

The Application of Quizizz in Learning Reading: A Study on Students' Perceptions

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ABSTRACT

With the advent of technology in the 21st century, learning English has become more fascinating and appealing, especially in reading, a receptive skill which is considered to occasionally exhaust students. This study aimed to investigate the application of Quizizz to learning reading skills for elementary learners at university. Thirty-four elementary students from the Intensive English course at International University were chosen as participants to take part in this research to figure out the students' perceptions about Quizizz in learning reading skills. After six weeks of implementing Quizizz into teaching and learning reading skills, students were required to fill out the survey and six voluntary interviewees joined a brief interview to collect more specific data. The findings revealed that most participants not only shared a positive viewpoint about the integration of Quizizz in their current reading learning but also wanted to use Quizizz in other classes in the future as well. Overall, the research brought a positive result with the hope that lecturers could consider employing Quizizz in their teaching to increase students' engagement and create an active and exciting atmosphere in their classroom.

Keywords: application of Quizizz; reading skills; students' engagement; students' perceptions

INTRODUCTION

Learning a foreign language has become an integral part of the human educational aspect. These days, due to globalization, the need for communication among nations is increasingly rising. As a result, English has become the global language to serve as a bridge connecting countries in the areas of technology, economy, health, and education (Crystal, 2003). To acquire English, four fundamental skills that are frequently perceived are reading, listening, writing, and speaking. Among those skills, reading is considered an indispensable skill in the learning process (Anwar, 2020) due to its complexity, intentionality, interactivity, comprehension demands, and adaptability, which require remarkable time and effort to acquire (Bojovic, 2010). Reading skill is also regarded as a cognitive ability that a person can use when reaching a written text (Suyitno, 2017). It is believed to bring many benefits to humanity as reading stimulates our brain to increase concentration and critical thinking (Ani et al., 2019). Moreover, in learning a language, reading can help us perceive knowledge as well as vocabulary to acquire the language (Ani et al., 2019). However, because of their deficiencies in vocabulary, grammar, listening, speaking, and pronunciation, many learners have struggled with reading comprehension (Khan et al., 2019; Schmitt & Schmitt, 2020; Shahbaz & Khan, 2017). Reading difficulties can arise when students lack motivation or perceive reading as a tiresome task (Shahbaz et al., 2016), which aligns with Zebrowitz's (2018) assertion that a significant number of learners struggle with reading due to their reluctance to engage in it. Therefore, this research was conducted with the hope that Quizizz could help learners have the motivation and interest to focus on learning reading.

With the emergence and development of computer technology these days, the approach to languages is more easily accessible since assimilating educational applications into the domain of language lessons would partially contribute to assisting students to achieve their best outcomes (Alsied & Pathan, 2013). Hence, various online platforms, including Kahoot, Duolingo, and others, have been developed as educational tools. Among these platforms, Quizizz has gained significant popularity in teaching. Notably, during the COVID-19 pandemic, Quizizz emerged as one of the most widely used

game-based learning platforms for remote learning due to its user-friendly interface (Chaiyo & Nokham, 2017). Unlike traditional paper-based exercises, Quizizz engages students by presenting time-limited questions on the screen, allowing them to review their answers afterward. This interactive approach has resulted in more engaging lessons. Furthermore, students have expressed positive attitudes towards quizzes, displaying increased learning effort, enthusiasm to study, participation in extracurricular activities, and improved academic performance (Basuki & Hidayati, 2019).

