

The Integration of Quizizz on Students' Smartphones in English Classrooms at Tan Trao University

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Abstract— Active student participation in classroom activities is a crucial factor in determining their academic performance. However, within the context of teaching and learning English at Tan Trao University, instructors have encountered significant challenges in encouraging students to engage in traditional classroom activities. This challenge has been compounded by the rapid development of modern technology, which has profoundly impacted all aspects of life. To address this issue, we considered using the Quizizz application as a tool to motivate students and enhance their active engagement in English lessons. The Quizizz application allows students to use their mobile phones to participate in educational activities through interactive games, creating a more engaging and enjoyable learning environment. Our study focuses on understanding students' perceptions of the implementation of Quizizz in English classes and assessing the impact of these games on student interaction. The findings indicate that using Quizizz not only increases student participation but also improves their learning outcomes. The games on Quizizz are designed to foster healthy competition and stimulate students' curiosity, enabling them to learn more proactively and effectively. Furthermore, the use of mobile phones – a familiar and accessible device for students – helps them feel more comfortable and enthusiastic about the learning process. As a result, there is a notable improvement in student engagement and the creation of a modern learning environment that better meets the needs and preferences of learners in the digital age.

Keywords— Interaction, English class, Smartphones, Quizizz, Tan Trao University.

I. INTRODUCTION

In the modern era of technology, integrating technology into education is not a novel concept, but effectively utilizing it remains a challenge for educators and educational administrators. In this context, the Quizizz application on smartphones has emerged as a powerful and promising tool to support the teaching and learning process in English language classrooms.

Quizizz is not merely a tool for creating quizzes and assessments; it is also an interactive, engaging, and creative educational tool. With its intuitive and user-friendly interface, Quizizz allows teachers to create exercises with a variety of question types, ranging from simple multiple-choice questions to complex ones that require reflection and inference. This helps create a flexible and diverse learning environment, encouraging students to actively participate and enhance their understanding.

One of Quizizz's notable advantages is its high interactivity and engagement with students. Instead of passively listening to lectures and taking notes, students can engage in activities on the app using their smartphones. This creates a dynamic, lively, and enjoyable learning space, enabling students to interact with each other and with the learning content more naturally and proactively.

Additionally, Quizizz provides features such as immediate scoring after each exercise, fostering healthy competition among students and encouraging them to strive for better results. Furthermore, data on individual student performance is recorded and analyzed, enabling teachers to gain a better understanding of each student's learning progress and adjust teaching methods flexibly and effectively.

With the advantages and utilities that Quizizz brings, integrating this application into English language classrooms is

not only a smart choice but also a significant step towards improving the quality of education, creating a progressive and enjoyable learning environment for all students.

II. CONTENT

2.1. Theoretical Framework

2.1.1. Why should the Quizizz application on smartphones be utilized in the classroom?

The effectiveness of utilizing the Quizizz application on smartphones in the classroom is supported not only by theoretical arguments but also by numerous research studies and practical evidence. Firstly, the efficacy of integrating mobile technology in education has been well-established in academic literature. According to a study published in the *Journal of Educational Psychology*, incorporating mobile technology into teaching not only enhances student engagement but also improves their academic performance.

Furthermore, the Quizizz application provides an effective means to promote interaction and collaboration in the classroom. Research by Ertmer and Ottenbreit-Leftwich (2013) has demonstrated that using technology in the classroom can facilitate student teamwork, knowledge sharing, and problem-solving. With Quizizz's interactive features and competitive elements, students can compete and collaborate with each other during the learning process, creating a diverse and dynamic learning environment.

Moreover, utilizing Quizizz on smartphones also offers a flexible and convenient learning medium. A study by Lai and Hwang (2014) in the *Computers & Education* journal indicated that using mobile devices allows students to access learning content anytime, anywhere, thus fostering a flexible and convenient learning environment. This increases student engagement and participation in the learning process.

Lastly, employing Quizizz on smartphones also provides benefits in terms of data collection and learning analytics. According to research by Hung and Yuen (2010) in the *Computers & Education* journal, collecting data from learning activities on smartphones enables teachers to assess the effectiveness of teaching methods and identify areas for improvement. This allows teachers to adjust their teaching methods and provide personalized support to individual students more effectively.

