1). <https://doi.org/10.15639/teflinjournal.v19i1/57-69>
- Nation, I. S., & Webb, S. A. (2011). Researching and analyzing vocabulary. MA: Heinle, Cengage Learning.
- Rafidiyah, D., Adhitama, M. J., & Wianto, D. (2019). Video Games: An Innovative Way To Master English. *TEFLA Journal (Teaching English as Foreign Language and Applied Linguistic Journal)*.
- Rahman, A. A., & Angraeni, A. (2020). Empowering learners with role-playing game for vocabulary mastery. *International Journal of Learning, Teaching and Educational Research*, 19(1). <https://doi.org/10.26803/ijlter.19.1.4>
- Rahmawati, N. (2012). Difficulties in English vocabulary learning experienced by the eighth grade students of SMP Negeri 1 Borobudur in the academic year of 2011/2012. *Yogyakarta: University of Yogyakarta*.
- Rahmi, M. M., & Erlinda, R. (2014). Developing Students' Language Awareness through Discovery Learning in English Language Teaching. *Proceedings of ISELT FBS Universitas Negeri Padang*.
- 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*. <https://doi.org/10.1080/09588221.2020.1846567>
- Richard-Amato, P., A. (1996). Making it happen. New York: Addison Wesley Publishing Group.
- Richards, J. C., & Renandya, W. A. (2002). Methodology in language teaching: An anthology of current practice. Cambridge University Press, 255.
- Rohmatillah. (2014). A Study On Students' Difficulties In Learning Vocabulary Rohmatillah Institut Agama Islam Negeri (IAIN) Raden Intan Lampung. *Institut Agama Islam Negeri (IAIN) Raden Intan Lampung*, 6.
- Schmitt, N. (2010). Researching vocabulary: A vocabulary research manual. New York:

*Palgrave Macmillan.*, 4.

- Souriyavongsa, T., Rany, S., Jafre Zainol Abidin, M., & Lai Mei, L. (2013). Factors Causes Students Low English Language Learning: A Case Study in the National University of Laos. *International Journal of English Language Education*, 1(1). <https://doi.org/10.5296/ijele.v1i1.3100>
- Tomlinson, B. (2012). Materials development for language learning and teaching. In *Language Teaching* (Vol. 45, Issue 2). <https://doi.org/10.1017/S0261444811000528>
- Uzun, L. (2009). An {Evaluative} {Checklist} for {Computer} {Games} {Used} for {Foreign} {Language} {Vocabulary} {Learning} and {Practice}: {Vocaword} {Sample}. *Novitas-ROYAL*, 3(1).
- Vahdat, S., & Behbahani, A. R. (2013). The Effect of Video Games on Iranian EFL Learners' Vocabulary Learning. *Reading Matrix: An International Online Journal*, 13(10).
- Widodo, H. P. (2014). Methodological Considerations in Interview Data Transcription. *International Journal of Innovation in English Language*, 3(1).
- Yue, N. (2017). Computer multimedia assisted English vocabulary teaching courseware. *International Journal of Emerging Technologies in Learning*, 12(12). <https://doi.org/10.3991/ijet.v12.i12.7955>
- Ziyu, L., & Jing, X. (2019). Study on the strategy of improving self-learning ability of College Students. *SHS Web of Conferences*, 60. <https://doi.org/10.1051/shsconf/20196001005>