Exploring Gamified E-Quizizz as a Digital Strategy to Support Learner Engagement and Classroom Atmosphere

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Abstract—Gamification is one of the creative strategies used in modern education to increase student involvement. This study looks at how Quizizz, a gamified online test, might be utilized to encourage active student involvement and create a positive atmosphere for learning. This qualitative case study was conducted in a secondary school classroom with a teacher and fifteen students. Data was gathered through in-depth interviews, learning activity documentation, and closed-ended and open-ended questionnaires. The results showed how important Quizizz was for creating a fun, competitive, and supportive learning environment. When students are asked questions, they engage and feel more supported. In the classroom, Quizizz encouraged collaboration and social interaction. It can be concluded that Quizizz serves as a valuable online educational tool that enhances student participation and fosters a more encouraging and emotionally supportive classroom atmosphere.

Keywords— Gamification, Quizizz, Student Engagement, Learning Atmosphere

*   **Abstrak—***Gamifikasi adalah salah satu strategi kreatif yang digunakan dalam pendidikan modern untuk meningkatkan keterlibatan siswa. Penelitian ini melihat bagaimana Quizizz, sebuah tes online yang di-gamifikasi, dapat digunakan untuk mendorong keterlibatan siswa secara aktif dan menciptakan atmosfer yang positif untuk belajar. Studi kasus kualitatif ini dilakukan di sebuah kelas sekolah menengah dengan seorang guru dan lima belas siswa. Data dikumpulkan melalui wawancara mendalam, dokumentasi kegiatan pembelajaran, dan kuesioner tertutup dan terbuka. Hasil penelitian menunjukkan betapa pentingnya Kuis untuk menciptakan lingkungan belajar yang menyenangkan, kompetitif, dan mendukung. Ketika siswa diberi pertanyaan, mereka terlibat dan merasa lebih didukung. Di dalam kelas, Quizizz mendorong kolaborasi dan interaksi sosial. Dapat disimpulkan bahwa Quizizz berfungsi sebagai alat pendidikan online yang berharga yang meningkatkan partisipasi siswa dan menumbuhkan suasana kelas yang lebih mendorong dan mendukung secara emosional.*

Kata kunci— *Gamifikasi, Quizizz, Keterlibatan Siswa, Atmosfer Belajar*

INTRODUCTION

The gradual digital revolution has led to important changes in modern education (Manuel et al., 2023). This technological era has not only changed classical learning methods, but also offers challenges and opportunities that require rapid pedagogical adjustments. As stated by Manuel et al (2023), the current generation of students,

known as generation 'Z', are those who were born in the digital age, and with technology at their fingertips, grew up in an environment filled with information and communication technology, so it is not difficult for them to adapt to various technological tools.

English language skills teaching strategies should be appropriate for each skill in order to achieve the expected results (Nurdianingsih, 2021). Among the various emerging teaching strategies, the application of gamification has emerged as a transformational method that has attracted the interest of academics and education professionals. Gamification, described as the use of game elements within non-game contexts such as learning, serves as a tactic to simplify complex and often stressful processes, such as learning assessments, to be easier and more enjoyable, while increasing learner motivation ((Llorens-Largo et al., 2016); (Quispe Ccoa et al., 2023)). As outlined by Quispe Ccoa et al. (2023), gamification in an educational context allows students to hone their critical thinking and optimize their educational potential, while making learning more engaging.

In the realm of English language learning, the dimension of student participation reflects an important factor directly related to the acquisition of comprehensive linguistic skills. The phenomenon of anxiety and lack of participation among language learners is a challenge that must be addressed to optimize the learning process. As revealed in the research of Quispe Ccoa et al. (2023), about 80% of students reported fear of mistakes during the conventional evaluation process, and 90% felt uncomfortable before facing the assessment.

Consequently, there is an urgent need to create pedagogical tools that can stimulate a supportive learning environment and relieve the mental stress inherent in the language acquisition process. Encouragement, understood as the positive tendency to learn and continue doing so independently (Melian-melian & Martin-gutierrez, 2020), is a crucial aspect that must be strengthened. Low student interest in learning and participation has become a major issue in modern education due to the digital revolution, and based on many scientific studies, this problem cannot be solved by applying classical or common techniques because they fail to motivate and actively engage students (Barata et al., 2015).

