



RESEARCH PAPER

The Impact of Gamification Tools on Reading Comprehension Skills: A Comparative Study of Kahoot! Quizizz and Baamboozle of English Language Learners

¹Hiba Qureshi*, and ²Dr. Sahib Khatoon

1. Research Scholar, Center of English Language and Linguistics, Mehran University of Engineering and Technology Jamshoro, Sindh, Pakistan
2. Assistant Professor, Center of English Language and Linguistics Mehran University of Engineering and Technology Jamshoro, Sindh, Pakistan

*Corresponding Author

qureshihiba23@gmail.com

ABSTRACT

Gamification tools are being utilized more frequently in education to improve learning results and student engagement. This study looked into how well students' reading comprehension skills may be improved using gamification technologies like Kahoot, Quizizz, and Bamboozle. A mixed-methods technique was used in the study to collect quantitative data from a survey of 200 students and qualitative data from semi-structured interviews with 10 students. The quantitative results showed that students had favorable sentiments regarding gamification technologies and believed they were useful for improving their reading comprehension abilities. The qualitative research results provide light on the precise methods by which gamification technologies aid in improving reading comprehension, such as by boosting engagement, offering quick feedback, and fostering a positive learning environment. The study's findings suggest that gamification software holds promise for enhancing pupils' reading comprehension abilities. The best ways to use gamification tools in the classroom must be identified, and their long-term effects on student learning must be assessed, through additional research.

KEYWORDS

Bamboozle, Gamification, Kahoot!, Quizizz, Reading Comprehension, Students

Introduction

The use of technology in the classroom has resulted in significant changes to conventional instructional approaches and presented novel opportunities for student engagement in recent times (Rusmiyanto et al, 2023). Gamification, which refers to the integration of game features and mechanics into contexts that are not inherently game-related, has demonstrated considerable potential in augmenting motivation, engagement, and educational achievements across diverse domains, such as language education. According to Garcia-Iruela and Hijon-Neira (2020), it can potentially be inferred that features are intentionally developed to facilitate and enhance task performance, cultivate pleasurable experiences, and encourage engagement in specific activities.

In general, the research demonstrates a favorable correlation between the utilization of computers and the enhancement of English language skills, implying that the integration of technology has the potential to have a significant effect on the acquisition of second languages. Thus, technology serves as a catalyst, augmenting the language acquisition process and facilitating more efficient communication (Kenning, 2007).

According to Chapelle (2010), Information and Communication Technology (ICT) is essential for English language instruction. Students who have grown up with technology are acclimated to its use; therefore, incorporating ICT into the classroom can help to maintain learners' interest. It is possible to use ICT to teach reading, listening, speaking, and writing, as well as to create a more engaging classroom environment. Thus, e-learning has evolved from traditional learning, and Kahoot! And Quizizz are examples of e-learning web apps that are commonly used in classrooms to administer online assessments.

Digital Tools

Across the globe, a wide range of Learning Management Systems (LMS), tools, and online applications are being employed to enhance the quality of teaching the English language (Yunus, Ang & Hashmi, 2021). The aforementioned examples encompass a variety of Learning Management Systems, namely Blackboard, Canvas, Google Classroom, Microsoft Teams, Zoom, and Massive Open Online Course (MOOC) (Martin & Betrus, 2019). However, due to the necessity of active participation and communication in online education, game-based approaches have been widely adopted worldwide to enhance the quality of digital learning engagements (Fernandes-Rio, 2020). Therefore, there are numerous game-based software applications that are utilized in both online and traditional classroom settings. Several examples of educational technology tools that can be utilized in academic settings include Kahoot, Quizizz, FlipQuiz, Duolingo, Ribbon Hero, and ClassDojo, among others (Priyanti et al 2019). The current study focuses on a comparative study of gamification tools; Kahoot! and Quizizz for teaching and learning comprehension skills.

Kahoot!

Defined Kahoot! is recognized as a game-based educational tool that enhances classroom dynamics by momentarily transforming the learning environment into an engaging and enjoyable game show-like experience for students. It represents one of the mediums used for the assessment of any lesson as well. According to a recent study on Kahoot!, it has several benefits for both teachers and learners. Kahoot! can be an engaging tool for teachers to involve students and evaluate their learning and it can be a motivational tool for learners, encouraging them to pay attention and participate in the learning process.