When it comes to teaching and learning reading, a student's interest is crucial for fostering text comprehension since it is connected to reading motivation and overall learning outcomes (Eidswick, 2009). When students get excited, they show tenacity, engagement, and good attitudes when working on assignments (Ainley et al., 2002; Hidi, 2000; Renninger, 2000). To sustain students' interest, the instructor should employ a variety of instructional methods, media, and activities when teaching reading (Dwiningtiyas et al., 2020). Unfortunately, as noted by Roy (2019), the conventional method of teaching at schools often lacks a student-centered focus, neglecting opportunities for focused learning, critical thinking, and meaningful interaction. As a result, this traditional methodology hinders students from actively participating in the subjects they are interested in. Moreover, in a traditional classroom setting, the sources of knowledge are mostly from the teacher and the textbooks, which can be limiting when compared to the vast array of resources and applications available through technology. Consequently, students are often unable to independently explore new things, which leads to the fact that learning can occasionally become tedious and burdensome (Adipat et al., 2019). This is particularly true for reading skills, where students are expected to absorb numerous words in each lesson. Therefore, technology has been developed to solve this problem. Brown (2004) emphasizes that teaching strategies aim to facilitate the use of diverse teaching approaches and techniques, promoting more interactive learning environments, and integrating technology in a meaningful way. Therefore, Quizizz emerges as a potential tool for teaching reading as it can contribute to enhancing students' engagement and motivation. According to Lim and Yunus (2021), Quizizz has been highly appreciated and utilized to teach reading by teachers in secondary and high schools as well. However, the application of Quizizz in the context of teaching and learning reading skills in Vietnam has not been fully investigated. Up until now, previous studies in Vietnam mainly focus on other skills such as vocabulary and grammar. Additionally, Quizizz has been found to bring students more motivation compared to other platforms such as Kahoot! (Lestari, 2019). Therefore, this paper was conducted to investigate the perceptions of students at International University – Vietnam National University regarding the use of Quizizz for developing reading skills inside the classroom.

In order to achieve the purpose of this study, the following question is raised: "What are the IU students' perceptions of Quizizz in studying reading skills?"

METHODS

1. Study Design

A mixed methodology combining a quantitative approach through a questionnaire and a qualitative component involving interviews was employed in this research. The quantitative component involved the administration of a questionnaire to gather statistical data on students' perceptions of Quizizz (Zegeye et al., 2009) as questionnaires are useful for summarizing data and identifying patterns and relationships (McLeod, 2019). In this study, the questionnaire was developed based on Utami's (2022) framework, which encompassed three main components: cognitive, affective, and conative aspects. However, due to time constraints, obtaining a large number of survey responses posed a challenge. To gain deeper insights and enhance the validity of the findings, a qualitative approach was employed. Qualitative research methods are particularly valuable as they involve non-numerical data, such as text, recordings, and other means facilitating subsequent thematic analysis and providing proof to understand students' perspectives (McLeod, 2019). In this study, interviews were conducted with students, allowing for an in-depth exploration of their experiences with Quizizz (Abawi, 2017; Zegeye et al., 2009).

2. Participants

The International University – Vietnam National University was chosen as the site for the research. A purposive sampling technique was employed to select participants who had experience using Quizizz to learn reading skills. Participants in this study were 34 elementary freshmen including 26 females and 8 males in an Intensive English 1 class (see Table 1) since students at low proficiency levels usually struggle with motivation in studying and comprehension in reading (Klauda & Guthrie, 2015). All of the students in the class and the teacher were informed about the purpose of the study and provided the consent form to participate in the research after the researcher was allowed to do the research with this program. After 7 weeks of studying reading with the implementation of Quizizz, students were invited to fill in the questionnaire to gather their perceptions and later 6 students voluntarily participated in the follow-up interviews to have more in-depth insights. The selection of the interviewees was based on their willingness to share their experiences. Confidentiality was maintained throughout the research processes.

Table 1. Participants demographic profile

Participants	Genders	Age	Questionnaire	Interview
Students	Male	18-19	8	1
	Female	18-19	26	5
	Total		34	6

3. Data Collection Instruments

3.1. Conceptual Framework for Students' perceptions of Quizizz

Many frameworks based on perceptions were created such as Chong (2019) with the tripartite conceptualisation of students' perceptions of e-feedback, or Kastanakis and Voyer (2022) with their framework of the role of culture on consumers' perception and cognition. Nevertheless, the framework of students' perceptions in the EFL class by Utami (2022) was the most suitable to apply in this paper since her framework examined students' positive and negative perceptions of using Quizizz and the validity of the test and the reliability was ensured with the internal consistency of 0.8. Based on the conceptual framework presented by Utami (2022), the student's perception was categorized into three main components, namely the cognitive aspect, the affective aspect, and the conative aspect as known as behavioural aspect. With Utami's (2022) framework, it is possible to determine if students have a positive or negative perception of Quizizz. However, Utami's (2022) only investigated the assessment aspect, while this paper aimed to examine the classroom atmosphere. Therefore, a modified framework referenced by Utami's (2022) was suggested in this paper with the purpose of observing students' perceptions towards Quizizz in learning reading (see Figure 1).