Quizizz, as a modern example of a gamified digital education app, interprets the concept of gamification through a platform design that incorporates game elements such as a point accumulation system, interactive leaderboards, competitive timing mechanisms, as well as engaging visuals in the form of funny memes that can trigger positive responses from users. Quizizz is a website that offers the creation of online quizzes that can be answered by students in three different methods: directly, as homework, and independently (Maraza-Quispe et al., 2024). When compared to other online evaluation tools such as Kahoot, Socrative, Plikers, and Celebrity, Quizizz not only provides more variety for different disciplines, but also allows users to understand students' low and high knowledge levels through detailed statistical reports (Quispe Ccoa et al., 2023).

A preliminary investigation conducted by Quispe Coa and his colleagues (2023) showed that the utilization of Quizizz in learning assessment brought about a significant increase in student motivation. In this study, 70% of students were able to complete the exam within the set time by using Quizizz, while only 45% were

successful in the conventional evaluation. In addition, the pass rate of students using Quizizz reached 75%, which showed a 15% difference compared to traditional assessment. Findings from (Janah & Number, 2022), provided positive results with the acceptance rate of the Quizizz 48% engaging student learning motivation.

Although previous research has shown that Quizizz can increase student motivation, there is still a gap in the current literature regarding a thorough qualitative understanding of how gamification affects interaction dynamics and the overall transformation of classroom environments in English language education. Studies by (Altawalbeh & Irwanto, 2023), highlighted high student motivation when using real-time assessment tools such as Kahoot and Quizizz, with students favoring Kahoot and Quizizz. Nonetheless, (Zainuddin et al., 2019) recognized that despite the improvement in student performance through gamification, its implementation still faces challenges. This study aims to address this gap by conducting a phenomenological exploration of students' immersive experiences with Quizizz as an English learning tool and examining how the tool contributes to creating an effective learning ecosystem. Additionally intends to explore not only measurable outcomes but also qualitative pedagogical shifts enabled by gamification in English language learning.

RESEARCH METHOD

To address the initial objective, a qualitative research methodology was utilized, specifically adopting a case study design to gather in-depth insights and a detailed understanding of the subject matter (Rohmah, 2022). The researchers employed multiple data collection methods to gather comprehensive and detailed data. The data set was carefully compiled from the student teachers' in-depth responses during the interview phase, which offered a comprehensive perspective of their experiences and perspectives (Rozak et al., 2019). These interviews aimed to explore their personal experiences, perceptions, and attitudes toward using Quizizz in their learning process. Through these conversations, the researchers sought to understand the participants' views on the effectiveness, engagement levels, and challenges associated with the platform. Furthermore, questionnaires were distributed to the participants to gather qualitative data. The questionnaires consisted of both closed-ended questions, designed to obtain measurable responses, and open-ended questions, which allowed students to express their thoughts and reflections more freely. This combination enabled a reflective assessment of students' responses, attitudes, and experiences with Quizizz. For data analysis, this study employed a thematic approach based on Braun & Clarke's (2014) methodology. The process involved several systematic steps: initial coding of the data to identify significant features, grouping these codes into broader themes that captured key patterns, revisiting and refining the themes to ensure they accurately represented the data, and finally interpreting the findings through a narrative analysis. This approach facilitated a comprehensive understanding of the participants' perspectives and experiences, allowing the researchers to present the results in a clear, organized, and meaningful manner. In addition to interviews, the researchers collected relevant documentation. This included screenshots of average leaderboards, which provided visual evidence of students' competitive interactions and motivation levels. These helped to triangulate the data and offered concrete

examples of how Quizizz was integrated into the learning environment. This study employed a descriptive qualitative research design, specifically utilizing a case study approach to gain an in-depth understanding of the phenomenon under investigation. The participants of this research included a total of sixteen individuals: one English teacher and fifteen secondary students from SMAN 1 Cepu. These students were selected because they actively engaged with Quizizz as a learning tool during their classroom activities, making them suitable informants for exploring the use and impact of the platform in an educational setting.