Quizizz

Quizizz, like Kahoot!, possesses several notable qualities. Quizizz offers a feature wherein students' answer space is displayed on their individual screens, allowing them to respond to questions at their own preferred pace and subsequently examine their answers at the conclusion of the activity. The research on online quizizz as a pedagogical and evaluative instrument indicates that the integration of quizzes with instructional activities and teaching methodologies produces positive outcomes. Thus, it facilitates students' ability to engage in quiz comprehension, demonstrate learning diligence, cultivate learning motivation, participate in academic activities, and achieve academic success. Paul (2021)

Baamboozle

Baamboozle does not only serve the purpose of engaging in an enjoyable way to spend one's time but also helps in learning through fun. According to Paul (2021), "Games are enjoyable activities that offer opportunities for learning a foreign language in a relaxed and engaging environment". The Baamboozle game is an online learning platform designed to provide accessible and engaging interactive experiences for classroom settings.

The bamboo game has the potential to be utilized as an educational tool. Baamboozle promotes the idea that learning should be a pleasant experience and aims to support educators in reinforcing key concepts while actively engaging all students in the learning process. Additionally, Bamboozle offers the opportunity for collaborative work among children (Quraishi et al., 2020).

The purpose of digital tools and platforms is to effectively support the learning process to correspond with the learning objectives and course material (Kurt et al., 2019). The use of these tools is suboptimal and required training and support throughout the initial phases. However, when employed in the context of the English language classroom, they optimize the learner's academic performance (Quraishi et al., 2020). Hence, it is significant to investigate the perceptions and experiences of using gamification tools; Kahoot! And Quizizz as digital resources in traditional classroom settings to learn English language skills, as well as how it impacts teaching and learning reads comprehension skills. In previous investigations, scholars have examined the utilization of digital tools within online educational settings. However, the current study specifically investigates the implementation of the Kahoot! And Quizizz applications within physical English language learning classrooms, specifically within the context of an Access Micro-scholarship Program.

Literature Review

Gamification can simply be defined as “Gamification is the use of game design elements in non-game contexts” (Deterding et al., 2011, p. 9). Gamification pertains to the practice of incorporating game elements and mechanics into situations that are not naturally game-related, such as educational settings, to enhance levels of engagement, motivation, and ultimately, the achievement of learning objectives. Gamification entails the utilization of game design ideas, techniques, and features to enhance the interactivity, enjoyment, and engagement of various activities. Gamification seeks to enhance participant engagement and motivation by utilizing many intrinsic components of games, including but not limited to points, badges, leaderboards, levels, prizes, and challenges (Anisa et al., 2020).

Gamification tools are easily available and accessible digital platform that serves a wide variety of uses in the education and acquisition of the English language (Lim & Yonus, 2021; Degirmenci, 2021). According to Lim and Yonus (2021), a classroom must be equipped with an internet connection. These gamification tools function as a platform that provides access to a wide range of English language resources, including various language material and quizzes. These ready-made resources can be found in a library and can be used hassle free. It can be modified, duplicated, and applied in any language. Teachers have the power to generate personalized instructional materials and seamlessly include the gamification tools into their teaching methodology, consequently enhancing the effectiveness of English language acquisition. Furthermore, it offers a language acquisition environment that facilitates meaningful and collaborative learning experiences. As learners effectively respond to statements, and questions, or fill in the spaces, they receive points (Almeida & Simoes, 2019). Furthermore, students can assess their progress by comparing it with the language content and questions, and then make revisions to the language being instructed.

This research paper is focusing on two gamification tools Kahoot! and Quizizz. Moreover, this paper will investigate the effectiveness of gamification tools; Kahoot! and Quizizz and also which gamification tool is more effective in teaching and learning Reading Comprehension Skills.

