# EFL STUDENTS' PERCEPTION TOWARDS THE USE OF BAAMBOOZLE FOR VOCABULARY LEARNING

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## ABSTRACT

Various methods are used to allow students to be more involved in a meaningful vocabulary learning atmosphere, one of which is using technology-based gamification. This study aims to investigate EFL learners' perception of technology-based gamification using Baamboozle for English vocabulary learning. Accordingly, following this objective, a qualitative approach was used, with a case study as the research design. In collecting the data, the researchers utilized semi-structured interviews with two high-achieving and two low-achieving students in the 8th grade International Class Program at one of the private junior high schools in Malang, Indonesia. After gaining the data, the researchers analyzed it through three phases: familiarizing and organizing, coding and reducing, and interpreting and representing. The results showed that students respond positively to Baamboozle for vocabulary learning. Their perceptions are then categorized into seven points: 1. Using Bamboozle is an effective way to learn vocabulary; 2. The use of technology in the learning process is important; 3. Learning vocabulary using Baamboozle is more enjoyable; 4. The use of Baamboozle can increase vocabulary; 5. Favorite features of Baamboozle; 6. Students' difficulties in using Baamboozle; 7. Baamboozle motivates students to learn vocabulary. Thus, utilizing technology-based gamification using Baamboozle is recommended in learning English vocabulary.

*Keywords:* Baamboozle, Students' Perception, Vocabulary Learning

## A. INTRODUCTION

In a foreign language acquisition, vocabulary is essential to help students produce effective oral and written communication. According to Ghalebi et al. (2021), vocabulary acts as a helpful basis for students to achieve effective communication and sufficient performance in speaking, listening, reading, and writing. Li (2022) mentioned that vocabulary holds a significant position as one of the fundamental elements of language and has a vital role in acquiring language. In addition, Jannah & Syafryadin (2022) remarked that students need to master vocabulary since it is an essential basis of language acquisition that helps students produce verbal and oral communication. Considering the importance of vocabulary in a person's language acquisition, mainly to enhance real-life communicative competence and comprehension of four language skills, all language learners, especially learners of a foreign

language, should have adequate vocabulary knowledge to gain satisfactory performance in language production.

However, some students still believe learning vocabulary is demanding, especially regarding phrasal verbs in English as a Foreign Language (EFL) vocabulary. According to Frances et al. (2020), foreign language learners may find learning new words challenging since it is not their native language. Roohani & Vincheh (2021) also stated that learning vocabulary can be demanding, especially regarding phrasal verbs, since these verbs serve significant functions in grammar. Even though English phrasal verbs may be complex for students in EFL settings, Chou (2020) argued that it is essential to allow students to maximize their utilization of phrasal verbs within the language classroom because phrasal verbs help students improve fluency and achieve a native-like production in the English language. Seeing that having sufficient knowledge of phrasal verbs can boost students' language fluency, and a lack of vocabulary knowledge could distress language learners, research on English vocabulary will continually persist and develop.

Aside from research on English vocabulary that will continually develop, technology has also undertaken massive development following the era. Technology has become a necessity that is closely related to human life, especially for the new generation, such as Generation Z. Fitri et al. (2022) stated that students nowadays live in a digital era where they utilize technologies in their daily lives. As a result, besides the health, economy, government, and other sectors, technology has also contributed to the educational field to help optimize learning. Various digital learning platforms and innovations in teaching and learning activities relying on technology have also emerged over time, mainly since the COVID-19 pandemic, which required all activities, including learning, to be conducted online. In language learning, technology can provide meaningful understanding for students, especially Generation Z students, who are very familiar with the presence of technology in their daily activities. In line with this case, Hao et al. (2021) found that students perform better in long-term retention of new words when assisted with technology-based rather than non-technology-based vocabulary learning. Rintaningrum (2023) also stated that technology in language learning, especially in English learning, could help students enhance their English mastery and grow their independence in learning. Therefore, teachers must also take this opportunity to enhance the quality of learning through technology integration, mainly to encourage students' motivation and engagement in the learning process.