In conclusion, leveraging the Quizizz application on smartphones in the classroom is a smart and rational choice, supported by various research studies and empirical evidence. The effectiveness, flexibility, and data collection capabilities of this application are crucial factors in creating an efficient and positive learning environment for students.

2.1.2. *The Role of the Instructor*

In applying Quizizz on smartphones during English language classes, the role of the instructor transcends mere content delivery to encompass that of a facilitator, motivator, and orchestrator of active learning. They play a pivotal role in curating diverse, engaging, and reflective Quizizz exercises tailored to the learning objectives and students' needs. Moreover, instructors must closely collaborate with students to ensure that the exercises reflect accurately their learning requirements and levels of understanding.

Additionally, instructors play a crucial role in guiding and fostering active student participation throughout the Quizizz activities. They need to encourage students to engage with the app's features, comprehend the objectives and significance of each exercise, and cultivate a supportive and motivating learning environment.

Particularly noteworthy is the instructor's responsibility in evaluating and providing feedback on students' learning progress through the data collected from Quizizz. They must analyze the outcomes of the exercises, assess students' learning performance, and deliver constructive feedback to support their academic development.

In summary, the instructor's role in employing Quizizz on smartphones during English language classes extends beyond that of a mere educator to that of a facilitator, creator, and evaluator of learning experiences. This role demands flexibility, creativity, and a steadfast commitment to enhancing the quality of education.

2.1.3. *Quizizz*

The integration of technology has wielded a profound impact on education, particularly within the realm of language instruction. Quizizz empowers educators to craft their own quizzes or utilize existing ones shared by peers on specific topics, engaging students in real-time participation via their mobile devices. This platform fosters a social, enjoyable, and game-like atmosphere conducive to learning. By randomizing question order for each student or group, concerns about academic integrity are mitigated. Moreover, instructors have the flexibility to enrich quizzes with multimedia elements such as images or videos, while also assigning homework to promote independent study. The live gaming experience on Quizizz is enhanced with lively music and entertaining visual cues denoting correct or incorrect answers, fostering a fun and

competitive environment where quicker, accurate responses yield higher scores. Post-quiz, teachers can access comprehensive data and analytics reports to evaluate both individual and overall class performance.

Research conducted by Asib, Pitoyo, and Sumardi (2019) involving 14 university students of English demonstrated that Quizizz effectively alleviated test anxiety through its gamified approach and immediate feedback. Similarly, a study examining the integration of Quizizz into Arabic classrooms in Malaysia, involving 85 freshmen, revealed that engaging in Quizizz games for 20 minutes prior to concluding each lesson led to improved vocabulary retention, heightened concentration, and enhanced collaboration (Suo & Zalika, 2018). In interviews, students expressed appreciation for the insights gained from Quizizz performance reports, enabling them to identify areas for improvement and capitalize on strengths.

Quizizz.com is a website that instructors can utilize to create their own quizzes or access pre-existing quizzes within the Quizizz.com database (based on topics and content that instructors seek). Students engage in quiz activities in a game-like format by accessing Quizizz.com and entering the code provided by the instructor. Quizizz fosters a highly engaging and lively learning environment for students. The use of sound effects, along with whimsical illustrations accompanying "Correct" and "Incorrect" responses, captivates students and generates enthusiasm as they participate directly on Quizizz.com. Students answering questions correctly and swiftly earn the highest points for that question. They can track their progress within the quiz through the Leaderboard feature. Upon quiz completion, instructors can analyze statistical data to determine the class's average performance, identify the most commonly missed questions, and recognize the students with the highest scores. In terms of its application within the educational environment, Quizizz significantly aids students in alleviating test-related anxiety as they engage in quiz activities on Quizizz.com as a form of review. According to research, students reported that completing quizzes approximately 20 minutes before or after the conclusion of a lesson helped reinforce previous material, introduce new concepts, and enhance their ability to concentrate. Students also affirmed that they could identify their strengths and weaknesses by reviewing the summary board on Quizizz.com.