Kahoot! is a widely recognized and widely used online educational application that employs a game-based structure to facilitate the accomplishment of academic goals. Kahoot! incorporates several elements of both game-based learning and gamification to attain these desired results. Licorish et al. (2018) made a distinction between game-based learning and gamification strategies in their study. Game-based learning is an instructional strategy that uses games to facilitate the acquisition of educational objectives through incidental learning. On the other hand, gamification techniques pertain to approaches that actively engage students in deliberate learning by including game aspects within a non-gaming system. By employing both of these concepts, Kahoot! Generates a functional and efficient educational tool. The gamification of learning tools can be advantageous for learners of all ages, not solely confined to youngsters. ; Fernandes-Rio, 2020)

Quizizz is a free, gamified, web-based quiz platform that offers learners the opportunity to engage in quiz practice using various electronic devices such as computers, cell phones, and tablets. The software can generate a multiplayer game, which serves as an engaging activity for individuals engaged in the learning process (Mei et al., 2018). Educators can generate, modify, and employ preexisting assessments and instructional materials accessible on the website. The quizzes can be allocated as homework or conducted during live sessions by providing students with a hyperlink or a game code. Various question formats can be employed in the construction of quizzes, including choice, complete-the-blank, open-ended, poll, matching, and reordering. In addition, educators can incorporate audio or video files, as well as photos, into the question prompts. In addition, Quizizz is a user-friendly product that is accessible to learners. Students have the option to utilize their email accounts affiliated with Google, Microsoft accounts, or their email addresses to access the site and engage in quiz activities.

In this research, Priyanti et al. (2020) performed a quasi-experimental investigation to assess the impact of the Kahoot! and Quizizz platform on students' reading skills. Data was gathered from a sample of seventy-three students in the 11th grade, with 37 students assigned to the experimental group and 36 students assigned to the control group. The experimental group received instruction in reading abilities through their utilisation of the Kahoot! and Quizizz applications, while the control group received instruction through traditional teaching methods. The Study of English Language Learners' Experiences with the Utilisation of the Kahoot! and Quizizz Tools for Enhancing Learning and Language Proficiency in English for Specific Purposes (ESP) Classes. The study's findings revealed that students' reading comprehension skills were enhanced through the implementation of digital teaching methods. Specifically, the integration of the Kahoot! And Quizizz contributed to improvements in five key aspects:

“Literal recognition of the text (including word meaning and contextual references), reorganisation of information (such as classifying, outlining, and synthesising), and inference abilities (encompassing predicting outcomes, identifying main ideas, understanding implicit information, and recognising cause and effect relationships)” (Priyanti et al., 2020; p. 7).

Therefore, the study concluded that the use of the gamified tools Kahoot! and Quizizz applications are beneficial for facilitating various reading tasks and may be readily integrated into a classroom environment.

Icin and Orta (2018) carried out a quantitative analysis to determine whether or not the Quizizz and Baamboozle tools can be utilised to teach vocabulary in English. A test, an observation, and a questionnaire were used to gather data. The results of the paired-t test analysis of the tests showed that, after modifying the tool for vocabulary teaching and

learning, there are notable differences. According to the findings, Quizizz and Baamboozle help learners become more knowledgeable by introducing new terms, synonyms, and antonyms, as well as by having them guess and use terminology in (Priyanti et al., 2020; p. 7).

In 2020, Zukriyah and Pratolo carried out a qualitative investigation to ascertain students' opinions towards Kahoot!, and Baamboozle as tools for assessment. Interviews using a semi-structured were employed to gather data. The results demonstrated students' opinions that Kahoot!, and Baamboozle are useful evaluation tools that boost students' self-esteem, improve their reading comprehension, and help them become more independent. Similarly, Primastuti (2022) investigated how pupils in the tenth grade could benefit from the Kahoot!, and Baamboozle apps for Language Learning. As a result of this, a descriptive qualitative study was carried out, and information was gathered through teacher interviews, questionnaires for English language learners, and observation. The results demonstrated that Kahoot! and Baamboozle deliver engaging learning experience that foster motivation, self-reflection, and chance for learning. Hence, this current study investigates the utilization of digital tools in traditional English language classrooms in Pakistan, specifically focusing on their effectiveness in teaching, learning, and assessment. The objective of this study is to investigate the learning experiences of students to determine the potential use of these tools in various educational settings, including different contexts, classrooms, and institutes, for the objective of teaching and assessment.

