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## Transforming English Language Education with Gamification: An Analysis of Student motivation, Engagement and Performance

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**Abstract.** The recent development of digital technology has revolutionized various industries, including the education sector. The COVID-19 pandemic in 2019 necessitated the adoption of distance learning, resulting in a substantial increase in technological advancements and a demand for them. As a result, both teachers and students had to acquire digital literacy abilities. This study aims to explain the effect of employing Quizizz, Kahoot!, ClassPoint, Flippity, and Educaplay gamification on student motivation, engagement, and performance in the realm of English language training. This study thoroughly examines students' experiences with gamification in the context of English language teaching. The data was gathered by the utilization of a survey, examination, and observation sheet. Following the completion of the learning activity, a survey was given to a cohort of 35 vocational undergraduate students. The study's findings demonstrate the significant influence of gamification in the field of English language instruction. Participants regularly reported experiencing heightened engagement, motivation, and the cultivation of effective and enjoyable learning activities as a result of competition.

**Keywords:** *gamification, motivation, engagement, performance*

### 1. Introduction

The introduction of digital technology has completely transformed numerous industries, including the field of education. An important advancement is the utilization of gamification, which involves incorporating game components into non-game situations, in order to improve learning experiences. Within the field of English language teaching, gamification has emerged as a viable strategy to tackle issues pertaining to student motivation, engagement, and performance. By utilizing gamification elements such as reward, rankings, and challenge, educators strive to establish a more engaging and interactive educational setting that appeals to contemporary students who are adept at using technology.

The COVID-19 epidemic in 2019 required remote learning leading to a significant increase in technological progress and necessity. Consequently, both teachers and students were faced with the task of acquiring digital literacy skills. The effectiveness of technological adaptability in e-learning depends on the educator's knowledge, the institution's preparation, and motivation (barber, 2020). Effective e-learning is dependent upon digital literacy, which unavoidably influences the understandings and preference of both educators and learners. Thus, it is necessary for them to adjust to unconventional classroom environments by utilizing massive open online courses (MOOC), a learning management system (LMS), or online conferencing platforms that facilitate real-time interactions between educators and learners.

Technology is becoming more widely acknowledged as an essential tools, media and instrument in many educational settings for both teaching and learning purposes (Saichaie, 2020). In the context of English language instruction, technology has several benefits. It improves teaching and learning by increasing motivation, fostering student independence, offering a wide variety of reading resources, facilitating efficient learning, and enhancing communication (Mofareh, 2019). In addition, the use of digital content technology in English as a Foreign Language (EFL) education enhances the learning process and facilitates the creation of relevant learning experiences (Helvich et al., 2023). Integrating technology into the classroom is regarded as a new and modern method of instruction. One effective way to integrate technology into the classroom is through gamification.

Gamification refers to the incorporation of game characteristics into situations that are not related to gaming (Robson et al., 2015). Originally implemented in the corporate domain to foster interactive and significant interactions with user, gamification has subsequently gained extensive acceptance in several industries. Gamification has been increasingly popular in education due to its capacity to boost motivation and engagement in learning. As a result, it has become a preferred method in training and educational settings in recent years (Rincon, et al., 2022). Within this particular context, gamification is regarded as a progressive approach aimed at enhancing student interest and engagement by integrating elements of game design (Dichev & Dicheva, 2017). Studies suggest that the implementation of gamification can have a substantial influence on the educational experiences of students. Research has demonstrated that this method enhances student involvement and enhances learning results by making educational programmes more pleasurable and interactive (Kapp, 2012).