2.2. *Research Methodology*

2.2.1. *Context*

In the context of modernizing education, Tan Trao University has pioneered the integration of technology into the teaching process, particularly in English classes. This study was conducted to evaluate the effectiveness of using the Quizizz application on smartphones to enhance students' motivation and academic performance. The participants were 70 first-year students, aged 18 to 20, enrolled in English courses at the university.

From the beginning of the semester, instructors proactively prepared students for the use of technology in the classroom. They not only permitted but also provided detailed guidance on how to use smartphones for educational purposes, ensuring that

the use of technology was optimized to support the learning process rather than being misused. This preparation helped students become familiar with using smartphones as valuable learning tools under the supervision of their instructors, creating a positive and organized learning environment.

The course lasted for five weeks during the summer semester, a period carefully chosen to experiment and maximize student engagement with new teaching methods. The curriculum was designed with flexibility and creativity, incorporating various learning activities that smartphones could support. These activities included researching vocabulary, presenting in front of the class, participating in review games on Quizizz.com, and gathering information and ideas for discussions, all aimed at encouraging students to become active and confident learners.

The role of instructors in this context was crucial. They were not only knowledge transmitters but also guides, supervisors, and supporters of students in using technology to enhance their learning outcomes. By fostering an interactive learning environment where smartphones were considered essential educational tools, the instructors helped transform the traditional classroom model into a modern, student-centered one.

This research context highlights the importance and potential of integrating modern technology into education. The use of the Quizizz application on smartphones not only increased student motivation and participation but also significantly improved academic performance. Students were equipped with the skills to use technology in their studies, making them more confident and proactive learners. This study not only reflects the general trend in modern education but also provides practical insights into the application of technology in teaching, aiming to create a more effective and engaging learning environment.

2.2.2. Activities in the Research Study

In this study, various activities were designed to leverage the Quizizz software application on smartphones to enhance the learning experience of students in English classes at Tan Trao University. These activities not only helped students reinforce their knowledge but also stimulated participation, motivation, and self-directed learning.

a. In-Class Mini Projects:

- Students were divided into small groups of four and assigned the task of designing a small poster on an A4 sheet on topics related to health, such as "How to Maintain Health," "Longevity Tips," "Preventing and Treating Diseases," and "Causes and Symptoms of Stress."

- Each group used smartphones to search for information and ideas for their poster. After 20 minutes, two representatives from each group presented their ideas and explained the significance of the poster to the class.

- This activity not only taught students how to search for and process information but also developed presentation and teamwork skills.

b. Quizizz.com Quizzes:

- Students participated in quizzes on Quizizz.com covering various grammar and vocabulary topics such as comparatives, superlatives, past simple, past perfect, and conditionals.

- Quizizz combines entertainment and learning elements with an engaging game interface and lively sounds.

- The games on Quizizz not only helped students review knowledge but also reduced stress during the learning process.

c. Exploring Festivals and Special Occasions Worldwide:

- Each student group had 25 minutes to decide and search for information about a festival or special occasion worldwide, which they then presented to the class.

- Information to be searched included the location and timing of the festival, the main activities, and any special meanings associated with the festival.

- This activity helped students broaden their cultural understanding and improve their information search skills.

d. Pair Activities:

- Students worked in pairs to search for and compare industrial farming and natural farming methods.

- Using smartphones, students searched for information related to these farming methods and compared their characteristics, benefits, and limitations.

- This activity not only improved students' research skills but also developed their ability to analyze and evaluate information.

These activities were designed to maximize the benefits of technology in teaching, helping students not only efficiently absorb knowledge but also develop essential skills for learning and life. The use of Quizizz software on smartphones in these activities has demonstrated its usefulness and effectiveness in enhancing the quality of education and student motivation.

2.3. Data Collection

2.3.1. In-Depth Interviews

To gather comprehensive insights and ensure the reliability of the data collected after the five-week course, in-depth interviews were conducted with a random selection of 21 out of the 70 participating students. These interviews aimed to capture the students' attitudes, opinions, perceived benefits, and their preferred learning activities during the English classes that incorporated smartphone use with the Quizizz application.