Material and Methods

The current study used a mixed methods approach, incorporating both quantitative and qualitative methodologies to address the research concerns. According to Pardede (2019, p. 232), the mixed-method approach refers to the integration of qualitative and quantitative methodologies. Various strategies are utilized, resulting in a design that is further improved by the integration of textual elements. The academic components of this study include descriptions, graphic representations, and narrative elements. Creswell (2014) posits that Mixed-method research is a scholarly approach that involves the amalgamation or integration of both quantitative and qualitative methodologies. The utilization of research and data inside a research investigation. Hence, the conceptualization of mixed-method research entails the research methodology employed in this study integrates both qualitative and quantitative data. In addition, Creswell and Plano-Clark (2006, p. 59) provided further clarification regarding mixed-method research. The study encompasses four distinct designs, including the triangulation design, embedded design, explanatory design, and the descriptive design. The two types of design that will be discussed in this paper are prescriptive design and exploratory design. In the present study, the investigator has employed an explanatory sequential design. A mixed method design is employed in this study.

The current study employed a mixed method approach, namely an explanatory sequential mixed method design, to gather and analyze the data. Creswell (2014) posits that the explanatory sequential design is distinguished by its utilization of a quantitative framework that subsequently transitions to a qualitative approach, hence leading to the generally recognized explanatory sequential mixed-methods approach.

Various terms have been employed to characterize this particular methodology, encompassing qualitative and quantitative approaches, multi-methods, methodological triangulation, integrated research, synthesis, combined study, and hybrid research. However, the term "mixed approaches" is widely utilized and favored by the majority of researchers Primastuti (2022).

The research design that best aligns with the objectives of this study is the explanatory sequential mixed method design. The primary aim of this study is to investigate the effectiveness of gamification technologies, namely Kahoot!, Quizizz, and Bamboozle, in improving the learning of Reading Comprehension abilities. This study will employ an explanatory sequential mixed method design for the purpose of data collecting.

Data Collection Tool and Method

The process of data collecting enables a comprehensive understanding of a phenomenon within its contextual framework (Yin, 2009). This study has employed two distinct data gathering tools in accordance with the mixed method methodology. The collection of quantitative data was facilitated through the utilization of a close-ended questionnaire, whereas the acquisition of qualitative data was accomplished by means of conducting semi-structured interviews with the participants. In order to establish the credibility and consistency of the measurement tools, a preliminary investigation was carried out, involving a cohort of fifty participants selected from the research location, namely The Cowasjee School of NEDUET, located in Karachi.

Plan: A survey-based research questionnaire is the quantitative data collection tool. With the goal of determining how the gamification tools affected their performance in reading comprehension skills, it was given to 200 students in the ACCESS Microscholarship Program at The Cowasjee School of NEDUET. Similarly, interviews with about 10 participants were done as part of the qualitative data collection. Semi-structured interview guidelines were used during the interviews. Investigating how gamification technologies affect participants' effort, methods of learning, and results was the main goal of these interviews.

Instrument: The survey is a closed-ended tool that was modified from Basuki, Yudi, and Hidayati's (2020) research. It has 40 items on a Likert scale, with responses ranging from "Never, Rarely, Sometimes, Often, Always" to "Not at all, Slightly, Moderately, Very Much." The purpose of the questionnaire is to gather data on students' perceptions toward gamification tools used to improve reading comprehension abilities and to determine which gamification tool is the most successful at doing so.

The semi-structured interview is a strategy that enables the interviewer to get the students' opinions regarding using gamification technologies to enhance reading comprehension skills. Five open-ended questions make up the interview, which is based on a study by Rondiyah (2020) titled "Interactive Games as the Media of Students' Reading Comprehension Skills Assessment."

This study's research tool is built to gather both quantitative and qualitative data. A questionnaire will be used to gather quantitative information about students' attitudes about gamification tools and to determine which gamification tool is most useful for improving reading comprehension. The qualitative data will be gathered through an interview with students to elicit their opinions on the use of gamification technologies to enhance reading comprehension skills.

