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THE UTILIZATION OF ONLINE GAMES TO ENHANCE EFL STUDENTS' VOCABULARY MASTERY IN SENIOR HIGH SCHOOLS

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Abstract

Language learning, with a particular emphasis on vocabulary development, plays a pivotal role in achieving proficiency in English as a foreign language. Nonetheless, effectively teaching vocabulary poses challenges, often resorting to traditional methods like memorization, which may lack engagement for students. In response to this, the study sets out to explore the potential of integrating popular online games, such as Mobile Legends, PUBG Mobile, League of Legends, and Minecraft, as tools to enhance students' mastery of vocabulary. Employing a qualitative research design, the investigation involved semistructured interviews and focus group discussions with eight students from a senior high school in Jakarta. The findings of the study unveiled that online games offer an immersive and enjoyable environment conducive to vocabulary enrichment. These games provide both direct and indirect opportunities for students to encounter new words and phrases. The research demonstrated that the use of online games positively influences students' motivation and interest in learning English vocabulary, leading to tangible improvements in their language skills. Consequently, it is suggested that students incorporate the practice of English through the utilization of relevant online games, thus promoting the enhancement of their English vocabulary mastery.

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INTRODUCTION

Language learning is an intentional procedure, resulting from educational experiences in formal settings or self-directed learning initiatives (Zaščerinska, 2010) through different stages: silent phase, early production and experimentation, and continual development and communicative competence (Zhang, 2022). Learning a foreign language, especially learning English, involves listening, speaking, reading, writing, grammar, pronunciation, and vocabulary. Students have to balance every aspect of English skills in order that they can master English well. One of the skills that cannot be separated from learning English is vocabulary.

As stated by Schmitt & Schmitt (2020), vocabulary refers to words that are helpful across a wide range of themes and contexts in both speech and writing. Meanwhile, according to Algahtani (2015), vocabulary is the collection of words that are essential for effective communication, encompassing both expressive vocabulary or the words used in spoken English and receptive vocabulary or the words understood in listening skill. Vocabulary learning is a difficult and prolonged process, and different ways may be suitable at different stages of the process (Afzal, 2019; Schmitt, 2019), and English teachers need to encounter the

challenges of teaching vocabulary efficiently (Rosyada-AS & Apoko, 2023; Baiq-Sumarni et al., 2022). Students must acquire vocabulary that is pertinent to their daily life requirements. Teachers must be attentive to identify the most efficient means of utilizing media in English vocabulary instruction (Yudha & Mandasari, 2021). The most common method used by previous teachers was by memorizing vocabulary. This method is considered ineffective since students sometimes feel bored (Aprilani, 2021; Sotlikova, 2023), and it is difficult for students to process vocabulary. This makes teachers confused about what methods are effective and students are interested in improving their vocabulary.

English teachers need to acknowledge that students possess varying learning preferences. Some students might find it easier to acquire vocabulary through visual aids such as pictures or videos, whereas others may need consistent repetition and exercise. As a result, teachers should take note of their student's learning styles and employ suitable approaches as it will assist teachers in designing lesson plans that align with or adjust their teaching methods, enabling them to offer the most suitable and meaningful activities or tasks for specific learner groups at various stages (Felder, 2011; Hidayatullah et al., 2022; Nagsyabandiyah & Deghanitafti, 2023). With the development of technology, teachers need to adjust their way of teaching using different techniques by utilizing interactive media (Apoko et al., 2023). There are various techniques in developing students' vocabulary, such as watching movies with subtitles, listening to songs, describing pictures, video games, etc.

In this globalization and technology era, most students enjoy using video games as a learning medium, especially online games. Digital games hold promise as potential reservoirs of second or foreign language input for students (deHaan et al., 2010). As stated by Arintia, Linda; Fitriati, n.d. (2014), most online games use English for their instructions. In addition, according to Angraeni et al. (2019), developing the use of online games have some benefits. Firstly, students generally have a fondness for games and often dedicate a considerable amount of their free time to play them. Secondly, games provide a natural context for communication among students, which can help them overcome shyness. Thirdly, games have the potential to motivate children to speak English language they are learning. Also, a mobile game application can aid students who struggled with English at first and boost their confidence (Elaish et al., 2019).