Regarding the acquisition of the English language, the implementation of gamification techniques, such as badges, point systems, and educational games, can offer prompt feedback and cultivate a competitive yet encouraging environment for learning (Turgut & Rabia, 2017). Fitria's (2022) study suggests that gamification, also known as game-based learning, is expected to have a positive impact on students. According to Indriasari, et al. (2020), gamification has been employed to increase student engagement in peer review tasks. According to Manzano-Leon et al. (2021), educational gamification has a substantial impact on academic achievement. A study conducted by Hsu and Wang (2019) emphasizes that the implementation of gamification not only increases students' motivation but also improves their performance in language learning tasks. By skillfully incorporating game and competition elements, the process of learning can become more interesting and fun, thereby enhancing students' motivation to study. To enhance the learning experience, it is crucial to establish a well-defined concept and objectives, and to actively involve students in a manner that enhances enjoyment and immersion.

One of the breakthroughs in English language instruction is the use of gamification, specifically through platforms like utilizing Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay, which has shown to be a powerful tool. They are educational platform that utilizes interactive quizzes and competitive features. Gamification in education entails integrating game design components into the learning process to stimulate and captivate pupils. Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay prove this by transforming quizzes into a vibrant sport where students accumulate points and receive instant feedback. This interactive structure not only

engages students but also boosts their motivation to actively participate. They offer students the chance to engage in English practice through interactive and enjoyable activities, turning ordinary exams into a competitive and immersive experience in a supportive environment. The rapid feedback mechanism and gamified environment of this platform motivate students to actively engage and work towards increasing their language skills.

This study aims to clarify the impact of using Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay gamification on students' motivation, engagement, and performance in the field of English language instruction. The study seeks to evaluate the students' motivation, engagement, and performance of this gamification method in addressing educational obstacles and fostering a more engaging and efficient learning atmosphere through a comprehensive examination. The study aims to provide significant insights into the impact of Kahoot! gamification on modern English language training and its potential benefits for learners and educators.

## **2. Research Method**

This study utilized a mixed-method technique, which involved pretests, posttests, and a semi-structured questionnaire, to successfully investigate individual experiences and opinions (Creswell & Creswell, 2018). To fully understand the impact of gamification in English language training, it was necessary to employ qualitative methods, specifically semi structured interviews, due to the intricate nature of the subject. This research comprehensively investigates students' encounters with gamification in the context of English language instruction. The study approach is determined by its suitability for studying individual perspectives, enabling a thorough assessment of the impact of gamification. Criteria of success refer to the specific measurements or standards that are utilized to evaluate the effectiveness or accomplishment of a certain activity. The success criteria in this study entail active student participation in the teaching and learning process. The students demonstrate high levels of engagement and motivation, with an estimated 70% actively participating in the teaching-learning process through attending class, completing assignments, and engaging in educational games.

Data was collected using a survey, test and observation sheet. After completing the learning activity, a survey was administered to the group of 35 vocational undergraduate students. The survey was created with the intention of assessing the motivation and engagement levels of participants in gamification activities and game-based learning activities that were given during the course while the test to measure the students' performance. The primary emphasis of the class observations was on motivation and involvement. All learning activities in the class were documented in the field notes. The assessment comprised a performance test to evaluate students' speaking abilities and listening comprehension, as well as a multiple-choice test to assess their reading comprehension and listening skills. A rubric was implemented to evaluate students' performance in speaking and writing, in order to determine their scores.

## **3. Findings And Discussion**

The study of individuals' experiences in gamified English language classes has yielded significant results, providing insight into the various impacts of gamification on factors such as engagement, motivation, and performance. By examining a range of subjects, the study captures

participants' perspectives, offering a valuable outlook on the substantial effects of gamification. The findings highlight the diverse ways gamification influences English language instruction, including improvements in student engagement and attitudes, the motivational benefits of competition, and the effectiveness of incorporating varied learning activities.

The results reveal the positive impact of gamification on their engagement and overall attitude towards learning English. Many students have observed that increased class attendance reflects the beneficial relationship between gamification and active participation (Inayati & Waloyo, 2022). The adoption of gamified teaching methods appears to have transformed the traditional classroom environment, making it more dynamic and engaging.