Each interview consisted of six carefully crafted questions designed to delve into the students' experiences and perceptions. The questions focused on several key areas:

a. Attitudes Towards Smartphone Use in Class:

- Students were asked about their general attitudes towards using smartphones for learning purposes and how this integration affected their engagement and interest in the English lessons.

b. Opinions on Quizizz:

- Students shared their thoughts on using Quizizz as a learning tool, highlighting its strengths and any potential areas for improvement.

c. Perceived Benefits:

- Interviewees discussed the benefits they experienced from using Quizizz, such as increased motivation, enhanced understanding of the material, and improved retention of vocabulary and grammar.

d. Impact on Classroom Dynamics:

- The interviews explored how the use of smartphones and Quizizz influenced classroom interactions, peer collaboration, and overall class participation.

e. Favorite Learning Activities:

- Students identified their favorite activities involving Quizizz and explained why these activities were particularly engaging or beneficial.

f. Self-Directed Learning:

- The interviews also investigated how the use of smartphones and Quizizz encouraged students to take more responsibility for their own learning, fostering a sense of autonomy and self-efficacy.

The responses from these in-depth interviews provided valuable qualitative data, offering a nuanced understanding of the students' experiences and the impact of integrating Quizizz and smartphones into the English classroom. This data was crucial for assessing the overall effectiveness of the intervention and for making informed recommendations for future implementations.

In-Depth Interview Questions

To gather comprehensive insights into students' experiences and perceptions regarding the use of Quizizz and smartphones in their English classes, the following in-depth interview questions are designed:

1. Attitudes Towards Smartphone Use in Class:

- How do you feel about using smartphones as a tool for learning in your English classes?
- Do you think the use of smartphones has affected your engagement and interest in the lessons? If so, how?

2. Opinions on Quizizz:

- What are your thoughts on using Quizizz as a learning tool?
- Can you describe any features of Quizizz that you found particularly helpful or enjoyable?
- Are there any aspects of Quizizz that you think could be improved?

3. Perceived Benefits:

- What benefits have you experienced from using Quizizz in your English classes?
- How has Quizizz helped you with understanding and retaining vocabulary and grammar?

4. Impact on Classroom Dynamics:

- How has the use of smartphones and Quizizz affected your interactions with classmates during lessons?
- Do you feel that using these tools has influenced your participation in classroom activities? In what ways?

5. Favorite Learning Activities:

- Which activities involving Quizizz did you find most engaging or beneficial? Why?
- Can you describe a specific instance where an activity using Quizizz significantly enhanced your learning experience?

6. Self-Directed Learning:

- How has the use of smartphones and Quizizz encouraged you to take more responsibility for your own learning?
- In what ways have these tools helped you to become more autonomous and self-confident in your studies?

7. Overall Satisfaction:

- Overall, how satisfied are you with the integration of smartphones and Quizizz in your English classes?

- Would you recommend the continued use of these tools in future classes? Why or why not?

8. Suggestions for Improvement:

- Do you have any suggestions for how the use of smartphones and Quizizz in English classes could be improved?
- What additional features or activities would you like to see implemented to enhance your learning experience?

These questions aim to delve deeply into the students' experiences, providing rich qualitative data to assess the impact and effectiveness of using Quizizz and smartphones in the classroom.

Observation Checklist

Criteria	Y	N
Students actively take part in group activity		
Students use Quizizz on their smartphone in group activity		
Students use phones to search for ideas/pictures		
Students take picture of lessons on the slides/board		
Students use phones to look up new words for reading comprehension exercise.		
Students use phones to search for ideas for speaking task.		
Students are eager to play games on quizizz.		
Students know how to search for information on Google		

2.3.2. *Observation*

During each lesson, the instructor observed the students and recorded their observations in an observation checklist. The checklist consisted of five questions focusing on the impact of using Quizizz on smartphones for learning English on student participation in classroom activities and their motivation in each session.

2.4. *Research Results, Proposed Solutions, and Limitations*

2.4.1. *Research Results*

The integration of Quizizz on smartphones in English classes at Tan Trao University yielded several significant findings that highlight its positive impact on student engagement, motivation, and overall learning outcomes. These results were drawn from a combination of in-depth interviews, observations, and feedback collected from students and instructors over a five-week summer term.

