

# Examining the Pros and Cons of Using Game-Based Learning for Vocabulary Instruction to Junior High School Students

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**Abstract.** In recent years, there has been considerable change within the educational environment, partly due to innovations in technology and teaching methods. Game-based learning (GBL) is one of the well-known approaches to include game elements in instructional processes to enhance student engagement and learning results. Based on the background above, this study investigates the advantages and disadvantages of GBL in teaching new vocabulary for seventh-grade students at class VII-A of SMPN 25 Surabaya. The researcher conducted a qualitative descriptive study using an open-ended questionnaire with six students in the class for data collection to describe their perspectives. According to the study results, GBL provided an exciting and interesting atmosphere that gave rise to students' interest in learning English, which referred to attention and comprehension. The investigation in question identified several problems, most notably those that pertained to technology limitations, such as device accessibility and internet connection issues, which can hinder the effectiveness of the GBL approach in the classroom.

Keywords: Game-based Learning, Vocabulary Acquisition

## 1. INTRODUCTION

There are few more stimulating regions of the world than education right now, driven to some extent by technology and in many ways by inventive pedagogy. Among the latter, Game-Based Learning (GBL) is a highly sought approach. GBL considers a specific type of game, either digital or not, used with designated learning objectives (Plass & Homer, 2015). This method introduces elements of gamification within direct learning sessions to enhance

engagement, effectiveness, and fun. This kind of learning is fun and can stimulate students to participate in the process of learning (Yen-Ru & Ju-Ling, 2015). The GBL approach is also utilized to enhance the quality and interactive learning part of classroom-based learning. However, in GBL, people mainly assess the impact of English language training concerning effectiveness and efficiency (Tili et al., 2021). As Biemiller (2005) observes that as the students' progress on their language learning, the vocabulary size also changes. Students who are less proficient in this area may fall behind their grade level average at that time.

In teaching new vocabulary to class VII-A students at a state junior high school in Surabaya, game-based learning provides a new opportunity to improve students' understanding and memorization of the subject matter. Using game-based learning can make English language acquisition more enjoyable for students. Septiani corroborates this viewpoint, showing that using GBL in the classroom raises student attention and achievement (Septiani et al., 2021). Aside from that, the benefits of game-based learning include drawing students' attention, encouraging them to think critically after playing the game, and encouraging them to study in class.

According to Yu et al. (2021), game-based learning also has several benefits students can receive during the learning process. For example, they will be more motivated during the learning process because of the educational and interactive learning applied to the game-based learning method. In addition, game-based learning integrated with tools such as Mindtool can improve attitudes and increase students' self-efficacy so that students feel more confident in the learning process. Students can also train their thinking performance, attitudes, motivation, and critical thinking skills. If several positive impacts received by students can be appropriately applied, they can experience an increase in their academic education. Overall, the benefits of implementing game-based learning can be very significant compared to conventional methods that schools have long implemented.

The use of modern technology in the home is spreading among adults and children of all ages, in various settings, and throughout the world (Jerry et al., 2013). Nevertheless, it is impossible to ignore the drawbacks or potential harm that game-based learning could do to classroom instruction and learning activities (Elleman, 2009). Numerous research studies, including one by Qian, demonstrate the detrimental effects of frequent video game use on younger children's emotional states, motivation, cognitive ability, and conduct (Qian & Clark, 2016). These studies provide a contrasting view on games proposed by Yu et al (2021). Games can bring both benefits and defilement. Hence, teachers' ability to select the game content is important.

DeHaan (2019) found several crucial aspects of using games in teaching language and literacy. Games must be carefully integrated into the learning objectives and activities to boost participation and cognitive development. Teacher facilitation and mentoring, along with the appropriate material, help students achieve more. Also, games featuring multimodality can better contribute to students' understanding. Games also facilitate learning activities, particularly those related to the games. An issue to consider is the challenges in connecting the textual meaning to the real-world context.

As a result, scholars can discern between various kinds of game content that are appropriate for use in game-based learning. Foremost, there is something called

a serious game, which is a game that is specifically made for learning purposes and pays attention to pedagogical achievements and training program needs. These negative impacts can have an impact on student learning activities, which will make it difficult for teachers to monitor students. Because this context occurs in junior high school students who still play a lot, the class can be very uncontrolled, which causes other problems and failure to achieve learning goals.