In addition, the participants consistently conveyed increased enthusiasm linked to gamified learning exercises. The participants emphasize the emotional advantages brought about by gamification. These views are consistent with prior research, which highlights the beneficial emotional influence of gamified methods on individuals learning a language (Rahayu et al., 2022). Moreover, the distinctive and pleasurable elements of gamification enhance the development of a favorable and attractive learning environment (Dian Anisa et al., 2020).

Table 1. Result of Students' Answer on Engagement and Motivation

NO	Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I desired to thoroughly investigate all the available alternatives due to their high level of difficulty	5%	5%	12%	52%	26%
2	I perceived time to elapse swiftly during the process.	3%	4%	10%	56%	27%
3	My objective was to successfully accomplish the game, regardless of its outcome	3%	4%	13%	59%	21%
4	I didn't mind how the game concluded.	21%	60%	9%	6%	4%
5	I experience a sense of boredom when engaging in its gameplay	29%	54%	9%	5%	3%
6	I prioritized achieving success in this task.	5%	5%	12%	54%	24%
7	I would depict this activity as highly captivating.	3%	4%	10%	60%	23%
8	I exerted significant effort in completing this activity	42%	35%	5%	14%	4%
9	I did not exert much effort in performing well in this activity	32%	36%	16%	12%	4%
10	I did not devote much energy into this task	3%	4%	13%	51%	29%

The majority of participants about 78% reported being sufficiently stimulated to explore all available alternatives, while only 7% expressed feelings of boredom. The majority of participants

80% expressed a willingness to complete this gamified learning exercise. Gamification has a notable impact on student engagement with the learning material. The students were not only acquiring knowledge from their institutions, but they were also striving to comprehend and assimilate the material (Cahyani, 2016).

The motivation of students plays a vital role in conceptual transformation processes that involve emotional aspects, critical thinking, learning strategies, and academic success. Students exhibit intrinsic motivation once they have established their desired outcome. Consequently, the students are motivated to take action in order to fulfil their inherent drive to enhance their own performance. Gamified learning interventions can enhance student motivation throughout the learning process. The table comprises statements that are relevant to engagement. This study also investigated the potential of gamified learning scenarios to enhance students' motivation. In general, the feedback was favorable: 90 % of participants expressed the belief that performing well on this assignment was essential to them. About 83 % of students found it engaging and considered the Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay game to be intriguing.

The outcomes of incorporating gamification in English language learning demonstrate the long-lasting effectiveness of competitive elements in motivating participants to improve their performance. These findings align with previous scholarly studies that emphasize the motivational impact of competition in gamified environments (Li et al., 2022). This acknowledgement highlights the importance of the competitive element in gamification as a key motivator for individuals to actively engage in the educational process and continuously strive for personal growth.

Participants in the competition also priorities self-improvement and aiming for perfection. This demonstrates how gamification can be a powerful motivator. Introducing competition as a means of motivation not only encourages learners to actively participate but also emphasizes individual achievement as a primary objective (Q. Zhang & Yu, 2022). This aligns with the self-determination theory, which posits that tasks perceived as challenging and providing autonomy might enhance intrinsic motivation (Jones et al., 2022). The positive reactions expressed in the competitive aspects of gamification provide more insights into the motivational benefits linked to these characteristics. The recognition that competition serves as an incentive for participants to develop more ambitious aims aligns with the idea that rivalry can stimulate individuals' drive to pursue greater effort for demanding accomplishments (Shekels & Tranter, 2022). Furthermore, the participants' recognition of the challenges associated with balancing cooperation and individual effort in a competitive setting highlights the complex and fulfilling aspects of managing rivalry in the context of gamified learning.