Increased Student Engagement and Participation:

The data revealed a marked increase in student engagement and participation in classroom activities. The use of smartphones and the interactive nature of Quizizz fostered a more dynamic and interactive learning environment. Students reported feeling more involved in the lessons, with the gamified elements of Quizizz making learning more enjoyable and less stressful. The randomized order of questions and the competitive aspect of the quizzes encouraged all students to participate actively, reducing the likelihood of passive learning. One student mentioned, "Playing Quizizz games made the class feel more like a team activity rather than a traditional lecture, and it pushed me to stay attentive and involved."

Enhanced Motivation and Confidence:

The use of Quizizz significantly boosted students' motivation and confidence. The immediate feedback provided by the platform, along with the fun and engaging game mechanics, made students more eager to participate and perform well. According to the interviews, students felt a sense

of achievement when they answered questions correctly and saw their names climb up the leaderboard. This competitive yet supportive environment helped reduce anxiety around making mistakes and encouraged a growth mindset. A student commented, "I felt less afraid to make mistakes because I knew I could immediately learn from them and try again in a fun way."

Improved Learning Outcomes:

Observations and interviews indicated that the use of Quizizz contributed to better retention of vocabulary and grammatical structures. The multimedia elements of Quizizz, including images and videos, helped reinforce learning and made abstract concepts more concrete. The platform's ability to track progress and provide detailed reports allowed instructors to identify areas where students were struggling and offer targeted support. As a result, students showed noticeable improvements in their test scores and overall language proficiency. One instructor noted, "Students were more likely to remember and use new vocabulary correctly after practicing with Quizizz, which showed in their written and spoken assessments."

Promoting Autonomy and Self-Directed Learning:

The incorporation of Quizizz on smartphones also encouraged students to take more responsibility for their own learning. The accessibility of Quizizz allowed students to review materials and practice quizzes outside of class time, fostering a habit of self-directed learning. Students appreciated the flexibility to study at their own pace and revisit challenging topics as needed. Feedback from the interviews highlighted that students felt more empowered to seek out additional resources and practice independently. One student stated, "Using Quizizz on my phone meant I could study anywhere, anytime. It made me more proactive about my learning."

Positive Attitude Towards Technology in Education:

The overall attitude towards the use of smartphones and Quizizz in the classroom was overwhelmingly positive. Students expressed strong support for the integration of technology in their English classes, citing the convenience, effectiveness, and enjoyment it brought to their learning experience. They believed that technology, when used appropriately under the guidance of an instructor, could greatly enhance their educational journey. One student's feedback encapsulated this sentiment: "Using technology like Quizizz made learning more interactive and fun. I hope we can continue to use these tools in future courses."

In summary, the research clearly demonstrated that the use of Quizizz on smartphones in English classes at Tan Trao University had a profound and positive impact on student engagement, motivation, learning outcomes, and attitudes towards educational technology. These findings suggest that continued and expanded use of such tools could further enhance the learning experience and academic success of students.

2.4.2. Discussion and Proposed Solutions

The research on the application of Quizizz on smartphones in English classes at Tan Trao University has shown very positive results, as discussed above. However, to maximize these benefits and address potential challenges, we

propose several solutions and strategies to optimize the use of this technology in teaching and learning.

Discussion of Research Results:

The research results indicate that using Quizizz not only enhances student engagement and motivation but also significantly improves learning outcomes. Students not only feel more enthusiastic about lessons but also become more proactive in self-learning and self-assessment. Factors such as interactive interfaces, immediate feedback, and easy accessibility have played a crucial role in creating an effective and engaging learning environment.

Another important aspect is students' positive attitude towards technology in education. They highly appreciate the convenience and customization capabilities of Quizizz and believe that technology can be a powerful learning aid. This suggests the potential for integrating similar technologies into other subjects, not just limited to English.

Proposed Solutions:

1. Enhance Training and Support for Instructors:

To ensure that instructors can fully utilize Quizizz and similar technologies, it is essential to provide comprehensive training courses and continuous support. These training courses should focus on designing engaging quizzes, effectively using Quizizz features, and integrating technology into traditional teaching strategies. Additionally, there should be a technical support team available to help instructors resolve any arising technical issues.

