The International Journal of Social Sciences World
TIJOSSW is Available Online at:
https://www.growingscholar.org/journal/index.php/TIJOSSW
Vol. 6 No. 2, July – December 2024, pages: 20-26
DOI: https://doi.org/10.5281/zenodo.13254412
ISSN **2690-5167**
Growingscholar Publisher

The Impact of Online Gaming on English Vocabulary Mastery: A Study of Mechanical Engineering Students

Dessy Meliani Para[1*], Bernadus Stefanus Wuwur [2] ,
Dedy Nataniel Ully [3], David S. Latupeirissa[4]

Article history:
Received June 01, 2024; Accepted: August 01, 2024; Displayed Online: August 06, 2024; Published: December 30, 2024

Keywords

Mobile gaming;

English vocabulary mastery;

Language learning;

Gamification;

Educational technology;

Abstract

This study investigates the relationship between online gaming and English vocabulary mastery among Mechanical Engineering students. Through semi-structured interviews and a vocabulary test, the study reveals that students who play online games, such as Mobile Legends, demonstrate improved English vocabulary mastery compared to those who do not. The findings suggest that online games can provide students with a unique opportunity to engage with English vocabulary in a real-world context, leading to improved language skills. The study challenges prevailing negative perceptions of online games and highlights the importance of considering the students' perspective in language learning. The results have implications for language instruction and learning, suggesting that online games can be a valuable resource for language learners and a useful tool for improving vocabulary mastery. The study's findings contribute to a more nuanced understanding of the role of online games in language acquisition and have implications for the development of language learning materials and resources.

1. Introduction

Vocabulary is one of the most important elements. It is used by people in writing as well as speaking activities (Brooks et al., 2021). Zou et al. (2021) state that one of the learning media that can be used to implement vocabulary is games. Games can help students learn English vocabulary, in other words, games can indirectly increase students' motivation to learn, as well as help students expand their English vocabulary.

One of the games that is currently popular and widely played by all groups from children, teenagers to adults is Mobile Legends (Delos e at., 2020). Based on the results of observations in English courses in the second semester of the Mechanical Engineering Department regarding mastery

[1-4] *Politeknik Negeri Kupang, Email:[1*] paradessy@gmail.com*

of English vocabulary, it is known that vocabulary mastery is still low, this can be seen from students who have not been able to mention the vocabulary requested by the lecturer according to the meaning, students have not been able to master English vocabulary in terms of writing words according to the correct spelling, this is based on when the lecturer gives questions, students write their answers, there are still some missing letters and are not right, students have not been able to read English vocabulary. From this it can be seen that the problem lies in the low vocabulary of students.

To solve this problem, researchers provide motivation through various interesting or non-monotonous ways to improve English vocabulary. One of the learning tools that can be used to implement vocabulary is games. Through games, learning will be more creative in presenting learning materials. In addition, games can also display innovative learning, are not boring, and make it easier for students to understand English subject material.

2. Theory and Methods

The Role of Language in Games

The use of language is an integral part of gaming, as it enables users to understand the rules and explanations of the game. The language used in games can vary, depending on the creator's preference for using their native language or a translated language. However, English is the dominant language used in most games, as it is a universal language that facilitates global communication. This widespread use of English in games encourages users in Indonesia to develop their English language skills, which in turn has a positive impact on their overall language proficiency (Cf. Hanghøj et al., 2022).

The Impact of English in Games on Indonesian Players

The widespread use of English in games has a significant impact on Indonesian players, particularly in terms of their language skills. As Indonesian players engage with English-language games, they are exposed to a vast array of vocabulary, phrases, and grammatical structures that they may not encounter in their daily lives. This exposure can help them develop their listening, reading, and comprehension skills, as well as improve their pronunciation and speaking abilities (Prihandini et al., 2021). Moreover, the interactive nature of games provides players with opportunities to practice their language skills in a fun and engaging way, which can be more effective than traditional language learning methods.