Sailer & Homner (2020) stated that the findings showed some irregularities, indicating that the positive effects of gamification were less significant than the adverse effects experienced by students. The study revealed that the negative results outweighed the benefits obtained from gamification. These adverse effects include instability in students' motivation and behavioral outcomes. While the positive impact of gamification on cognitive outcomes was considered stable, its effects on motivation and behavior tended to be less consistent. This suggests that not all gamification elements produce consistent impacts, especially those concerning motivation and behavior. Another negative impact identified was recognizing the transfer of effects to situations outside the gamification context.

There were indications that significant behavioral changes often only occurred during the intervention and did not always carry over to other non-gamified contexts. In other words, the behavioral effects of gamification on participants may be temporary and specific to the gamification environment. Finally, there is a risk of a mismatch between gamification design and learner needs in the classroom. For gamification to be effective, it must be carefully designed to align with the psychological needs of learners and the types of high-quality learning activities involved. Otherwise, gamification can be ineffective or even detrimental if it does not meet the needs of each individual. Given the many negative impacts, it can be a consideration for teachers to start a better game-based learning method so that the negative impacts on students can be appropriately suppressed and the positive impacts on students can be increased.

After seeing the explanation of the possible impacts that may arise from various perspectives of game-based learning methods, the researcher decided to find out more about the impacts of this game-based learning. Specifically, this study was conducted at a public junior high school in Surabaya for several months as a place for researchers to provide teaching assistance. This study also explores the advantages and disadvantages of learning vocabulary through game-based learning.

Considering the aforementioned studies, it is clear that research on gamification in language teaching does not always give consistent findings. While the benefits of GBL are highlighted, some drawbacks are also acknowledged. By examining the various interpretations of the previous studies above, this study seeks to find empirical evidence from the field concerning the pros and cons of implementing GBL in ELT. In particular, the study mainly aims to determine the benefits, obstacles, and effects of using game-based learning methods experienced by students in grade eight of a public junior high school in Surabaya. The study focuses on students' interactions and outcomes and seeks to provide insight into how game-based learning impacts their learning processes, motivation, and comprehension in the classroom.

This research is significant because it intends to evaluate the impact of game-based learning on student participation and understanding in acquiring new

vocabulary among VII-A students at SMPN 25 Surabaya. This study, which investigates how an interactive and engaging strategy might boost pupil enthusiasm and knowledge, provides significant insights for educators looking for novel strategies to improve learning results. The findings will clearly show how game-based learning may be successfully integrated into the curriculum, possibly transforming traditional teaching methods and creating a more dynamic learning environment.

This research also finds supporting statements regarding the advantages of game-based learning in the classroom. This research highlights the practical significance of introducing educational games into the classroom by demonstrating concrete outputs, such as higher motivation and enjoyment in learning. These findings will help teachers, curriculum developers, and policymakers interested in delivering more enjoyable and compelling learning experiences for children. The insights will determine best practices and strategies for using game-based learning or other approaches in teaching new vocabulary and other subjects.

The last section in this paper outlines some perspectives on possible obstacles and challenges related to game-based learning by examining student obstacles, for example, technological issues, time limitations, and differences in student engagement. This investigation provides a more nuanced assessment of how practical this approach is. Knowing these incapacities is paramount in construing solutions to bridge them, and with such sustainable development, can the induction of game-based learning be successful? Such a close and rigorous scrutiny will ultimately lead to a more sophisticated concept of game-based learning, which can be adopted and adapted in diverse educational contexts.

According to Perrotta et al. (2013), Game-Based Learning (GBL) is a method that incorporates game elements taken from game theory into the learning process. This will be suitable for students because games are an important element in the learning process. Fajarina (2017) also stated that using games in the classroom can encourage students to be more involved and interact with each other.

In line with this, students can be enthusiastic about playing the game because they will feel happy and interested throughout the learning process. In addition, GBL provides exciting features and real-time feedback so teachers can create many learning strategies when providing material to students. To achieve the purpose of using games in language learning, there are principles to adhere to (Adipat et al., 2021). Some crucial approaches to consider include theories related to engagement, narrative-centered learning, and problem solving. For the game to enhance engagement, it must have interactive features with fantasy elements. Also, games need to rigorously associate features in the game with real-life context. This will build the narrative representing the real-life situation, enabling students to connect the game to the real-world context. Games also have to provide progressions in which students, as players, are challenged to go through the adventures, identify problems, and propose solutions.

Alqahtani (2015) said that vocabulary learning is needed to express our ideas and understand the language. Vocabulary is essential to master. In other words, vocabulary learning is the ability to understand lexis, which is very important to master because learning much vocabulary will make it easier for students to read, write, listen, and speak English. Vocabulary learning is essential to learning a foreign language because the meaning of new words is often

emphasized in books and in class.