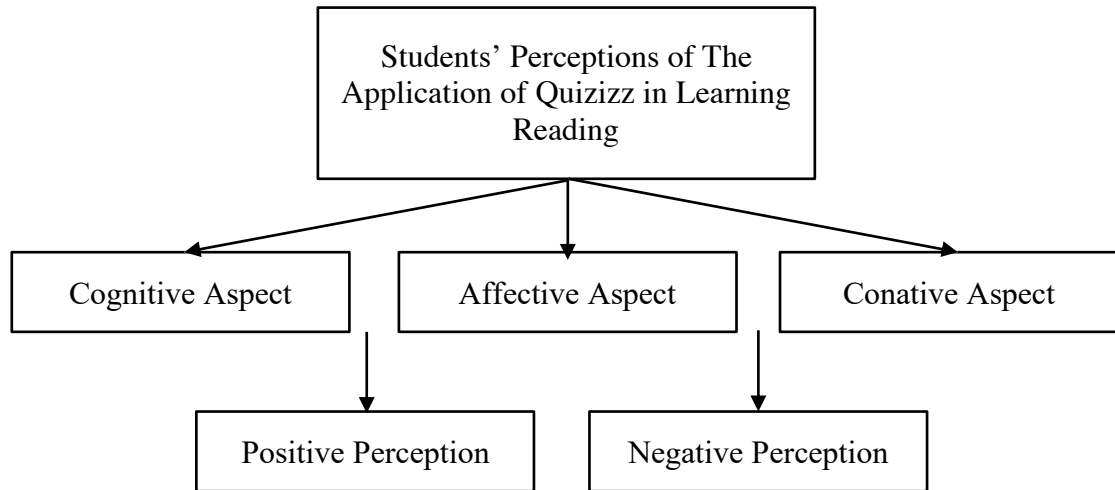


Figure 1. Students' Perceptions of the Use of Quizizz in Learning Reading Model, adopted from Utami's (2022)

3.2. The questionnaire

For data collection, the Likert-scale questionnaires were used in this research as they are widely used for assessing emotional variables such as motivation and self-efficacy (Nemoto & Beglar, 2014) as well as participants' perceptions and attitudes (Joshi et al., 2015). In this study, a five-point scale ranging from 'Strongly disagree' to 'Strongly agree' was employed to gather participants' perceptions of learning reading through Quizizz. The questionnaire consisted of sixteen statements and was categorized into three main aspects - cognitive, affective, and conative – as suggested by Utami (2022). To ensure the comprehensibility of the statements in the questionnaire, a pilot test was conducted with students from another Intensive English 1 class to assess the clarity of the statements. After receiving positive feedback that the statements were easy to understand for the Intensive English 1 level, the official version of the questionnaire was given to the participants to collect the data. After the completion of the survey, statistical analysis was performed using Cronbach's Alpha in Microsoft Excel. The calculated Cronbach's alpha was found to be 0.9, indicating excellent internal consistency and high reliability of the instrument (Taber, 2018). This result further strengthened the validity of the data obtained through the questionnaire.

Google Forms were utilized to conduct the questionnaire because it is a free application that allows researchers to create forms and surveys (Simanjuntak & Limbong, 2018) and distribute the form online by sending the link or transferring the link into the QR code, and then integrate the data with Google Spreadsheets which has similar statistical functions to Microsoft Excel (Melo, 2018). Despite their benefits, Likert-scale questionnaires have limitations. They only capture a portion of the issue and cannot provide in-depth responses, as they rely on quantitative data (Barua, 2013). Additionally, respondents' choices may not accurately represent their viewpoint, as the options may not fully capture their perspective or may be ambiguous (Hymen, 2016). Therefore, an interview needs to be used for further findings.