RESULTS AND DISCUSSION

This research study produced two important and notable results about using Quizizz as a teaching tool based on game principles in English language education. The first main result concerns how Quizizz influences students' overall learning experiences, including its effects on their engagement, motivation, and perception of learning process. Motivation plays an important role in increasing students' enthusiasm and engagement, encouraging them to participate in the learning process actively and fostering a positive attitude towards the acquisition of new knowledge and skills (Fitrianingsih, 2017). The second main result focuses on how Quizizz helps create and improve a positive and lively classroom atmosphere, which can lead to better student interaction, teamwork, and the general classroom environment. These results emphasize the potential advantages and effectiveness of using gamified digital tools like Quizizz in English language teaching, providing useful information for teachers aiming to develop more engaging and supportive learning spaces.

A. Students' Learning Experience with Quizizz

Information obtained from interviews indicated that a substantial number of students found learning through Quizizz to be enjoyable. They characterized the experience as engaging, interactive, and far from monotonous. Features such as leaderboards, a points system, timed quizzes, and immediate feedback contributed to the perception that they were participating in a game rather than a traditional learning environment. One student articulated this sentiment as follows:

"Learning is actually like playing a game for me. It's fun, not boring, because that learning element still makes me use my brain. The best part is that when I make mistakes, I don't get super embarrassed, I just chill about it. It's like leveling up in a game - sometimes you have to fail first before you can move up to the next level. " (Interview, Vicky, student at SMAN 1)

Table 1. Table The Results of the Questionnaire from Students

No	Indicator	Question Item	Response Distribution
1.	Motivation	I feel more motivated to study when using Quizizz.	Strongly Agree: 7 (46.7%) Agree: 6 (40.0%) Neutral: 2 (13.3%) Disagree: 0 (0%) Strongly Disagree: 0 (0%)

No	Indicator	Question Item	Response Distribution
2.	Motivation	I enjoy the points and leaderboard system in Quizizz.	Strongly Agree: 10 (66.7%) Agree: 4 (26.7%) Neutral: 1 (6.6%) Disagree: 0 (0%) Strongly Disagree: 0 (0%)
3.	Motivation	I am interested in learning more after using Quizizz.	Strongly Agree: 4 (26.7%) Agree: 7 (46.7%) Neutral: 3 (20.0%) Disagree: 1 (6.6%) Strongly Disagree: 0 (0%)
4.	Engagement	Quizizz makes me more active in answering questions.	Strongly Agree: 4 (26.7%) Agree: 8 (53.3%) Neutral: 3 (20.0%) Disagree: 0 (0%) Strongly Disagree: 0 (0%)
5.	Engagement	I tend to collaborate more with classmates when using Quizizz.	Strongly Agree: 4 (26.7%) Agree: 6 (40.0%) Neutral: 4 (26.7%) Disagree: 1 (6.6%) Strongly Disagree: 0 (0%)
6.	Atmosphere	The classroom becomes more enjoyable when using Quizizz.	Strongly Agree: 8 (53.3%) Agree: 6 (40.0%) Neutral: 1 (6.6%) Disagree: 0 (0%) Strongly Disagree: 0 (0%)
7.	Atmosphere	I do not feel stressed when answering wrong in Quizizz.	Strongly Agree: 5 (33.3%) Agree: 7 (46.7%) Neutral: 2 (13.3%) Disagree: 1 (6.6%) Strongly Disagree: 0 (0%)
8.	Atmosphere	I feel more relaxed and confident during Quizizz sessions.	Strongly Agree: 6 (40.0%) Agree: 6 (40.0%) Neutral: 3 (20.0%) Disagree: 0 (0%) Strongly Disagree: 0 (0%)

A total of 13 out of 15 students who were asked said they felt more enthusiastic when using Quizizz, and 12 students felt more engaged when it came to answering questions in class. Moreover, 11 of the students mentioned they were less scared of making errors since the way of playing helped them feel more at ease to participate. The teacher who was interviewed shared the same views. She mentioned that:

"Quizizz gets students more excited. I've observed that Quizizz genuinely enhances student engagement in my classroom. What's particularly notable is that even our more reserved students actively participate in answering questions. One of the most beneficial aspects is that I rarely need to remind students to maintain their focus—they naturally remain attentive throughout the activity." (Teacher Interview)

The teacher also mentioned that using Quizizz really assisted her with grading since she could quickly see the results and which questions students often got wrong.