The Benefits of English Language Skills for Indonesian Players

The benefits of developing English language skills through gaming are numerous. For Indonesian players, improved English language skills can open up new opportunities for education, career advancement, and social interaction. In the digital age, English is the language of the internet, and being proficient in English can provide access to a vast array of online resources, including educational materials, job opportunities, and social media platforms. Furthermore, English language skills can also enhance Indonesian players' ability to participate in global online communities, connect with players from other countries, and engage in cross-cultural exchange.

The Potential for Language Learning through Games

The potential for language learning through games is vast, and it is an area that is increasingly being explored by researchers and educators. Games can provide a unique and engaging way to learn languages, as they offer an interactive and immersive experience that can be tailored to individual learners' needs and interests (Li & Lan, 2022). Moreover, games can also provide instant feedback and assessment, which can help learners track their progress and identify areas for improvement. As the use of English in games continues to grow, it is likely that we will see more innovative and effective language learning tools and resources being developed, which can benefit Indonesian players and language learners around the world.

Understanding Vocabulary

Vocabulary is a fundamental aspect of language, and it refers to a collection of words that convey meaning when used in context. According to Schmitt & Schmitt (2020), vocabulary is a collection of words in English, while Zhang & Graham (2020) defines English vocabulary as a collection of words that have meaning when used. English vocabulary can be classified into various types, including Word Classes, Word Families, Word Formation, Multiword Units, Collocations, and Homonyms. Understanding these different types of vocabulary is essential for effective communication in English.

Research Methodology

This study employed a mixed methods research approach, which combines the strengths of both quantitative and qualitative methods. Mixed methods research involves the use of two distinct methods, namely quantitative and qualitative research methods, in a single study. This approach is more complex than other research designs, as it requires the collection and analysis of two types of data, as well as the integration of the functions of both quantitative and qualitative research. The study was conducted in the Mechanical Engineering Department, where the population of interest was identified (Shan, 2022).

Sampling and Data Collection

To ensure that the sample was representative of the population, the researchers selected 27 students from the 11th semester of the Mechanical Engineering Study Program. This sample size was deemed sufficient to investigate the impact of the Mobile Legends Game on students' English vocabulary. The data collection techniques used in this study included interviews, questionnaires, and tests. Interviews were conducted face-to-face with the 27 selected students to gather information about their experiences and perceptions. Questionnaires were distributed to the students to collect data on their responses to the Mobile Legends Game and its impact on their English vocabulary mastery. Additionally, a test was administered to assess the students' English vocabulary mastery and to analyze the differences in learning outcomes between traditional English learning and learning through playing the Mobile Legends Game.

Data Types and Sources

The study utilized two types of data: primary data and secondary data. Primary data were collected directly through observation techniques, interviews, focused discussions, and questionnaires. The primary data sources used in this study were obtained through questionnaires

and interviews. Secondary data, on the other hand, were obtained from existing sources, such as literature reviews and previous studies.

3. Results and Discussion

Findings from Semi-Structured Interviews

The semi-structured interviews conducted with 30 second-semester students majoring in Mechanical Engineering revealed several key findings. Firstly, the students' vocabulary mastery was found to be lacking. Observations in English courses indicated that students struggled to recall vocabulary words when prompted, and their written responses often contained spelling errors. Furthermore, students experienced difficulties in reading English vocabulary due to the differences in pronunciation between English and Indonesian. The lecture process was also perceived as monotonous and unengaging, which may have contributed to the students' low vocabulary mastery.