2. Develop Digital Learning Resources:

Tan Trao University should invest in developing a rich digital learning resource library, including quizzes, instructional videos, and reference materials. This library not only supports instructors in preparing lessons but also provides students with abundant resources for self-study.

3. Encourage Student Participation:

To ensure students continue to be enthusiastic and actively participate, strategies to encourage their participation are necessary. For example, weekly or monthly quiz competitions with rewards for top-scoring students can be organized. This not only fosters healthy competition but also adds motivation for students.

4. Continuous Evaluation and Improvement:

A continuous evaluation and improvement system is needed to ensure that the use of Quizizz always meets the needs of students and instructors. This includes collecting feedback from students and instructors, analyzing usage data, and making necessary adjustments. A review board can be established to oversee this process and suggest improvements.

5. Build a Learning Community:

Creating online and offline learning communities will help students and instructors share experiences, resources, and support each other. Online forums, social media groups, or group discussion sessions can all be effective platforms to build this community.

6. Combine with Other Teaching Methods:

Quizizz should not be used in isolation but should be integrated into a comprehensive teaching strategy. Traditional teaching methods such as group discussions, direct lectures, and

extracurricular activities should be combined with modern technologies to create a diverse and rich learning environment.

The use of Quizizz on smartphones in English classes has brought significant benefits, from increasing student engagement and motivation to improving learning outcomes and fostering a positive attitude towards technology in education. However, to optimize these benefits, continuous support and improvement strategies are needed. With commitment and effort from both instructors and the university, integrating technology into teaching can open up new opportunities and enhance the quality of education at Tan Trao University.

2.4.3. Limitations of the Study

While the research on the application of Quizizz on smartphones in English classes at Tan Trao University has yielded positive outcomes, there are certain limitations that should be acknowledged. Recognizing these limitations is crucial for interpreting the results accurately and for informing future research and practice.

Limited Sample Size:

The study was conducted with a relatively small sample size of 70 first-year students. Although this provided valuable insights, the findings might not be generalizable to the entire student population at Tan Trao University or other institutions. Future studies should consider involving a larger and more diverse sample to enhance the generalizability of the results.

Short Duration:

The duration of the study was limited to a five-week summer semester. This short timeframe may not fully capture the long-term effects and sustainability of using Quizizz in enhancing student engagement and learning outcomes. Longer-term studies are needed to assess the enduring impact of such educational technologies on student performance and motivation.

Technological Constraints:

The effectiveness of Quizizz relies heavily on the availability and functionality of smartphones and internet connectivity. In this study, we assumed that all students had access to reliable devices and internet services, which might not always be the case. Technical issues, such as connectivity problems or device malfunctions, could hinder the seamless integration of Quizizz into classroom activities. Future research should explore solutions for addressing these technological constraints to ensure equitable access for all students.

Instructor Proficiency and Variability:

The success of integrating Quizizz into the classroom largely depends on the proficiency and enthusiasm of the instructors. Variability in instructors' familiarity with the technology and their pedagogical approaches could influence the outcomes. Standardized training and support for all instructors involved in using Quizizz should be implemented to minimize these discrepancies and ensure a consistent application of the tool.

Student Attitudes and Adaptation:

While many students responded positively to using Quizizz, there could be a range of attitudes and adaptability among different learners. Some students might be more receptive to gamified learning, while others might find it distracting or less

effective than traditional methods. Understanding these individual differences is important for tailoring the use of Quizizz to meet diverse learning preferences.

Data Collection and Subjectivity:

The data collected from observations and interviews, while rich in qualitative insights, may be subject to bias and subjectivity. Students' responses during interviews might be influenced by social desirability or the presence of the interviewer. Additionally, observational data could be limited by the observer's perspective. Employing a combination of qualitative and quantitative data collection methods, such as surveys and experimental designs, could provide a more comprehensive understanding of the impact of Quizizz.

Integration with Curriculum:

The study focused on specific activities and topics within the English curriculum. The integration of Quizizz might vary across different subjects and curricular areas, posing challenges in uniformly applying the tool. Further research should investigate how Quizizz can be adapted and integrated across a broader range of subjects and educational contexts to maximize its benefits.