There are some relevant studies related to online games to increase students' vocabulary mastery. Yudha & Mandasari (2021) and Ashraf et al. (2014) discovered that employing digital games for English vocabulary learning proved highly effective. This success was attributed to the enjoyable nature of games, aligning well with children's learning characteristics. Another finding related to this study is from Jannah et al. (2020), which indicated that there was an improvement in students' vocabulary mastery, and online gamebased vocabulary learning had a positive impact on concentration (R. Li et al., 2021) and motivation (Jackson et al., 2022; Shahriarpour & kafi, 2014; Tay et al., 2022). Thus, teachers believed that online games could promote students' learning, shape learning attitudes (Pozo et al., 2022), and encourage their independences (Wei, 2023). Moreover, it is proposed that using online games in teaching vocabulary to students had some purposes (Arintia, Linda; Fitriati, n.d., 2014) such as providing new words in English, increasing their new vocabulary, and helping them to learn vocabulary simply and without difficulty. In addition, one finding pointed out that students were emotionally, behaviorally, and cognitively engaged in digital game-based vocabulary learning (R. Zhang et al., 2023). Thus, it can be implied that the utilization of online games is very important to enhance students' vocabulary mastery.

This current study distinguishes itself from its predecessors on the basis of two principal considerations. First, a departure from the norm is noted in the choice of methodology. Unlike the majority of prior investigations which have predominantly employed educational games expressly designed to facilitate vocabulary enrichment among students, the present study

adopts a unique approach. Specifically, it harnesses the potential of popular mainstream games, such as Mobile Legends, PUBG Mobile, League of Legends, Minecraft, and others, which have not been directly tailored for the explicit purpose of enhancing students' vocabulary mastery. This deliberate departure from conventional educational game platforms introduces a novel dimension to the research landscape, broadening the scope of inquiry into the efficacy of unconventional sources for language acquisition. Secondly, the current study stands out in terms of its distinctive contextual parameters. Unlike its antecedents, which often encompass diverse educational institutions and participant demographics, this investigation is confined to a singular senior high school setting. This deliberate restriction allows for a focused examination of the impact of popular online games on vocabulary acquisition within a specific educational environment. The selection of participants is also notably specific, contributing to the uniqueness of the study's design. By concentrating the research within a singular senior high school and utilizing a specific participant pool, the study aims to derive nuanced insights that may be contextually relevant and offer a more targeted understanding of the dynamics involved in the intersection of popular online gaming and vocabulary mastery. This deliberate contextual and methodological distinctiveness positions the current study as a valuable contribution to the evolving discourse on innovative approaches to language learning within educational contexts.

Based on the explanation above, this study aims to investigate the utilization of online games to enhance students' vocabulary mastery and whether online games have a significant effect on students in language learning or not. Thus, the research questions to be answered include: "How do online games enhance students' vocabulary mastery in senior high school?". Therefore, the novelty of the study lies in the use of online games assisted with Mobile legends, PUBG mobile, League of Legends and mInecraft to develop students' vocabulary mastery.

RESEARCH METHOD

Research Design

In conducting this study, a deliberate and methodologically rigorous approach was adopted, characterized by the utilization of a qualitative research design. The research methodology was framed within an exploratory and descriptive paradigm which emphasises on gaining an in-depth understanding of participants' experiences, perceptions, and attitudes (Creswell, 2018). The research sought to delve into the multifaceted aspects of students' engagement with online games as tools for enhancing vocabulary mastery within the context of English language learning. This qualitative framework allowed for a nuanced exploration of the intricate dynamics involved in the students' interactions with popular online games, such as Mobile Legends, PUBG Mobile, League of Legends, and Minecraft, with a particular focus on the impact of these interactions on their vocabulary development. To capture the richness and depth of the participants' experiences, the study employed interviews and focus group discussions as the primary methods of data collection. These qualitative techniques were chosen for their ability to elicit detailed narratives and facilitate a comprehensive exploration of the diverse perspectives held by the students. Through the interactive nature of interviews and the group dynamics inherent in focus group discussions, the study aimed to uncover not only individual attitudes but also the shared perceptions within the cohort.