3.3. The interview

The followed-up interviews were conducted after the administration of the questionnaire to investigate the reasons for the data in the questionnaire. The interview was semi-structured with five questions. Zoom meetings were used as the platform for the semi-structured interviews because is a cloud-based online conferencing system (Nuryana et al., 2021) that allows users to communicate via visual, audio, or video content (Dias et al., 2020). In this study, the interviews were conducted in Vietnamese, the participants' native language, to ensure the students' comfort in expressing their opinions, as the level of proficiency of the interviewee was just elementary. Then, the recorded speeches were transcribed into texts through the website V-ione, as this browser provided clearer and

more accurate Vietnamese transcription, and translated into English with the assistance of Google Translate and the double check from two lecturers in the School of Languages.

4. Data Analysis

In the first place, the responses from the questionnaires were collected and exported in Google Sheets. Then, they were converted to Microsoft Excel for further statistical analysis. As for interview data, after translation, they were coded for thematic analysis using Microsoft Word as Word was a convenient tool for keeping in-text information, and almost every computer has this software (Ikhwan et al., 2015; Patil, 2020).

RESULTS AND DISCUSSION

The research question “*What are the IU students’ perceptions of Quizizz in studying Reading skills?*” would be answered depending on the collected data from the questionnaire and responses from the interview in this section. Students' perceptions would be examined using a scale ranging from *Strongly Disagree* (1) to *Strongly Agree* (5).

1. Cognitive aspect

TABLE 2. The Percentage of Students’ Cognitive Aspect of Perception on Quizizz

Statements	Result (n(%))				
	1	2	3	4	5
1. It is difficult for me to choose the answer through Quizizz’s colorful display.	12 (35.3%)	12 (35.3%)	4 (11.8%)	4 (11.8%)	2 (5.8%)
2. Seeing both the question-and-answer choices on my device makes me do the exercise easily.	0 (0%)	0 (0%)	4 (11.8%)	17 (50%)	13 (38.2%)
3. Random answer feature in Quizizz helps me do exercises independently.	0 (0%)	0 (0%)	9 (26.5%)	17 (50%)	8 (23.5%)
4. Showing the answer key feature in Quizizz helps me understand the correct answer choice.	0 (0%)	0 (0%)	5 (14.7%)	19 (55.9%)	10 (29.4%)
5. Joining reading Quizizz many times in class helps me read for main ideas better.	0 (0%)	0 (0%)	7 (20.6%)	19 (55.9%)	8 (23.5%)
6. Joining reading Quizizz many times in class helps me read for specific ideas better.	0 (0%)	0 (0%)	7 (20.6%)	20 (58.8%)	7 (20.6%)
7. Quizizz’s limited time helps me control the time better to finish questions.	0 (0%)	0 (0%)	7 (20.6%)	18 (52.9%)	9 (26.5%)

The statistics about the cognitive aspect in Table 2 showed the majority of the students supported that Quizizz cognitively brings benefits to their reading learning experiences. The data highlighted the advantages of Quizizz such as the convenience of viewing both the question-and-answer choices (88.2), the assistance provided by the answer key in understanding the correct answers (85.3%), and the independent learning facilitated by the random answer feature (73.5%). The agreement on the feature of showing both questions and answer choices on the devices can be clarified by the responses from the interview that the fact that students can see both the question and answers on either their devices or even the class screen helped them “understand the question and the answer choice easier” (S1, and S5), “capture the keywords faster” (S1, and S3) and even “train the scanning skill” (S2). Similarly, the showing-answer-key feature was appreciated due to the effectiveness of

“knowing exactly the answer key for less-able student” (S4), the comfort of “realizing the wrong answer choice and asking the teacher to explain again when necessary” (S1, S5, and S6). The random-answer feature also received much support from all interviewees as it stimulates independent work “when students know that the surrounding students do not have a similar answer choice” (S1, S2, S3, and S6) or because they “are forced to concentrate on the task to choose the answer without the help of nearby friends” (S4, and S5). These findings further supported the results from Hikmah et al.’s (2021); Melissa et al.’s (2022); and Suharsono’s (2020) studies.