One example of integrating technology into English language learning is using Baamboozle as a part of technology-based gamification. In education, specifically in English learning, Redjeki & Muhajir (2021) concluded that gamification refers to using game elements in teaching and learning, which can be highly beneficial for enhancing English skills. Furthermore, Saud et al. (2022) defined Baamboozle as a collaborative online game-based platform to build interactive activities that involve all students in the process of gaining knowledge through its interactive features. Winaningsih et al. (2022) revealed that using Baamboozle as learning media seizes students' attention and stimulates their competitive nature to increase learning motivation. In terms of oral production, Sáez & Espinoza (2023) also found that Baamboozle enhances students' willingness to communicate. In the educational institution where this study was conducted, Baamboozle was used as an English vocabulary teaching tool about phrasal verbs in a language development program in the 8$^{th}$ grade of the International Class Program. The application of this media, which drew on the concept of technology-based gamification, was aimed to increase students' active

participation during the learning process and maximize their learning outcomes in learning phrasal verbs, considering that learning phrasal verbs is still challenging for some EFL students.

Several studies have also shown the advantages of using technology-based gamification in EFL settings. Thuy & Hung (2021) revealed that teachers positively perceived that using gamification applications was advantageous for instructing young learners in speaking skills. Furthermore, in vocabulary learning, Gao & Pan (2023) declared that gamification through gamified vocabulary learning apps is designed to make vocabulary learning exciting. Likewise, Sadeghi et al. (2022) found that gamified instruction was effective for learning and practicing vocabulary. They also added that using game elements actively in classroom practices can help maintain students' interest and curiosity in the course. Due to the positive impacts of technology-based gamification, Chan & Lo (2022) also suggested that educational institutions provide additional resources, training, and technical support as imperative to foster game-based learning in the classroom, creating an interactive learning environment for students in this new era of technology. As for Baamboozle itself, Sáez & Espinoza (2023) found that Baamboozle is a valuable resource for improving students' willingness to communicate in an EFL online teaching setting. Although several studies have confirmed the benefits of technology-based gamification, EFL students' perceptions of this field need to be explored.

Various studies have been conducted regarding student perceptions towards gamification using various online-based applications or sites, which were proven to have beneficial effects on students' performance (Almusharraf, 2023; Chan & Lo, 2022; Jannah & Syafryadin, 2022; Pham, 2022; Sadeghi et al., 2022; Tao & Zou, 2023). However, research that specifically focused on students' perception of using Baamboozle for vocabulary learning is still limited. Hence, to complete the gap between the previous studies, this research aims to investigate EFL students' perception of technology-based gamification using Baamboozle for English vocabulary learning by involving students with high and low achievers in the International Class Program at one of the private junior high schools in Malang, Indonesia. Based on the description above, the research question arises: What are the EFL students' perceptions towards the use of Baamboozle for vocabulary learning?

## B. METHOD

This study was conducted at one of the private junior high schools in Malang, Indonesia, and focused on students' perception of Baamboozle for vocabulary learning. This study used a qualitative approach, with a case study as the research design. According to Creswell (2015), a case study, which relies on comprehensive data collection, is used to thoroughly investigate a confined system such as an activity, event, process, or individual. The researchers used a semi-structured interview guideline as the instrument for data collection to gain more in-depth information on students' perceptions of using Baamboozle in vocabulary learning. According to Hadijah et al. (2020), the semi-structured interview allowed the researchers to further explore information by asking follow-up questions based on the participants' responses. There were eight questions regarding effective ways to learn vocabulary, the advantages and disadvantages of technology-based gamification, and the advantages and disadvantages of Baamboozle for vocabulary learning. These questions were translated into Indonesian to help the participants understand the questions well.