Research Participants

The focal participants in this research were drawn from the student body of a state senior high school situated in Jakarta. Given the qualitative nature of the study, a purposive sampling strategy was employed, leading to the inclusion of eight students in the investigation. This cohort, intentionally diverse, consisted of five females and three males, chosen based on their expressed willingness to engage in the interview process, their availability for participation, and their prior experiences with online games. The selection criteria were deliberately designed to ensure a varied and representative sample of participants who could offer diverse perspectives on the subject under scrutiny. Notably, the participants were individuals who actively used online games, a criterion essential for the study's focus on the intersection of gaming experiences and vocabulary development. This deliberate choice aimed to capture a range of attitudes, behaviors, and insights related to the engagement with online games within the context of language learning. It is worth noting that the participants' active involvement in online gaming served as a foundational element for the study, ensuring a firsthand understanding of their experiences and interactions within this virtual domain. By enlisting students with varying levels of exposure and engagement in online gaming, the research sought to explore the nuanced ways in which these experiences might influence vocabulary mastery. Thus, the comprehensive selection process of participants, grounded in their willingness, availability, and prior experiences, contributes to the robustness of the qualitative inquiry, offering a diverse array of perspectives for a more thorough exploration of the research objectives.

Instruments

The instrument used in this research was the researchers. They used semi-structured interview and focus group discussions to collect the data. The interviews were conducted with eight students to gain an in-depth understanding of their experiences and perceptions of using online games to improve their vocabulary. Every student had a 15-20-minute interview. The eight students are labelled with S1, S2, S3, S4, S5, S6, S7, and S8. The focus group discussions involved a group of students who had used online games for vocabulary mastery. The group discussions aimed to explore the group's attitudes, perceptions, and experiences concerning the use of online games for vocabulary mastery.

Data Analysis

The data collected through the semi-structured interviews and focus group discussions underwent a meticulous three-step analysis process (Miles et al., 2014). The initial step involved data condensation, wherein the information gleaned from interview transcripts and related documents was systematically curated. This process encompassed the selective extraction, concentration, simplification, and transformation of the data, facilitating a more focused and manageable dataset for subsequent analysis. Following data condensation, the second step in the analytical framework was data display. This involved the creation of a structured and condensed presentation of information derived from the collected data. The purpose of this phase was to provide a visual and organized representation of the key findings, enabling a clearer understanding of patterns, themes, and noteworthy insights. The data display served as a crucial intermediary step, bridging the condensed data and the subsequent phase of drawing conclusions. The third and final step in the analysis process was conclusion drawing and verification. In this phase, the analyst systematically examined the condensed and displayed data to derive meaningful conclusions and insights. This involved the identification of patterns, correlations, and overarching themes within the dataset.

Moreover, conclusion drawing entailed a meticulous analysis of what the identified objects, statements, and patterns signified, incorporating both explicit explanations and implicit assertions. This critical phase aimed not only to draw conclusions but also to verify the robustness and reliability of the findings, ensuring that the interpretations were grounded in the data and reflective of the participants' experiences and perspectives. In essence, the three-step analysis process, encompassing data condensation, data display, and conclusion drawing/verification, constituted a comprehensive and systematic approach to extracting meaningful insights from the collected qualitative data (Miles et al., 2014).

RESEARCH FINDINGS AND DISCUSSION **Research Findings**

In line with the research question, there are eight questions addressed to the participants to answer. The results of the interviews revealed critical findings related to the participants' preferences for online games, their motivations for game selection, the impact of games on vocabulary learning, the frequency of using games for vocabulary enrichment, the effectiveness of games in improving vocabulary, the specific features of games that contribute to vocabulary development, and the changes observed in English vocabulary as a result of using online games.