In addition, as shown in Table 2, many students (almost 80%) agreed that joining Reading Quizizz many times contributed to the improvement of their skimming and scanning skills and the time-limit functions boosted students reading speed. To illustrate, S1 and S5, explicitly, expressed similar opinions as Quizizz helped them read faster and more precisely; while S1 and S3 had the same point that Quizizz supported them to understand the passages better and know how to filter the information to choose the answer more accurately. S2 and S4 shared that as they want to have a feeling of the winner, they “concentrate more, try to read more quickly to find the main ideas, to analyze the questions and answers more quickly and scan for the answer choice”; as a result, “it creates a habit of concentration when the question appears, and the skills also improve day by day” (S3). Another participant (S6) admitted that he failed to find the correct answers at first because he was not familiar with reading the questions and answer choices on the device, but after getting acquainted with the application, listening to the teacher’s explanation for the correct choice and knowing the strategy, he could choose the right answers faster to fit the time the teacher required and he feels more excited when seeing his name on the leaderboard. In addition, a student (S4) clarified that with the support of the time limit feature, they got a chance to improve their reflex: “When doing questions on Quizizz, each answer has its time limit, so I have to learn how to get used to the time pressure. Usually, I will read the topic sentences first; if the following sentences are related to the details in the question, then I will gradually start reading, and that helps me improve my reading skills and overcome my time pressure.” These findings were correlated with Utami’s (2022) that Quizizz helped students better grasp reading content and increase reading speed.

2. Affective aspect

TABLE 3. The Percentage of Students’ Affective Aspect of Perception on Quizizz

Statements	Result (n(%))				
	1	2	3	4	5
1. Quizizz creates an exciting atmosphere in my reading class.	0 (0%)	3 (8.8%)	1 (2.9%)	19 (55.9%)	11 (32.4%)
2. Quizizz’s colorful display makes me feel interested in doing the reading tasks.	0 (0%)	0 (0%)	4 (11.8%)	17 (50%)	13 (38.2%)
3. Music in Quizizz makes me feel bored when doing the reading task.	10 (29.4%)	16 (47.1%)	4 (11.8%)	1 (2.9%)	3 (8.8%)
4. Individual feature motivates me to see my own ability.	1 (2.9%)	0 (0%)	14 (41.2%)	13 (38.2%)	6 (17.7%)
5. Leaderboard in Quizizz motivates me to be a winner.	0 (0%)	0 (0%)	4 (11.8%)	17 (50%)	13 (38.2%)
6. Quizizz’s showing answer key feature makes me bored to do the other questions.	9 (26.5%)	14 (41.2%)	5 (14.7%)	4 (11.8%)	2 (5.8%)
7. Quizizz’s limited time makes me more enjoyable.	0 (0%)	0 (0%)	8 (23.5%)	17 (50%)	9 (26.5%)

Table 3 generally revealed highly positive perceptions of Quizizz in the students’ reading class in terms of affective aspects. As can be seen from Table 3, most participants (more than 88%) affirmed

that Quizizz, in general, and some specific features such as the colorful display and leaderboard, created an exciting atmosphere. The findings aligned with the responses from the interview that the gamified elements of Quizizz fostered their engagement and excitement (S1, S2, S4, S5 and S6). They appreciate how Quizizz transforms reading exercises into interactive games, making the learning experience more enjoyable and helping them achieve better results (S4). Besides, students also compared Quizizz to the traditional style of reading learning which was a paper-based one in the interview. A student (S6) mentioned, *"Doing the reading on paper alone was quite sad, and sometimes I felt lazy, too; but on Quizizz, I could both play and learn with the whole class, so it was more competitive and fun."* Student 5 (S5) also expressed her excitement and appreciated the benefits of the colorful display and random answer feature *"These features helped me focus on studying and boost my engagement and interest"*. In the interview, students also appreciated how the leaderboard allows them to compare scores with their classmates and track their progress, fostering a desire for improvement (S4, and S6). They mentioned that they were motivated *"to learn more vocabulary at home, practice doing more reading tasks at home so that they could compete with their classmates"* because *"the highest-rank students will be celebrated on the big screen"* (S6) and *"the leaderboard helped me know my level and compare scores with my classmate"* (S4). This contrasted with the findings of Siregar and Oktavia (2022) that the leaderboard made them feel uncomfortable; however, this correlated to the idea written in Mohamad et al. (2020)'s study about the agreement that they had a sense of competition when their scores were being shown on the leaderboard.