The researchers interviewed two high-achieving and two low-achieving students from the 8th grade International Class Program, based on the recommendation of the English teacher, who is also the homeroom teacher of this class. In this case, sample elements that are considered representative are chosen from the population (Ary et al., 2009). According to the English teacher, students' academic abilities were determined based on exam results and active participation during the learning process. The 8th grade International Class Program was chosen because this class has used Baamboozle to learn vocabulary. Additionally, the International Class Program students are instructed to use foreign languages (English or Arabic) as their interactional language during the learning process. Creswell (2015) also noted that purposive sampling involves researchers choosing specific individuals and locations to gain insight into the main phenomenon.

The interview process was conducted face-to-face, and the researchers recorded the audio and video during the interview process to support the data analysis. It lasted about 25-30 minutes using the validated interview guidelines by an expert in English Language Teaching (ELT). This instrument validation process included developing the instrument under the specific theory and the aspects to be measured. After that, it was reviewed and consulted with the expert. In addition, the researchers used data triangulation to increase the data validity from the interviews. According to Denzin & Lincoln (2018), data triangulation is a validation strategy that entails the integration of diverse sources of data that are analyzed at varying moments, locations, and individuals. In this present research, data triangulation was carried out in the second phase of data analysis, namely coding and reducing.

After gaining the data, the researchers analyzed it through three steps: familiarizing and organizing, coding and reducing, interpreting and representing (Ary et al., 2009). First, in familiarizing and organizing the data, the researchers comprehensively listened to the interview recording to form transcriptions into two languages, Indonesian and English. After the transcription, the researchers listened to the audio interview again and reread the transcripts. Second, to code and reduce the data, the researcher did the data triangulation by classifying the data to identify patterns. This step was done by recognizing similarities and differences in the data and then decreasing the codes into suitable categories. Last, in interpreting and representing the data, the researchers interpreted the data into an extensive description based on the background of the study, students' perceptions, and theoretical aspects of the study to answer the research question.

## C. FINDINGS AND DISCUSSION

After collecting and analyzing the data, the researchers noted several findings regarding students' perception of using Baamboozle for vocabulary learning at one of the private junior high schools in Malang, Indonesia. The students' perceptions are categorized into seven points: 1. Using Bamboozle is an effective way to learn vocabulary; 2. The use of technology in the learning process is important; 3. Learning vocabulary using Baamboozle is more enjoyable; 4. The use of Baamboozle can increase vocabulary; 5. Favorite features of Baamboozle; 6. Students' difficulties in using Baamboozle; 7. Baamboozle motivates students to learn vocabulary.

### 1. Using Bamboozle is an Effective Way to Learn Vocabulary
In this section, the researchers found that high-achieving and low-achieving students used different learning strategies. High-achieving students used fun ways to learn vocabulary, such as by playing. Meanwhile, low-achieving students used the method of translating the

vocabulary into Indonesian. However, after getting to know Baamboozle, these low-achieving students believed learning through technology-based gamification was effective.

> "I prefer learning by playing or listening to songs because the vocabulary will not remain in my brain if I just read. Vocabulary learning using Baamboozle is effective because the more fun the learning is for me, the more the learned materials stick in my brain."
>
> (Student 1)

> "One effective way to learn vocabulary is by playing a game, one of which is when we use Baamboozle. When I only read the vocabulary, that method only has slight effectiveness since I prefer learning that is presented in a fun way."
>
> (Student 2)

Student 1 and student 2 were high-achieving students. They preferred attractive learning styles for vocabulary learning. They also emphasized that if they only read the new vocabulary they learned, the vocabulary would only last for a while in their memory. In conforming to this finding, Ahmed et al. (2022) mentioned that game-based learning tools effectively enhance vocabulary recall and retention, indicating that using games in language learning can mitigate stress levels and optimize learning results. Patra et al. (2022) also highlighted that utilizing digital game instructions benefits students' vocabulary acquisition and enhances the enjoyment of learning new words for students, resulting in faster acquisition and retention.