The research tool is based on the mixed methodology used in this study, which seeks to give participants a thorough understanding of the effects of looking into gamification tools on the development of reading comprehension skills.

Students enrolling in The Cowasjee School of NEDUET's ACCESS Microscholarship Program in Karachi are the study's target population. 200 students who

have utilized gamification technologies in the classroom to learn and teach reading comprehension skills were chosen by the researcher using purposive sampling. The researcher also chose 10 educators from the same program who had prior expertise in integrating technology into their English language instruction.

To examine the quantitative data gathered from the questionnaire, the researcher employed descriptive statistics. The goal of this research was to find patterns or trends in the data, such as how frequently each question was answered. The researcher analyzed the variables of the three gamification tools (Kahoot!, Quizizz, and Bamboozle) rather than conducting any hypothesis testing in order to examine participant attitudes toward them and determine which tool is most helpful in boosting reading comprehension abilities.

The qualitative information gained from the interviews was manually examined by the researcher. This required transcription of the interviews, accuracy checks, and minor changes to eliminate extraneous lines and rectify grammatically incorrect sentences.

Results and Discussion

The present investigation employed a questionnaire as a means of gathering quantitative data pertaining to the effects of gamification technologies (namely, Kahoot!, Quizizz, and Bamboozle) on the enhancement of reading comprehension abilities, with a particular focus on vocabulary acquisition and comprehension skills. The survey instrument utilized in this study was derived from the research conducted by Basuki, Yudi, and Hidayati (2020). However, several modifications were made to tailor it to the unique requirements of English as a Foreign Language learners who were part of the ACCESS Microscholarship Program.

The questionnaire possessed an ordinal nature, indicating that the individual items were arranged in a ranking or sequential order, but lacked equal intervals between values. Hence, it was deemed inappropriate to compute statistical measures such as averages or standard deviations for individual items. Nevertheless, in the event that the components were indicative of a common underlying concept, it became feasible to combine them into a unified scale. The aforementioned scale, which possesses the characteristics of an interval level, would be deemed appropriate for the purpose of reporting a mean and standard deviation.

Put simply, the researcher encountered limitations in calculating the mean score for each specific question on the survey. However, they were able to compute the average score for a cluster of questions that pertained to a common theme. As an illustration, one could compute the mean score for all inquiries pertaining to the acquisition of vocabulary.

Quantitative Research Findings.

Table 1
How much do you find these gamification tools (Kahoot!, Quizizz and Bamboozle) exciting, interesting, motivating & engaging in reading comprehension skills?

	F	%	Valid Percent	Cumulative Percent
Valid Strongly Agree	80	40.0	40.0	40.0
Agree	40	20.0	20.0	60.0
Neutral	10	5.0	5.0	65.0
Disagree	40	20.0	20.0	85.0
Strongly Disagree	30	15.0	15.0	100.0

Total	200	100.0	100.0
-------	-----	-------	-------

The examination of students' responses pertaining to Question number #01 revealed that 40% of students exhibited a strong agreement with the provided statement, while 20% of students expressed agreement. Additionally, 5% of students maintained a neutral, 20% of students disagreed, and a solitary student severely disagreed. This demonstrates that the utilization of gamification tools such as Kahoot!, Quizizz, and Bamboozle elicits enthusiasm, captivation, motivation, and active involvement among individuals when it comes to enhancing reading comprehension skills.

Table 2
To what extent does Kahoot! Help you to meet the standard performance and expectations for reading comprehension?

	F	%	Valid Percent	Cumulative Percent
Valid Strongly Agree	60	30.0	30.0	30.0
Agree	80	40.0	40.0	70.0
Neutral	10	5.0	5.0	75.0
Disagree	20	10.0	10.0	85.0
Strongly Disagree	30	15.0	15.0	100.0
Total	200	100.0	100.0	

The analysis of Question numbers 2 revealed that Kahoot! And Quizizz, both with a percentage of 30%, demonstrate comparable effectiveness in executing standard tasks and meeting expectations. Conversely, Baamboozle exhibited the lowest level of performance and failed to meet expectations. This observation suggests that students are exhibiting a lack of enthusiasm when participating in quizzes on Baamboozle, indicating that it may not be as captivating or interactive as alternative platforms such as Kahoot! and Quizizz

Table 3
To what extent does Bamboozle help you to meet the standard performance and expectations for reading comprehension?