Intensity of Online Gaming and its Impact on English Vocabulary

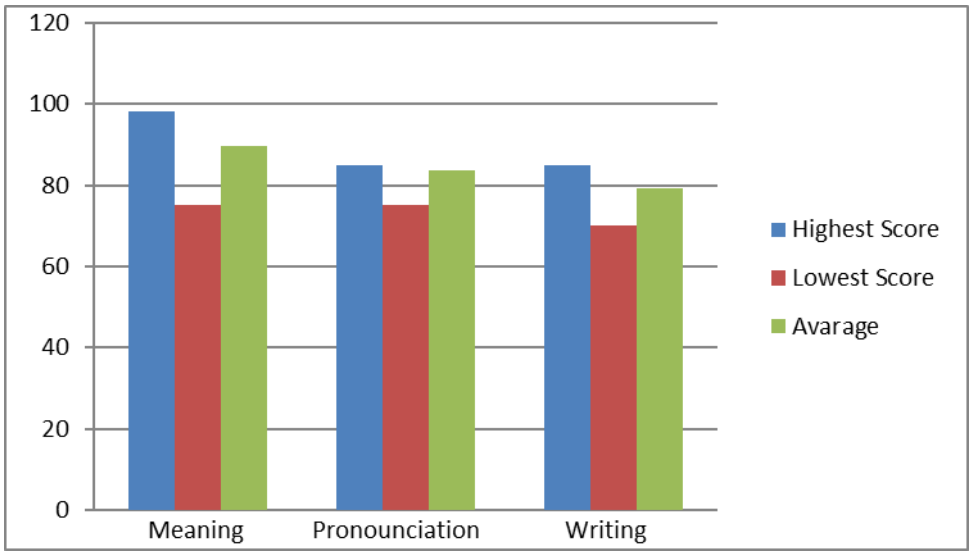
The interviews also revealed that the students were avid online gamers, with 27 out of 30 participants admitting to playing Mobile Legends daily. The intensity of their gaming habits was notable, with students spending between 1-6 hours per day playing online games. Interestingly, all 27 students reported a positive impact on their English vocabulary development as a result of playing online games. However, they also acknowledged negative consequences, including eye strain, dizziness, and addiction. Notably, the students perceived online games as a viable alternative means of learning English vocabulary.

Reevaluating the Impact of Online Games

The prevailing negative perceptions of online games held by parents and lecturers may be overstated. By examining the issue from the students' perspective, this study found that online games can have a positive impact on English vocabulary development. While acknowledging the potential drawbacks, the students' experiences suggest that online games can be a valuable learning tool. This finding highlights the need for a more nuanced understanding of the role of online games in language learning, one that takes into account the complexities of the students' experiences.

Next, in this study, the test conducted was a test of English vocabulary mastery questions conducted to analyze the differences in student learning outcomes between English learning outcomes and learning outcomes by playing games, one of which was playing the Mobile Legends game. Based on the results of the test conducted on English vocabulary mastery are as follows;

Diagram 1. Test Score Results Based on English Vocabulary Mastery Indicators



Analysis of English Test Scores

An examination of the English test score table, categorized by the English vocabulary mastery indicators, reveals notable trends. The scores for the Meaning indicator ranged from a high of 100 to a low of 70, with an average score of 78. This suggests that while some students demonstrated a strong understanding of vocabulary meanings, others struggled to comprehend even the most basic words. Similarly, the scores for the Pronunciation indicator ranged from 85 to 75, with an average score of 83. This indicates that students generally performed well in terms of pronunciation, but there was still room for improvement. The Writing indicator scores ranged from 85 to 70, with an average score of 79. This suggests that students were able to write coherent sentences, but may have struggled with spelling, grammar, and syntax.

The Impact of Mobile Legends on English Vocabulary Mastery

The data collected suggests that playing Mobile Legends has a significant impact on English vocabulary mastery. A substantial proportion of respondents (60%, n = 27) reported benefiting from improved English vocabulary mastery, often unintentionally acquiring new vocabulary while playing the game. This acquired vocabulary can, in turn, enhance their overall English skills. Notably, all instructions within the online Mobile Legends game are in English, necessitating players to understand vocabulary to navigate the game. This exposure to English vocabulary in a real-world context may have contributed to the students' improved vocabulary mastery.

Furthermore, the data suggests that the frequency and duration of Mobile Legends gameplay may also play a role in vocabulary acquisition. Students who played the game for longer periods of time and more frequently reported higher levels of vocabulary mastery. This correlation suggests that the more students engage with the game, the more opportunities they have to acquire new vocabulary.

Contrary to the prevailing negative perceptions of online games held by parents and lecturers, this study's findings suggest that online games, such as Mobile Legends, can have a positive impact on English vocabulary mastery. By examining the issue from the students' perspective, it becomes apparent that online games do not always have a negative influence. In fact, the data collected reveals that online games can still have a positive impact, including the acquisition of vocabulary through gameplay.