## 2. The Use of Technology in the Learning Process is Important
Among the four sub-dimensions asked, high- and low-achieving students believed implementing technology-based gamification had benefitted their vocabulary learning compared to the conventional learning method, where previously, they were only instructed to write several vocabulary lists and look for the meanings.

In this case, high- and low-achieving students mentioned that using technology for learning, specifically for vocabulary learning, was significant because it could efficiently increase their new vocabulary and provide an exciting learning atmosphere.

> "Technology is very important for learning, of course. We can learn more new vocabulary from technology, so I prefer to use it."
>
> (Student 1)

> "The positive thing about using technology is that we can expand our vocabulary, and learning becomes more exciting."
>
> (Student 2)

High-achieving students showed the same responses, believing that using technology in vocabulary learning could increase their vocabulary by a significant amount. Students 3 and 4, who were low-achieving students, also revealed the same answers. They believed that using technology for vocabulary learning results in straightforward learning and increasing vocabulary.

> "It would be easier for us to search for vocabulary if we used technology. As a result, learning vocabulary would be simple, and our vocabulary would increase because

we got further vocabulary. On the contrary, it would be difficult if we did not use technology because when we use a dictionary, we must look up the words first and then look for the meaning."

(Student 3)

".… using technology to learn vocabulary has benefits, such as increasing vocabulary to remember new vocabulary more easily."

(Student 4)

These findings align with Alfuhaid (2023), who found that using digital games for vocabulary learning boosts students' vocabulary acquisition. Furthermore, Aflah (2019) affirmed that integrating technology within the classroom, especially if it is equipped with explicit learning frameworks, can enhance the effectiveness of teaching and learning and allow valuable opportunities for students to enhance their language proficiency.

### 3. Learning Vocabulary Using Baamboozle is More Enjoyable
High- and low-achieving students equally discerned the difference after using Baamboozle for their vocabulary learning. They mentioned that learning became more enjoyable after using Baamboozle as a vocabulary learning medium.

"I felt the difference in learning after using Baamboozle compared to the learning I had previously participated in without using Baamboozle. The reason is that we use technology and can play around, so it is more exciting. Meanwhile, in the past, I was given questions more often and then told to use a dictionary, so it was a bit boring."

(Student 1)

"The difference is that we can access a larger vocabulary, so we can get more vocabulary, rather than if we did not use Baamboozle. In addition, when we did not use Baamboozle, we only listened to one teacher, which bored us. On the other hand, if we use Baamboozle, we are divided into several teams, and it becomes more exciting."

(Student 2)

High-achieving students stated that learning before using Baamboozle was boring because they were only told to listen to the teacher. Student 2 also explained further that when using Baamboozle, they are divided into teams, which makes learning more fun.

"Yes, there is a difference before and after using Baamboozle. When using Baamboozle, I feel more enthusiastic, and learning becomes more exciting. Moreover, Baamboozle has score features, so we are excited to continue adding scores. Furthermore, our knowledge increases, and I can remember new vocabulary more easily. Meanwhile, learning vocabulary will not be that fun without Baamboozle since we only answered questions from the teacher."

(Student 3)

"Yes, I feel the difference. After using Baamboozle, learning becomes more interesting. It also eases me into remembering new vocabulary. Meanwhile, before using Baamboozle, the teacher would give vocabulary, and we were told to write it in a book and turn it into a story or sentence, which made it less enjoyable."

(Student 4)

Similar to the excerpts of students 1 and 2, the excerpts of students 3 and 4 also mentioned that learning before using Baamboozle was less exciting because they only answered and followed the teacher's orders. Furthermore, they also said that using Baamboozle in vocabulary learning made it easier for them to remember new vocabulary because they learned in fun conditions. According to Hao et al. (2021), using technology to learn vocabulary is more advantageous than traditional instructional methods without technology assistance since technology improves students' long-term vocabulary retention. In addition, Saud et al. (2022) found that Bamboozle and Quizziz established a more enjoyable learning setting than the conventional method because these platforms encourage students to excel in the material and defeat the quiz, which coordinates with the purpose of gamification, offering challenges, points, competitions, and rewards.