	F	%	Valid Percent	Cumulative Percent
Valid Strongly Agree	30	15.0	15.0	15.0
Agree	60	30.0	30.0	45.0
Neutral	50	25.0	25.0	70.0
Disagree	30	15.0	15.0	85.0
Strongly Disagree	30	15.0	15.0	100.0
Total	200	100.0	100.0	

When inquiring about Question numbers 3, the focus is on the self-assessment of reading comprehension skills, particularly the development of vocabulary acquisition. According to student feedback, Kahoot! Has been found to be highly beneficial for enhancing vocabulary acquisition through its entertaining format. In comparison, Quizizz has been noted to be more effective than Baamboozle in facilitating vocabulary development. This observation demonstrates that students perceive the gamification tool Kahoot! As a more beneficial means of evaluating vocabulary acquisition and analyzing the ability to retain words.

Table 4
How often do you self-assess your vocabulary in reading comprehension skills while using Kahoot!?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	50	25.0	25.0
	Agree	70	35.0	60.0
	Neutral	20	10.0	70.0
	Disagree	40	20.0	90.0
	Strongly Disagree	20	10.0	100.0
Total	200	100.0	100.0	

In response to question number 04, the data reveals that 35% of students expressed strong agreement with the gamification tool Kahoot!, which offers feedback aimed at enhancing reading comprehension skills. Conversely, an equal percentage of 25% was observed for the gamification tools Quizizz and Baamboozle, indicating their effectiveness in providing feedback to aid students in improving their reading comprehension abilities. This data indicates a significant proportion of students who expressed agreement with the statement, suggesting their positive experience with gaining reading comprehension through the utilization of Kahoot!. Furthermore, this finding corroborates the outcome of inquiry number 04.

Table 5
How often do you self-assess your vocabulary in reading comprehension skills while using Kahoot!?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	80	40.0	40.0
	Agree	50	25.0	65.0
	Neutral	30	15.0	80.0
	Disagree	20	10.0	90.0
	Strongly Disagree	20	10.0	100.0
Total	200	100.0	100.0	

Questions 5 pertain to the immediate feedback that is given to pupils following an incorrect response. The findings indicated that a significant proportion of students, specifically 38.5%, expressed a strong agreement with the utilization of the gamification tool known as Kahoot!. Additionally, 40% of students shown agreement with the implementation of Quizizz, while an equivalent percentage of students, also 30.8%, expressed agreement with the incorporation of Baamboozle. This finding indicates that incorrect responses did not have a negative impact on the students' motivation. Instead, they received immediate feedback, which facilitated their progress in enhancing their reading and comprehension abilities.

The qualitative part of the study answers the following research question:

Which one of the gamification tools (Kahoot!, Quizizz and Bamboozle) do students think is the most effective tool in enhancing reading comprehension skills?

Thematic analysis was employed by the researcher to examine the qualitative data obtained from the semi-structured interviews. Thematic analysis is a systematic approach used to uncover, analyze, and report recurring patterns, often known as themes, within qualitative data. The researcher adhered to the six-step process of thematic analysis as outlined by Braun and Clarke (2013):

Gaining familiarity with the data at hand: The researcher transcribed and documented the interview data in order to maintain a comprehensive record of the information obtained during the interviews.

The researcher initially generated codes by identifying words or phrases that encapsulated the major concepts present in the data.

In the process of thematic analysis, the researcher organized the identified codes into coherent patterns, commonly referred to as themes.

The themes were subjected to a thorough assessment by the researcher in order to ascertain their alignment with the data and the research inquiries.

The themes were defined and identified by the researcher.

The report was authored by the researcher, wherein an account was provided that delineated the various themes and their interconnectedness with the study inquiries.

The Braun and Clarke (2006, 2013) thematic analysis technique was employed by the researcher to identify themes related to Research Question #2, which inquired about the students' perspectives on the efficacy of gamification tools in improving their reading comprehension abilities.