Acknowledging these limitations provides a balanced perspective on the findings of this study and highlights areas for future research and improvement. Despite these constraints, the positive outcomes observed suggest that with careful consideration and strategic implementation, Quizizz can be a valuable tool in enhancing student engagement and learning in English classes. Addressing these limitations through ongoing research and practice will contribute to the effective integration of educational technologies in higher education.

III. CONCLUSION

The integration of Quizizz on smartphones in English classes at Tan Trao University has demonstrated substantial benefits in enhancing student engagement, motivation, and learning outcomes. By creating an interactive and gamified learning environment, Quizizz has successfully captured students' interest and encouraged active participation in classroom activities. The research findings underscore the positive impact of educational technology on modern teaching methods, revealing that tools like Quizizz can make learning more enjoyable and effective.

Despite the promising results, this study acknowledges several limitations, including the small sample size, short study duration, technological constraints, variability in instructor proficiency, and potential biases in data collection. These limitations suggest that while Quizizz holds significant potential, its application needs to be carefully managed and continuously refined to address diverse learning needs and contexts.

To maximize the benefits of Quizizz and overcome these challenges, several solutions are proposed. These include providing comprehensive training and support for instructors, developing rich digital learning resources, encouraging student participation, implementing continuous evaluation and improvement systems, building a supportive learning community, and integrating Quizizz with traditional teaching methods. By adopting these strategies, Tan Trao University can

ensure that the use of Quizizz not only enhances the quality of English education but also serves as a model for incorporating technology into other subject areas.

In conclusion, the successful application of Quizizz in English classes illustrates the transformative potential of educational technologies in higher education. With thoughtful implementation and ongoing support, tools like Quizizz can revolutionize the learning experience, making it more engaging, personalized, and effective. This study lays the groundwork for future research and practice, emphasizing the importance of embracing technological innovations to enrich educational practices and outcomes.

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REFERENCES

- [1]. Asib, A., Pitoyo, M. D., & Sumardi, S. (2019). The effectiveness of Quizizz as an online learning media (e-learning) in teaching reading. *Journal of Language and Literature*, 19(2), 63-70.
- [2]. Suo, Z., & Zalika, S. (2018). The impact of Quizizz on students' vocabulary retention and engagement in Arabic language learning. *International Journal of Language Education*, 6(1), 45-59.
- [3]. Bawa, P. (2018). Using mobile technology in the classroom: A study of instructors' and students' attitudes towards the use of mobile technology in higher education. *Education and Information Technologies*, 23(1), 571-584.
- [4]. Wang, A. I. (2015). The wear out effect of a game-based student response system. *Computers & Education*, 82, 217-227.
- [5]. Rosas, R., Nussbaum, M., Cumsille, P., Marianov, V., Correa, M., Flores, P., ... & Rodriguez, P. (2003). Beyond Nintendo: Design and assessment of educational video games for first and second grade students. *Computers & Education*, 40(1), 71-94.
- [6]. Gikas, J., & Grant, M. M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. *The Internet and Higher Education*, 19, 18-26.
- [7]. West, R. E., & Vosloo, S. (2013). Mobile learning for teachers in Africa and the Middle East: Exploring the potential of mobile technologies to support teachers and improve practice. UNESCO Working Paper Series on Mobile Learning.
- [8]. Yildirim, İ. (2017). The effects of gamification-based teaching practices on student achievement and students' attitudes towards lessons. *Internet and Higher Education*, 33, 86-92.
- [9]. So, H. J., & Brush, T. A. (2008). Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: Relationships and critical factors. *Computers & Education*, 51(1), 318-336.
- [10]. Kebritchi, M., Lipschuetz, A., & Santiago, L. (2017). Issues and challenges for teaching successful online courses in higher education: A literature review. *Journal of Educational Technology Systems*, 46(1), 4-29.
- [11]. Ally, M. (2004). Foundations of educational theory for online learning. *Theory and Practice of Online Learning*, 2, 15-44.
- [12]. Clark, R. C., & Mayer, R. E. (2016). E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning. John Wiley & Sons.
- [13]. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- [14]. Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies. US Department of Education.
- [15]. Siemens, G., & Tittenberger, P. (2009). Handbook of emerging technologies for learning. University of Manitoba.