In increasing focus, high-achieving students perceived positively that besides making learning exciting, the use of technology-based gamification using Baamboozle had a positive impact on increasing their learning focus.

> "I have not felt the negative side, or it does not exist. The positive side is that I am happier because the learning atmosphere still exists even though we learn while playing. I can focus more on the game but, at the same time, learning vocabulary. I also feel more involved in learning because I am more focused. In contrast, learning becomes boring without technology-based gamification."

(Student 1)

> "On the positive side, it excites us to participate in the learning process because we can learn vocabulary while playing and working in groups. I can also focus on learning because I study in a happy condition. As for the negative side, I have not felt it so far."

(Student 2)

According to the excerpts, students 1 and 2 commented that technology-based gamification made them learn happily and helped them focus more on what they were learning. Along with these results, Zainuddin et al. (2020) mentioned that incorporating game-like elements in gamification has the potential to create more captivating and enjoyable activities within educational settings. In addition, Li et al. (2023) mentioned that gamification has been proven to boost students' levels of involvement and enhance activity results. Due to these advantages, gamification is proposed to enhance students' accomplishments, concentration, and satisfaction.

## 4. The Use of Baamboozle Can Increase Vocabulary
According to the excerpts, both high- and low-achieving students agreed that technology-based gamification was advantageous for their vocabulary learning because the learning environment became exciting. Additionally, students 3 and 4 stated that technology-based gamification could increase their vocabulary acquisition more excitingly and easily.

> "There are many positives, such as increasing my new vocabulary more easily and excitingly, improving teamwork, and boosting my competitive spirit because I feel like I have to win as opposed to the other team."

(Student 3)

> "The positive side of using technology-based gamification through Baamboozle is that it excites me to increase my vocabulary because learning becomes easier, more comfortable, fun, and enjoyable. As for the negative side, I have not found it yet."
>
> (Student 4)

In agreement with this result, Daulay & Adelita (2023) also found that using gamification through Scrabble raised students' motivation to learn, which led to a related increase in their acquisition of vocabulary. Additionally, Ahada (2021) reported that gamification could enhance students' vocabulary acquisition, as most of the students expressed a preference for Marbel over conventional worksheets when learning vocabulary.

In terms of vocabulary retention, high- and low-achieving students perceived using Baamboozle for their vocabulary learning as positive. They mentioned that learning became exciting. Therefore, they could better remember the new vocabulary they had acquired.

> "The benefit is that they are easier to access. So, the benefits are more than learning without digital-based interactive games. In addition, learning becomes exciting, and we can learn more about using technology. I also want to compete with my friends in this digital-based interactive game. Then, if we discuss in groups, we can share knowledge."
>
> (Student 1)

> "Digital-based interactive games make the lesson exciting and interesting because we can learn while playing. Apart from that, I can better remember the vocabulary I have learned through utilizing this game."
>
> (Student 2)

As in the excerpts, high-achieving students agreed that digital-based interactive games make learning more exciting. Likewise, besides making the teaching and learning process exciting, low-achieving students added that digital-based interactive games helped them remember new vocabulary more easily.

> "The benefit is that it eases me to remember the new vocabulary because we can know what a vocabulary means, when to use it, and how to write and pronounce it. I am also more interested in learning new vocabulary using Baamboozle because, besides being fun, Baamboozle is also equipped with clues to answer questions."
>
> (Student 3)

> "The new vocabulary I acquired became easier to remember because this digital-based interactive game improved communication between group members. I like group activities because they are exciting. Moreover, in Baamboozle, we have to choose a number for our question and guess the answer to the shown question."
>
> (Student 4)

Correlating with the results, Far & Taghizadeh (2022) revealed that gamification in language learning environments, both digital and non-digital, has the potential to be remarkably invaluable in enhancing learning outcomes and transforming classes into enjoyable and interactive settings. Additionally, Ali et al. (2022) disclosed that utilizing web-based games

for vocabulary learning allows adult students to acquire a wide range of new vocabulary and aids them in short-term and long-term retention.