Vocabulary learning is also an important part of language teaching and is very important for language learners. Recent research suggests that vocabulary instruction may be problematic because many teachers are unsure about best practices and sometimes do not know where to begin establishing an instructional emphasis on word learning (Berne & Blachowicz, 2008).

## 2. METHOD

This study used a qualitative descriptive approach to investigate students' perceptions of the benefits and limitations of using game-based learning to teach new vocabulary in English language classes. The qualitative method was employed because it allows for a thorough examination of students' real-life experiences, thus yielding better knowledge of how they interact with and respond to GBL strategies in ELT class. Under the qualitative method, the study's data source was six students in the eighth grade 8 of a public junior high school in Surabaya. These students previously attended GBL sessions in their ELT class. The selection process was motivated by specific criteria to ensure that the participants had enough experience with GBL, providing input into how GBL game-based education affected their perception of positive and negative aspects. The data collected about their experiences of learning English through games, particularly in the context of learning vocabulary, became significant information for the study.

Data were collected using structured interviews to systematically resolve the research questions on GBL. Aspects explored relate to the usefulness and challenges of GBL. Participants were asked to share ideas, opinions, and feelings about things that could all be identified as prominent moments in interviews created to showcase learning experiences when games were integrated in English teaching and learning. The interview questions explored various aspects of their experiences with GBL, including but not limited to motivation, recollection of new vocabulary learned through games, and overall learning satisfaction. In addition, the interview facilitated a comparison between students and their responses were accurately compared to one another, which enabled a proper investigation into common themes in experiences and individual differences.

In this study, the researchers examined the data collection process, looking for unique advantages of game-based learning instead of other forms of classroom-based intervention. For example, reducing dropout rates, improving affect, enjoyment in the educational setting, and enhancing vocabulary retention. This study also examined any disadvantages students may encounter with innovations or non-traditional teaching methods regarding focus, learning rate, or unique concerns that some students experience in GBL. This study provides a contextual understanding of the interplay between the usefulness of game-based learning as an instrument and potential issues in the field for EFL junior high school students by evaluating both sides.

## 3. RESULT

The results of the interviews show that most students who engaged in learning activities with Game-based Learning (GBL) methods got a good response.

The majority of students expressed that it improved their learning experience. They said that the game mode of learning made them enthusiastic and excited about the course. When asked if GBL is compelling and engaging, many students felt it helped improve their English understanding and made the process more fun. Several students also mentioned that this method would not make them feel bored in the classroom.

The interview also explored whether learning vocabulary using GBL was more interesting than traditional learning techniques. The question reads, "Do you think learning by using games makes it more interesting to learn English vocabulary? Explain the reasons!" The students responded that this approach simplified learning vocabulary compared to older methods. They think this method helped them to understand the vocabulary better. Some of the students also indicated that GBL brought a different and less monotonous teaching variability, which allowed them to have a new and fresh experience.

The third question expresses a perspective on "whether the Game-Based Learning (GBL) method is more effective in teaching English to junior high school students." Most students agreed that this strategy is more effective and allows them to understand the subject better. A student tweeted, "Because we are still young people, and technology has become an important part of our daily routines, we are more interested when learning combines technological devices, rather than depending solely on traditional methods." Furthermore, some students reported that the existing curriculum frequently bores them, and they discovered that the GBL method alleviates this boredom, improving their interest in studying English.

Very favorable results were achieved by the end of the first interview session, which addressed the first study question, "Are there any advantages to implementing game-based learning in learning new vocabulary for class VII-A students at SMPN 25 Surabaya?" Most reported that GBL boosted their interest and excitement for learning, mainly English. They believed this strategy made it simpler to absorb new language and made studying more interesting and less monotonous than previous methods. Some students felt that GBL was more useful for their lives because they were already comfortable with technology. As a result, GBL is thought to be more successful and entertaining for junior high school students studying English.

In the following question, which focused on the obstacles encountered through implementing the Game-Based Learning (GBL) technique, the researcher received various responses highlighting numerous issues. The question is, "In your opinion, what challenges might arise when using game-based learning to teach new vocabulary to VII-A students at SMPN 25 Surabaya?" Have you had any experience with them? The responses from the students personally were quite diverse; some stated the obstacles they encountered while carrying out activities, others stated the obstacles to suitable regional internet networks, and the majority stated that the class became more crowded because it was challenging to plan and oversee students who were enthusiastic about studying using this GBL methodology.

The next question that still leads to the possibility of shortcomings of this method when applied in class, while students are studying. The question is, "Do you feel distracted or unfocused when learning vocabulary using games? What makes you feel that way?". Most students answered no because they felt this method made them more interested in learning English. Some said that because they

were still teenagers and preferred to play, this method also channeled their pleasure in playing, but still in the context of learning English, which in this case was learning vocabulary.