The first question is related to the respondents' preferred online games. Most students responded that they have various games. S1, S4, and S8 describe this in the following interview data.

- "The online games that I often play are GTA 5 and Valorant. They help me enrich my SI vocabulary through the dialog played by NPCs and characters."
- S4 "The type of online game I play is Mobile Legend or ML."
- "The types of online games I usually play are MOBA and Battle Royal games. MOBA games like Mobile Legends is a battle arena-based game with five players per team. Meanwhile, battle royal games are Free Fire and Call of Duty combine adventure and survival genres."

The second one relates to the reasons why students chose specific online games. Students provided various reasons with most of them playing games for fun, while some specifically utilized games for their potential to improve their English language skills. This is based on the results of the interview from S5, S7, and S8.

- "I chose the game because it was fun and involved me directly. I do not like strategies that are too difficult and prefer games that have real actions."
- *S7* "I chose the game because it was viral at the time, so I wanted to try it and felt comfortable with the game. Also, some games caught my interest and made me want to try them."
- *S*8 "I chose the game because I could gain a lot of experience, such as cohesiveness and teamwork. The game also teaches strategies to win the game. In addition, I can improve my knowledge of foreign languages, such as Japanese, English, and Chinese."

The third one is about whether students learn vocabulary directly through online games. This point explains that students can indirectly and directly enhance their English vocabulary while engaging with games. S1, S2, and S7 narrated this in the following interview data.

- SI "I learn English vocabulary indirectly through games, especially through the dialog in games like GTA 5. I can understand new vocabulary that I have never heard before through the dialog."
- S2"I learn various English vocabulary through online games because the games can be set for various languages including English. I want to know a bit of English through the words or sentences in the games I play. So, I am not only playing the game but also gaining some knowledge through the game."
- *S7* "I learn English vocabulary through the game because there are many passages to read in the game. By using English, I can understand what to learn in the game."

The next one is about the frequency of using online games to enrich vocabulary. S4, S7, and S8 explained their high frequency of gameplay and how they use online games to enhance their vocabulary mastery.

- S4"I use online games to enrich my vocabulary every day. However, every time I play, there must be new vocabulary that I have never heard before."
- "I often use online games to enrich my vocabulary. Through interaction with foreign *S7* friends in games, I indirectly learn new vocabulary which I then look up and understand."
- *S*8 "I use online games a lot and every game I play, I use communication with my teammates through the Quick Chat feature. This helps me enrich my vocabulary in certain situations."

The other findings from the interview are regarding the impact of online games on enriching vocabulary. Students believed that online games had a positive influence on improving vocabulary knowledge. This is proven by the following ideas.

- SI"The use of online games, such as Valorant, helps me to enrich my vocabulary. In this online game, I interact with new people, both from overseas and from Indonesia, who use English and vocabulary that I have never heard before."
- S5 "The use of online games helps me to enrich my vocabulary. In online games, I find many new vocabulary words that are not found in books. Through in-game missions, there are tutorials and notifications on how to complete the mission, including words that I may not understand. I looked them up on Google Translate and finally understood the meaning of the words."
- "In using online games, especially when socializing with players from overseas, I feel *S7* that I am helped in enriching my vocabulary. Some words and sentences may be unfamiliar to me, but force me to look up the meaning of these words, especially through online dictionaries. That's way, I immediately know the meaning of the vocabulary."

When asked about the influence of online games on motivation and interest in learning English vocabulary, most of the students emphasized on the positive influence. They expressed how online games serve as a motivating and engaging platform for vocabulary mastery. This is proven by S3, S5, and S7 in the interview data.