## 5. Favorite Features of Baamboozle

According to the excerpts, students 1 and 2 revealed that the power-up feature on Baamboozle is their favorite feature about this website because it encourages their competitive energy, where they feel they have to win the game, especially if another team takes their collected points. This finding correlates with Winaningsih et al. (2022), who found that using Baamboozle as learning media seizes students' attention and stimulates their competitive nature to increase their learning motivation. In addition, Rahmani (2020) mentioned that gamification has advantages for students, especially in elevating motivation, performance, life skills, cognitive achievements, social interaction, self-sufficiency, and competitive energy among students.

> ".... I like the power-ups feature, although I usually feel annoyed if another team takes my team's points. On the positive side, I have the motivation to win those points again. In addition, because Baamboozle is displayed on an LCD (Liquid Crystal Display), we can focus more on thinking since we do not need to access it via phone."
>
> (Student 1)

> ".... I like the power-ups feature because we can choose what we want to use and the numbers for our questions. As a result of the power-ups feature, I also feel like I have to win the game. I also consider that Baamboozle, which is only displayed by the teacher via LCD, is a benefit because we seldom use it. Additionally, it can decrease the distraction of phones, like when we access ourselves."
>
> (Student 2)

Furthermore, they also revealed that Baamboozle, which only needed to be operated by the teacher via the LCD projectors, helped them focus on learning because they did not need to access their smartphones. As a result, it reduced distractions from smartphones. Regarding the negative impact of operating smartphones in the classroom, Amez & Baert (2020) stated that using smartphones might disrupt learning activities because they can be a diversion, resulting in task shifting. Smale et al. (2021) also added that besides distracting students' focus during the learning process, smartphones have the potential to be used in cyberbullying and cheating, which wound mental health.

As for low-achieving students, they are partial to Baamboozle because this website has animations. They said that Baamboozle's animations can give them hints to answer the vocabulary questions. In line with this finding, Waworuntu & Suyoto (2021) revealed that text, images, sound, animation, and video can boost student engagement and learning results.

> "What I like about Baamboozle, apart from the fact that it has many game types to choose from, which makes it fun, is that it has animations that help me understand the clues to the questions. This animation also interested me in Baamboozle, so I want to continue playing Baamboozle."
>
> (Student 3)

> "I like the appearance where we have to choose numbers to get questions, equipped with animations as clues to the answers. In addition, I also like the power-up features on Baamboozle because it can add and subtract points, which is interesting."

(Student 4)

## 6. Students' Difficulties in Using Baamboozle

High- and low-achieving students stated that they had no difficulty with Baamboozle features. The only difficulty or challenge they faced was in the vocabulary questions displayed. However, each person who controlled the game or created the questions could even adjust or edit these questions. In the same report, Winaningsih et al. (2022) explained that as a controller, the teacher can modify the game's visual formation to captivate students' attentiveness.

> "The challenges are more related to the vocabulary content or material displayed because there are usually several words I might not know, making them difficult to answer. As for the features, I have no problems because they are easy to understand."
>
> (Student 1)

> "I have not experienced any challenges or difficulties in using Baamboozle. The power-ups feature for decreasing points sometimes annoys me a bit, but it is fun because we can have another opportunity to add points."
>
> (Student 2)

> "The challenge that I felt was in the vocabulary content. Maybe the clues for the questions can be made easier. As for the features of Baamboozle itself, I do not experience any difficulties because I mostly feel the convenience."
>
> (Student 3)

> "The only challenge I felt when using Baamboozle was in the vocabulary content or questions presented. As for the features of Baamboozle itself, nothing was annoying or bothersome to me."
>
> (Student 4)

According to the excerpts, students 1, 3, and 4 expressed that the vocabulary questions displayed when using Baamboozle were quite challenging. In connection with the vocabulary questions presented, Baamboozle was used to learn phrasal verbs, and on one occasion, the phrasal verbs material presented was vocabulary related to daily activities. The 8th grade International Class Program students were grouped into several teams and asked to answer the vocabulary based on the given clues.