B. Effect of Quizizz on Learning Atmosphere and Student Grades

The students shared that incorporating Quizizz into their lessons created a classroom setting that was lively, engaging, and enjoyable. They described the atmosphere as being filled with enthusiasm and a sense of excitement, which contributed to a more positive and welcoming learning space. Many students expressed that using Quizizz made the classroom feel less tense and more relaxed, helping to reduce anxiety during lessons. The improvement of the learners was also reflected in their active participation, as they were considered inactive learners before the implementation of the program (Matin et al., 2017). According to the survey results, 14 students noted that the overall mood of the classroom improved, becoming more cheerful and lively with the game-based activities. Additionally, 12 students indicated that their confidence levels increased when participating in quizzes through Quizizz, as the interactive and competitive nature of the platform encouraged them to answer questions more willingly and without fear of making mistakes. Overall, the use of Quizizz not only enhanced the classroom environment by making learning more enjoyable but also appeared to positively influence students' self-assurance in their academic abilities, potentially leading to better engagement and improved academic outcomes.

Figure 2. Average Student Scores Across Three Quizizz Sessions
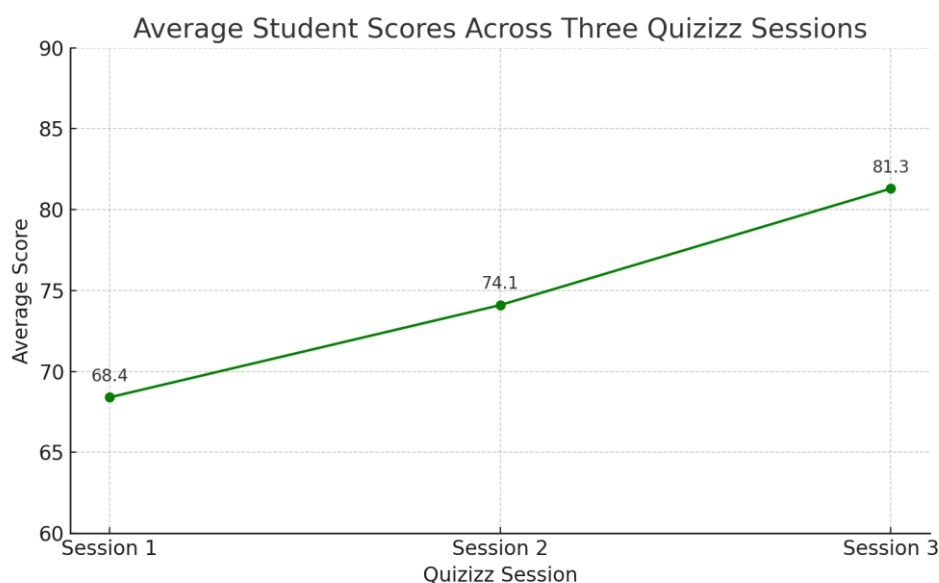
Documentation of student learning outcomes over the three sessions using Quizizz showed progress in grades. The average student score increased from 68.4 in the first session, to 74.1 in the second session, and reached 81.3 in the third session. This indicates that Quizizz not only creates a fun atmosphere but also plays a role in improving understanding of the material.

This increase signaled that students were not only emotionally engaged but also showed progress in learning outcomes. The teachers also emphasized that the gradual increase in students' scores helped them reflect on their understanding of the material and identify shortcomings from previous sessions.

CONCLUSION

In conclusion, Quizizz plays a crucial role in significantly boosting student engagement and shaping a positive learning atmosphere, particularly in English language classrooms. The incorporation of gamification elements within the platform serves to motivate learners, alleviate feelings of anxiety, and promote active participation among students. As a result, it is highly recommended for teachers to consider integrating platforms such as Quizizz into their formative assessments and various classroom activities. By doing so, they can greatly enhance the overall learning experience for their students, making it more interactive and enjoyable, which ultimately leads to better educational outcomes. The use of such innovative tools not only enriches the teaching process but also empowers students to take a more active role in their learning journey.

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