- S3 "The use of online games greatly affects my motivation and interest in learning English vocabulary. The games provide great motivation and interest in learning new vocabulary."
- S5 "The use of online games affects my motivation and interest in learning English vocabulary. At first, I thought English was useless, but when I started to like games and many games were in English, I became eager to learn English to play games better."
- *S7* "The use of online games motivates me to learn English vocabulary. When playing online games, I communicate and socialize with players from different countries using English. This encourages me to learn more English so that I can communicate fluently and effectively in the game."

The next findings mentioned about specific features and aspects of online games that help enrich students' vocabulary mastery. S2, S5, and S7 demonstrated that online games offer various vocabulary learning opportunities. This is described in the following interview data.

"In online games, there is a chat feature that can be used in various languages, including English. In addition, when certain situations occur in the game, such as the

- player getting a kill or the enemy team being eliminated, there is a voice-over. For example, words like 'first blood', 'double kill', 'victory', and 'defeat'."
- S5 "In the game, there is an English tutorial that teaches how to play the game. The setting feature also helps in enriching the vocabulary as there are many things to understand and change in English."
- "In online games, there is a live chat feature that uses English. Also, the Open Mic *S7* feature allows players to talk to each other through the game platform. These features help in enriching vocabulary through writing and speaking."

The last is dealing with changes or improvements in students' vocabulary mastery after using online games. Most students seemed that they have positive changes or improvements in their vocabulary mastery after using online games. It is shown from the interview data below.

- SI "I felt a significant change in my English vocabulary acquisition after using online games. I met outsiders and had conversations with them, which helped me learn new vocabulary and practice speaking in English."
- S4 "After using the online game, I feel there is an improvement in my English vocabulary. I play the game every day, which contributes to my vocabulary improvement."
- *S7* "I feel the change in my English vocabulary after using online games. I often get acquainted with outsiders from the game and communicate with them in English. This helps me improve my English skills."

Discussion

This study aims to investigate the utilization of online games to enhance students' vocabulary mastery in senior high school. Online games are believed to encourage EFL students to practice English better, especially in mastering their vocabulary. From the responses on online games that students usually played, it is evident that the students had diverse preferences when it came to online games. They showed a variety of game genres, including action-adventure, first-person shooter, and multiplayer battle arena games to facilitate their vocabulary development. Students liked digital games that could be played online and on mobile devices. Related to the playing frequency, it was discovered that most students preferred to play Minecraft (Bahçekapili et al., 2022).

In addition, EFL students chose the game for different reasons. Their preferences for the game varied significantly, driven by diverse factors. They chose online games for reasons ranging from entertainment to language skill improvement. Persson & Richtoff (2022) and Jackson et al. (2022) said that engaging in video or digital games at home could generally boost students' motivation to learn English in school. Some students were motivated by the desire for entertainment and active involvement, whereas others were influenced by the game's popularity, curiosity, and comfort. Moreover, some students chose the game because they could gain experiences, such as teamwork, cooperation, and improve their knowledge of foreign languages through the game.

Some students also demonstrated that online games could serve as a source of English vocabulary mastery. They revealed that games could be set in English and involved a lot of reading. This allowed them to gain a little bit of English knowledge while playing the game, other than just for entertainment. This current result is supported by a study which proposed that online games could serve as both indirect and direct sources of vocabulary enrichment. The immersive nature of games allowed students to encounter new vocabulary through dialogues, in-game language settings, and textual content (Miftahuddin & Malihah, 2022). Additionally, the frequency of using online games for vocabulary enrichment indicated their enjoyment and relevance as a learning resource and experience (Chen & Hsu, 2020).

From the interview, it indicated that most students used online games to improve vocabulary mastery with similar frequency. Some students benefited from incidental vocabulary exposure during gameplay, while others actively sought out opportunities for vocabulary learning through interactions and communication within the gaming context. This result is in line with a study which found that some online games showed positive impacts in increasing vocabulary learning within short and long terms (Castillo-Cuesta, 2020; Zou et al., 2021).