In line with the support of usefulness, the time-limited and the individual features were reported to enhance the students' enjoyment, with 76.5% expressing agreement as it created challenges that make students enjoy the achievement when they had to *"quickly process information, make decisions, and respond within the given time frame"* (S1 and S3).

Despite the overall positive perceptions, a small percentage of students expressed disagreement with certain features of Quizizz such as music (11.7%) and showing answer keys (17.6%). The opponent of music can be explained by one interviewee (S5) *"Personally, I don't like this type of music, and I also think the taste of music varies among different people."* However, no specific reasons were provided from the interviews for the disagreement with the showing-answer-key feature. Possible reasons might relate to individual preferences or personalities.

In general, as shown in Table 3, the questionnaire and interview results indicated that Quizizz was perceived positively by the majority of students in terms of the affective factors, which was consistent with Basuki and Hidayati's (2019) findings.

3. Conative aspect

TABLE 4. The Percentage of Students' Conative Aspect of Perception on Quizizz

Statements	Result (%)				
	1	2	3	4	5
1. If given a choice, I want my teacher to use Quizizz to practice Reading lessons.	0%	0%	20.6%	41.2%	38.2%
2. I will introduce Quizizz to others.	0%	0%	32.4%	38.2%	29.4%

In terms of the conative aspect of students' perceptions of Quizizz, no students had a negative view of the idea of Quizizz being used in other reading classes as well as introduced to other people (see Table 4). Advantages related to how Quizizz should be utilized as a tool for learning was emphasized by S1 *"Because first, it's fun. If the lesson is conducted in the form of playing games, it will create a much happier atmosphere in the class. In addition to helping me improve my reading skills, it is also an interesting tool that creates competitiveness among students and boosts our effort to learn."* Or by S3 *"I think Quizizz can be used in other reading classes because it is easy to use and quite fun to participate. Moreover, it allows teachers to keep track of our progress, find more suitable materials and suggest relevant strategies for us to read faster but still have correct answers."*

The positive feedback of students about using Quizizz in the other reading classes in this study was also identical to the result of the conative aspect from previous research by Utami (2022).

LIMITATIONS

Despite the encouraging results regarding students' perceptions of the implementation of Quizizz in reading classes, there are several limitations to consider in future research. Firstly, the sample size was considered rather small, with merely 34 participants taking part in the observation. This could not take representatives of all university students in Vietnam; therefore, more participants should be involved in future studies. Secondly, due to the difficulties of having two classes with a similar lecturer to do experimental studies, this paper could not examine the effectiveness of the treatment. Thirdly, the interview data did not contain enough details to explain the statistics in the questionnaire since there were only six voluntary students. Additionally, Quizizz mainly relied on the university's Internet connection and students' devices to access, which managed to the fact that Internet connection might have an impact on the participants' Quizizz experience so individuals may have subjective views about the application. Therefore, an experimental study with a larger size should be conducted to examine the impact of this application on students' reading performance, and an investigation related to teachers' perceptions or factors that affects the success of the treatment should be considered.

CONCLUSION

Relying on the worldwide state of linguistics, English has currently become the international language; therefore, the demand for comprehending this lingua franca is increasingly high. To learn English, four main skills are necessary to cultivate a language, and reading is one of them. Since reading is considered to easily cause boredom, the need to create positive classroom atmospheres in learning this skill is highly required. With the development of technology, many applications, including Quizizz, have been introduced to foster the teaching and learning process. The findings indicated that most participants not only shared a positive viewpoint about the integration of Quizizz in their current reading learning but also wanted to use Quizizz in other classes in the future as well. Overall, the research brought a positive result with the hope that lecturers could consider employing Quizizz in their teaching to increase students' engagement and create an active and exciting atmosphere in their classroom. However, factors related to individual preference should be taken into consideration when conducting further research.

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