The researcher identified several themes during the study. Engagement: The utilization of gamification techniques was perceived by students as being both engaging and motivating. The participants derived satisfaction from engaging in the competition and were motivated by the intellectual stimulation of accurately responding to questions. Learning: The utilization of gamification tools was perceived by students as beneficial in enhancing their learning experience and improving their ability to acquire and retain information with more efficacy. According to their statement, the participants expressed that the games provided an enjoyable experience and facilitated learning at an individualized pace.

The provision of instant feedback through the use of gamification tools was well-received by the students. According to their statement, the feedback provided enabled them to discern their areas of proficiency and areas for improvement, ultimately leading to enhancements in their reading abilities.

In general, the researcher observed that students held favorable judgments of the efficacy of gamification technologies in augmenting their reading comprehension abilities. The students perceived the games as being both entertaining and inspiring, leading to enhanced learning outcomes and improved information retention.

Discussion

The present research comprises a mixed methods approach to examine the efficacy of gamification technologies, namely Kahoot!, Quizizz, and Bamboozle, in enhancing students' reading comprehension abilities. The research is undertaken from the standpoint of students who are currently enrolled in the ACCESS Microscholarship Program at The Cowasjee School in Karachi, Pakistan. The primary objective of this study is to examine the viewpoints of the student population through the utilization of both qualitative and quantitative research methodologies. The main aim of this study is to examine the possible advantages of integrating gamification technologies into digital learning platforms in order to improve reading comprehension skills.

1. What are the ACCESS students' perceptions towards gamification tools (Kahoot!, Quizizz and Bamboozle) in enhancing reading comprehension skills?
2. Which one of the gamification tools (Kahoot!, Quizizz and Bamboozle) do students think is the most effective tool in enhancing reading comprehension skills?

The utilization of gamification technologies has emerged as a noteworthy driver of transformation in the field of education, specifically due to its capacity to augment the development of reading comprehension abilities. Through the integration of interactive features, competitive components, and fun qualities, gamification technologies have the ability to convert previously monotonous reading materials into compelling and engaging experiences.

One significant advantage of employing gamification technologies lies in their ability to foster active engagement. One illustrative instance is the platform Kahoot!, which enables the conversion of textual content into interactive quizzes or challenges, so affording students the chance to actively participate in the learning process. The competitive nature of these examinations, along with their time-constrained structure, acts as a motivating factor for students to augment their reading velocity and boost their aptitude for comprehension.

One further advantage of utilizing gamification tools is their ability to offer timely feedback. The absence of this crucial attribute is a common occurrence in traditional reading materials. The availability of instant gratification allows students to promptly obtain feedback on their comprehension levels, so changing the learning process into a dynamic and adaptable undertaking. An illustration of this may be seen in the case of Quizizz, which provides immediate feedback to students, assisting them in evaluating their understanding as they progress through the content.

In conclusion, gamification tools foster an environment that promotes a culture of error tolerance. Students are given the chance to make mistakes without facing criticism or adverse consequences, thereby fostering a more positive and exploratory mindset towards knowledge acquisition. Bamboozle cultivates a conducive atmosphere for the development of critical thinking skills in pupils through the implementation of inventive tasks. Simultaneously, it offers an entertaining experience that mitigates apprehensions regarding probable mistakes.

In general, gamification tools have a profound impact on the way reading comprehension is perceived, effectively transforming it into an engaging endeavor in which students eagerly immerse themselves in texts, actively participate in a competitive quest for knowledge acquisition, and regard mistakes as valuable chances for gaining understanding. The integration of competitive elements, timely feedback, and a supportive environment inside gamification technology has had a profound impact on students' attitudes towards and engagement with reading comprehension. As a result, this has led to improved learning experiences that are characterized by increased efficiency and enjoyment.

The utilization of gamification tools possesses the capacity to fundamentally transform our approach to the comprehension of written texts. Gamification tools have the potential to cultivate a fondness for reading and enhance reading proficiency among kids through the provision of captivating and interactive experiences, prompt feedback, and the creation of an environment that embraces mistakes.