Based on the responses on the impact of online games, most students revealed that through interactions with other players, exposure to new words in-game missions, tutorials, and the motivation to seek out their meanings, students had found online games to be effective tools for vocabulary mastery. In line with this result, (F. Li et al., 2023) said that students identified three beneficial impacts of online games, which included fulfilling personal growth needs, meeting social life requirements, and enhancing academic performance. Meanwhile, Hafiza Razami & Ibrahim (2022) in their study pointed out that digital educational games were easy to use, had some joyful activities, and provide positive social impacts to the students. However, Seekis & Kennedy (2023) reported that type of abilities or reactions that the player would acquire after playing certain games or reactions that the player will earn after playing kind of games. The reactions could be good or negative such as strengthening social connections or anxiety.

It is clearly described that the game became a great source of motivation for them to explore more vocabulary and students' interest in improving vocabulary grew. The engaging and practical need to communicate with other players served as a strong motivational factor for students to improve their vocabulary mastery. In other words, the interactions with players from different linguistic backgrounds, along with in-game missions and tutorials, contribute significantly to vocabulary improvement. Incorporating functional game elements led to increased student motivation, autonomy, and the development of problem-solving skills, as well as fostering intrinsic motivation Hasram et al. (2021). This finding further highlighted specific game features that facilitated vocabulary development, such as chat features, voiceovers, and live chat functions. Overall, the potential of online games created an enjoyable and effective language learning environment beyond traditional classroom methods AlJeremy (2022). Students said that online games could motivate them to explore and learn new vocabulary, leading to positive changes in their language skills. Thus, Bawa & Brockport (2021) recommended that online games might be used for education and could be a motivational tool for students.

The premise underlying this study rested on the belief that online games harbor distinctive features conducive to the enhancement of English vocabulary. A multifaceted exploration revealed that various components within these games played instrumental roles in enriching players' lexical proficiency. Notably, the chat feature, in-game writings, tutorials, settings, live chat, and the Open Mic feature collectively contributed to the augmentation of players' vocabulary mastery (Qasim, 2021). The chat feature facilitated real-time communication, encouraging players to employ and encounter diverse linguistic expressions. In-game writings, including narratives, dialogues, and instructions, served as additional sources of exposure to language, fostering a context-specific learning environment. Tutorials and settings, designed to guide players through the gaming interface, inadvertently exposed them to a range of vocabulary. Moreover, the live chat and Open Mic features introduced realtime verbal interaction, further immersing players in language-rich environments. The interactive nature of these elements was identified as pivotal in providing an engaging and dynamic learning experience. Through in-game utilization of these features, players were able to expand their vocabulary organically, thereby underscoring the positive impact of online games on language acquisition. Collectively, these findings suggest that online games play a

constructive role in vocabulary mastery and contribute to the promotion of engagement, affirming their potential as valuable tools for language learning within an interactive and immersive digital context (Qasim, 2021).

According to the EFL students' responses, it is understandable that interacting with outsiders through the game and having conversations in English helped in learning new vocabulary and practicing speaking. Some students also mentioned that the experience helped them in everyday situations, such as watching movies or doing assignments in English. This current result is strengthened by a study which pointed out that the online games highly and effectively contributed to the acquisition of knowledge and learning motivation (López-Fernández et al., 2023). Therefore, students used online games containing information on game sites, game wikis, and some YouTube channels (Bawa et al., 2018).

CONCLUSION

Based on the results and discussion above, it can be inferred that online games have a significant and positive influence on students' vocabulary mastery and their language learning experience in senior high school. The research indicates that students have diverse preferences to online games, strong motivations for playing games to increase their vocabulary, and learn new words and phrases through in-game language settings. Moreover, online games help and provide more new vocabulary to practice English better. Thus, it is suggested that students should find relevant and effective games as a learning resource of regular exposure to new vocabulary in the gaming context. In addition, incorporating online games into language learning activities should provide a valuable supplement to traditional classroom methods, offering a more engaging and effective learning environment. However, It is believed that this current research has some limitations such as the participants and the school level involved. Therefore, further research may be necessary to explore the long-term effects and optimal integration of online games as a language-learning tool.

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