## 7. Baamboozle Motivates Students to Learn Vocabulary

According to the excerpts, the researchers noted that high- and low-achieving students responded the same way that Baamboozle could increase their motivation and enthusiasm for learning vocabulary.

> "Using Baamboozle can motivate me to learn new vocabulary because learning from games like Baamboozle is more exciting. I am also motivated to look for vocabulary that I do not know so I can answer the questions correctly. In addition, vocabulary learning using Baamboozle is fun because we have to find the answers when discussing with friends. In addition, we get more points when we get the answer right, so my competitive energy can be motivated."
>
> (Student 1)

> "Yes, using Baamboozle can motivate me to learn new vocabulary because the class atmosphere is exciting. Besides that, Baamboozle also motivates me to work together to solve the answers so that I feel like I have a role in the group."
>
> (Student 2)

Students 1 and 2 stated the same rationalization that Baamboozle could motivate them to learn new vocabulary. They remarked that the motivation to learn the new vocabulary came from the excitement of using Baamboozle, compared to not using it. On the other hand, students 3 and 4 stated that Baamboozle, which supported group learning activities, allowed them to discuss and have a role during learning. Therefore, they conveyed that Baamboozle could increase their motivation to learn new vocabulary.

> "Yes, Baamboozle can increase my motivation to learn new vocabulary because Baamboozle has animations, sounds, and features that make learning more exciting. I also feel more active during learning because my friends and I can discuss the correct answers to the presented questions."
>
> (Student 3)

> "Yes, Baamboozle can increase my motivation to learn new vocabulary because we play it like a game but use vocabulary. Moreover, Baamboozle supports learning with friends, so I have a role during learning where I can discuss with my friends."
>
> (Student 4)

In line with the motivation made by Baamboozle above, Saud et al. (2022) found that using Baamboozle has a highly effective impact on boosting students' engagement, motivation, and English proficiency in online English classes. In other research beyond EFL settings, Rahayu & Rukmana (2022) also mentioned that Baamboozle has the advantage of enhancing the classroom environment and students' motivation, refining students' learning outcomes, and promoting continued learning. Apart from that, Kabilan et al. (2023) also found that incorporating gamification using technology benefited in fostering students' motivation to learn, aiding the boost of critical thinking and problem-solving skills, embracing students in the learning process, promoting meaningful interactions, and acquiring clear teaching and learning objectives.

## D. CONCLUSION

In this study, the researchers dig into the perception of EFL students at the secondary level of technology-based gamification using Baamboozle for vocabulary learning. Using data triangulation, the results showed that two high-achieving and two low-achieving students from the 8th grade of the International Class Program at one of the private junior high schools in Malang, Indonesia, have the same views about using Baamboozle for vocabulary learning. They responded positively to using Baamboozle as a vocabulary-learning medium. The results showed that students respond positively to Baamboozle for vocabulary learning. Their perceptions are then categorized into seven points: 1. Using Bamboozle is an effective way to learn vocabulary; 2. The use of technology in the learning process is important; 3. Learning vocabulary using Baamboozle is more enjoyable; 4. The use of Baamboozle can increase vocabulary; 5. Favorite features of Baamboozle; 6. Students' difficulties in using Baamboozle; 7. Baamboozle motivates students to learn vocabulary.

According to the findings, utilizing technology-based gamification using Baamboozle is recommended in learning English vocabulary and other language skills activities such as speaking, reading, listening, or writing so that students can engage more in a fun learning atmosphere. Apart from that, further research needs to examine the influence of using Baamboozle or technology-based gamification on EFL students' language skills performance to rig out the teachers or the school stakeholders with new insights to utilize and upgrade teaching and learning processes using technology-based gamification.

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