Conclusion

The successful application of gamification techniques presents several potential advantages in the enhancement of reading comprehension abilities. Gamification technologies have the potential to facilitate the cultivation of a fondness for reading and enhance reading proficiency among students through the promotion of active participation, provision of prompt feedback, and creation of an environment that embraces mistakes. According to the findings of this study, Kahoot! has been students' favourite gamification tool.

This study presents empirical findings that substantiate the efficacy of incorporating gamification tools Kahoot!, Baamboozle and Quizizz inside educational settings. Further investigation is required to ascertain the most effective strategies for integrating gamification tools and evaluating their enduring effects on student learning. Further investigation is warranted to examine the potential of employing gamification techniques in enhancing further aspects of literacy, including the acquisition of vocabulary and the development of writing proficiency.

References

- Abduh, A., & Rosmaladewi, R. (2017). Taking the Lextutor online tool to examine students' *World Transactions on Engineering and Technology Education*, 15 (03), 283-286
- Anisa, K. D., Marmanto, S., & Supriyadi, S. (2020). The effect of gamification on students' motivation in learning English. *Leksika: Jurnal Bahasa, Sastra dan Pengajarannya*, 14(1), 22-28.
- Benner, D. (2021). Engage Your Students With Baamboozle. <https://blog.tcea.org/baamboozle/S> classroom. In *ELT Forum: Journal of English Language Teaching*, 10(1), 21-29.
- Kenning, M. (2007). *ICT and Language Learning*. New York: Palgrave Macmillan.
- Kurt, A.A.; Sarsar, F.; Filiz, O.; Telli, E.; Orhan-Göksün, D.; Bardakçı, S. (2019). Teachers' use of Web 2.0: Education bag project experiences. *Malays. Online J. Educ. Technology*, 7, 110-125.
- Mohamad, A.M. (2020). Student as teacher – Alternative revision method via Quizizz app. *J. Pengaj. Umum Asia Tenggara*, 21, 147-156.
- Nadeem, N. & Al Falig, H. (2020). Kahoot! Quizzes: A Formative Assessment Tool to Promote Students' Self-Regulated Learning Skills. *Journal of Applied Linguistics and Language Research* 7(4), 1-20.
- Nafis, Y. A. (2020). *Kahoot game as media in grammar teaching learning process at SMAN 3 Ponorogo* [Unpublished doctoral dissertation], IAIN Ponorogo.
- Pardede (2016), *Proceeding of EED Collegiate Forum 2015-2018* (pp. 230-243). UKI Press.
- Primastuti, Y., & Sabariyanto, S. (2022). *The Using of Quizizz Application in English Learning at Tenth Grade of SMA Batik 2 Surakarta in Academic Year of 2021/2022*, Doctoral dissertation, UIN Surakarta
- Priyanti, N.; Santosa, M.; Dewi, K. (2019). Effect of Quizizz towards the eleventh-grade English students' reading comprehension in mobile learning context. *Lang. Educ. J. Undiksha* 2, 71-80.
- Quraishi, N. H., Asif, M., Sheeraz, M., & Amer, K. (2020). Novel Coronavirus (COVID-19) and its impact on Education at Tertiary Level: Challenges and Solutions for Pakistani Universities. *Journal of Education & Social Sciences*, 8 (2), 40-54.
- Razali, N.; Nasir, N.; Ismail, M.; Sari, N.; Salleh, K. (2020). Gamification elements in Quizizz applications: Evaluating the impact on intrinsic and extrinsic student's motivation. *Mater. Sci. Eng.*, 917, 1-11.
- Rusmiyanto, R., Huriati, N., Fitriani, N., Tyas, N. K., Rofi'i, A., & Sari, M. N. (2023). The Role of Artificial Intelligence (AI) In Developing English Language Learner's Communication Skills. *Journal on Education*, 6(1), 750-757.

- Wang, A. I. (2015). The Wear Out Effect of a Game-based Student Response System. *Computers and Education, 82*, 217-227.
- Zuhriyah, S. & Pratolo, B. W (2020). Exploring Students' Views in the Use of Quizizz as an Assessment Tool in English as a Foreign Language (EFL) Class. *Universal Journal of Educational Research, 8*(11), 5312 -5317