The final question of the session asked students about things they disliked or obstacles they encountered when learning new vocabulary utilizing the Game-Based Learning (GBL) method. Some students reported that increased activity in class often caused distractions, making it harder for them to concentrate. Other students mentioned technical issues with their devices, such as the problem of slow devices and their internet connection, which sometimes interfered with their ability to access certain websites or programs assigned by their teachers. The students can use their cellular data network, but most do not have an internet quota. To address the problem experienced by these students, the school provides Wi-Fi so that anyone in the school environment can access the internet. These things also create a new problem, because many students connected to the same network often have slow internet speeds.

The student deficiencies section highlighted numerous issues, such as challenges with their mobile phones and slow internet connection. While that approach resulted in larger and less-organized classes, some students said it kept them engaged with the material. Students were asked if they got distracted while studying. The majority responded that GBL helped them to study properly as it included the fun of gaming and studying. However, some students struggled with power cuts during classes and tech problems that curtailed program access. While teachers did give out private line access, they made it seem like the increase in subscribers created more constraints on speed and network.

Based on the interviews done with grade VII-A students at SMPN 25 Surabaya, teaching new vocabulary using Game-Based Learning (GBL) provides many benefits. Most students indicated that games-based learning promoted engagement and motivation, thus making learning more enjoyable. As Saputra's theory explains, students will also find an increase in learning motivation in classes that are used with GBL games, so using GBL is helpful towards their learning achievement (Saputra et al., 2021). GBL was reported by many participants as having increased their awareness of new vocabulary compared to usual methods and making complex information easier to understand. Regarding its advantages, some challenges were found concerning the delivery of GBL itself. Students experienced several issues during the learning session. Some of the disadvantages are fewer in number and slow internet connections. These technical challenges sometimes hinder access to needed applications, thus hindering learning. While enthusiasm and high energy in the classroom are good, they sometimes cause disruptions. As a result, this can make it more difficult for teachers to manage the classroom. The results of this kind of research were once expressed by Qian and Clark, who said that a good GBL approach should focus on learning activities, so that academic achievement can be considered. The possibility of errors can be minimized (Qian & Clark, 2016). Though students considered these obstacles, many considered that the positive aspects of GBL outweigh the disadvantages since this method maintains students' attention and enthusiasm. In this regard, teaching new vocabulary to grade VII-A students at SMPN 25 Surabaya was an interesting approach by using GBL for increasing their engagement and comprehension. GBL will require teachers to be prepared for the possible technical problems and

disruptions in classroom management so that this practice will be smooth and enjoyable for all the students.

#### 4. CONCLUSION

Conclusion in the implementation of the GBL technique in class VII-A SMPN 25 Surabaya, the students responded very positively. Students are excited to learn English with new vocabulary. Many students mentioned that GBL techniques are interesting and motivate them to study English more. One of the single best reasons for all this excitement over GBL is that it makes the learning environment active and dynamic, allowing students to feel involved in learning, rather than receiving it passively. This adjustment raises their concentration and focus in class, making the learning experience more present and memorable. Technical problems were sometimes caused by the devices' limitations and poor or intermittent internet connections. Students indicated that these disruptions to learning in the classroom only occurred infrequently.

Many respondents also said that they could only persist in such challenges because of how engaging the game was. In their opinion, by playing the game, they would learn the topics taught in school better because it was presented in a visually appealing and contextually meaningful way. Students also stated that GBL allowed a sense of achievement and movement because the game gave them instant feedback. This enhanced their achievement and increased their confidence and enthusiasm in taking further courses. In this way, children understood the material better and achieved a more positive approach to learning English. The final analysis confirmed GBL as a practical, game-like, and innovative approach to teaching junior high school students interested in joining a foreign language learning environment. The GBL approach improved students' academic results and set their long-term English language interests.

From a more in-depth study perspective, it is suggested that some classroom management strategies be elaborated on and tested to help overcome specific problems during GBL implementation and to keep students attentive and listening to what the teacher says. It is necessary to elaborate further on which modifications and innovations in game design are more appropriate to keep it interesting and in line with students' interests and age-specific features. This needs to be considered to increase their engagement and motivation. Further research could also assess the long-term effects of GBL implementation on students' academic success as measured by the improvement in comprehension of descriptive texts. More advanced technologies, such as VR applications, could be integrated. It is also plausible that these suggestions could update previous research in these areas and bring them into current relevance according to the conditions that existed at the time of the study.

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