This study's findings have implications for language instruction and learning. Rather than viewing online games as a distraction or a waste of time, educators and parents may need to reconsider their role in language acquisition. Online games, such as Mobile Legends, can provide students with a unique opportunity to engage with English vocabulary in a real-world context, potentially leading to improved language skills.

Moreover, this study's findings highlight the importance of considering the students' perspective in language learning. By examining the issue from the students' point of view, educators and researchers can gain a more nuanced understanding of the complex relationships between language learning, motivation, and technology. This understanding can inform the development of more effective language instruction strategies that take into account the role of online games and other digital technologies in language acquisition.

4. Conclusions

In conclusion, this study's findings suggest that online games, such as Mobile Legends, can have a positive impact on English vocabulary mastery. By examining the issue from the students' perspective, it becomes apparent that online games can provide students with a unique opportunity to engage with English vocabulary in a real-world context, potentially leading to improved language skills. This is because online games, unlike traditional language learning methods, offer an immersive and interactive environment where students can practice their language skills in a more enjoyable and motivating way.

Moreover, the study's findings highlight the importance of considering the students' perspective in language learning. By understanding how students perceive online games as a learning tool, educators and researchers can develop more effective language instruction strategies that take into account the complexities of the students' experiences. This may involve incorporating online games into language learning curricula, providing students with opportunities to engage with English vocabulary in a more interactive and immersive way.

The study's findings also have implications for language instruction and learning more broadly. They suggest that online games can be a valuable resource for language learners, providing a unique opportunity to practice language skills in a real-world context. This challenges the prevailing negative perceptions of online games held by parents and lecturers, and highlights the need for a more nuanced understanding of the role of online games in language acquisition.

Furthermore, the study's findings have implications for the development of language learning materials and resources. By incorporating online games into language learning curricula, educators and researchers can create more engaging and interactive learning materials that cater to the needs and preferences of modern language learners. This may involve developing language learning apps and games that are specifically designed to improve vocabulary mastery, or creating online language learning platforms that incorporate game-like features and mechanics.

Overall, this study's findings suggest that online games, such as Mobile Legends, can be a valuable tool for improving English vocabulary mastery. By considering the students' perspective and incorporating online games into language learning curricula, educators and researchers can develop

more effective language instruction strategies that cater to the needs and preferences of modern language learners.

Acknowledgment

This manuscript has no conflict of interes. We would like to thank our colleagues and peers who offered their input and suggestions during the research process.

References

Brooks, G., Clenton, J., & Fraser, S. (2021). Exploring the Importance of vocabulary for English as an additional language learners' reading comprehension. In *EAL Research for the Classroom* (pp. 35-58). Routledge.

Delos Santos, J. R. N., Cornillez, E. E., Carillo, V. D., & de los Santos, G. N. (2020). Mobile games and academic performance of university students. *International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN*, 2278-3075.

Hanghøj, T., Kabel, K., & Jensen, S. H. (2022). Digital games, literacy and language learning in L1 and L2: A comparative review. *L1-Educational Studies in Language and Literature*, *22*(2), 1-44.

Li, P., & Lan, Y. J. (2022). Digital language learning (DLL): Insights from behavior, cognition, and the brain. *Bilingualism: Language and Cognition*, *25*(3), 361-378.

Prihandini, A., Sudana, D., & Kurniawan, E. (2021, November). Online Games to Improve English Vocabulary Awareness in Daily Speech. In *Fifth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2021)* (pp. 136-142). Atlantis Press.

Schmitt, N., & Schmitt, D. (2020). *Vocabulary in language teaching*. Cambridge University Press.

Shan, Y. (2022). Philosophical foundations of mixed methods research. *Philosophy Compass*, *17*(1), e12804.

Zhang, P., & Graham, S. (2020). Learning vocabulary through listening: The role of vocabulary knowledge and listening proficiency. *Language Learning*, *70*(4), 1017-1053.

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.