Table 2. Overall English Score

	Mean Score	Standard Deviation
<b>Pre-Test Score</b>	64.32	5.56
<b>Post-test Score</b>	78.64	5.47

Table 3 T-test Score

	F	Sig.	t	df	Sig. (2-tailed)	Mean differences	Std. error differences

<b>Pre-Test Score -</b>	.516	.523	3.142	34	.001	6.343	1.993
<b>Post-test Score</b>							

The average English skills Pre-Test mean score of the students is 64.32, with a standard deviation of 5.56. The students' English mean score in the Post-test Score is 78.64, with a standard deviation of 5.47. Based on the data from table 3, it can be concluded that the t-test value (3.142) is greater than the t-table value (2.72), and the P-value (0.001) is less than 0.05, indicating a substantial difference in the Overall English Score when utilizing Quizizz, Kahoot!, ClassPoint, Flippity, and Educaplay for gamification. From the above table, it is obvious that the significance level (two-tailed) of 0.001 is lower than 0.05. This proves a distinguished difference in students' English language proficiency while utilizing Quizizz, Kahoot!, ClassPoint, Flippity, and Educaplay gamification for English language learning.

Using Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay can provide challenges, such as students encountering issues accessing the internet due to either leaving their devices at home or their batteries running out. As a result, they may only be able to view the questions without actively participating in the game. In the event that an issue arises, one of the students may encounter a difficulty, prompting the teacher to potentially modify the configuration of the games to be conducted in a collective manner. Another issue in gamification is the restricted range of question types available in the free version. The available choices are limited to multiple-choice and true-false formats and this constraint restricts the teacher's ability to obtain pupils' responses to an open-ended question that requires more extensive elaboration (Resmayani, 2019). Teachers can enhance their interactions by upgrading to the premium account through a monthly subscription.

## Discussion

Extensive research provides strong evidence for the effectiveness of gamification in enhancing student motivation and engagement. The utilization of online games for gamification can have a significant influence on students' motivation to acquire English language skills through various means. By utilizing Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay, students are incentivized to succeed since they are able to observe the rankings of their peers. Additionally, students desire to participate in competitions and engage in learning activities due to the straightforward and easily comprehensible game rules offered by both platforms. The usage of online platforms enhances student enjoyment and engagement by providing participants with appropriate feedback or prizes. The students exhibit significant enthusiasm for learning when games are introduced, as opposed to while studying in a traditional manner. A study conducted by Nitiasih et al. (2022) discovered that the implementation of gamification, specifically using local stories, resulted in heightened student incentive to read and improved reading comprehension. The study also proposed that in a gamified learning environment, teachers can employ a digitally-based narrative. Presently, numerous research findings indicate that digital reading material is more widely favored than printed reading material (Kaban & Karadeniz, 2021).



Furthermore, the prior investigation revealed that the students experienced boredom as a result of the learning activity that did not use the game. However, when utilizing the game, the students shown increased enjoyment and engagement. Gamification has the potential to offer a captivating and dynamic learning experience, hence enhancing the enjoyment and amusement of learning English. According to Chen and Yao (2021), engaging in online games might enhance students' pleasure and contentment with English learning tasks, hence boosting their motivation. Furthermore, the implementation of gamification in education can cultivate a spirit of rivalry among students, leading to heightened drive to excel and attain incentives. Competition and rewards in online games can enhance students' innate drive to learn English (Balaji & Chakraborty, 2021). Furthermore, gamification can offer prompt feedback and reinforcement, enabling students to track their progress and acknowledge their achievements. Feedback and reinforcement in online games can increase students' motivation and participation in English learning activities (Liu, Kuo, & Chao, 2021). In addition, online games have the potential to enhance students' cognitive abilities and foster their motivation to acquire English language proficiency (Mallick, et.al, 2021).

In general, incorporating gamification through online games can significantly enhance students' involvement in English courses. Gamification facilitates an enjoyable and dynamic educational experience, where competition and prizes foster internal drive, prompt feedback and reinforcement heighten involvement, and the development of problem-solving abilities boosts confidence and motivation to acquire knowledge. Implementing the use of Quizizz, Kahoot!, ClassPoint, Flippity and Educaplay Application Assisted Learning Gamification can create a dynamic and engaging learning environment that promotes healthy competition among students. This is achieved through the delivery of material and the use of multiple-choice quizzes, which are more effective than traditional lecture and question and answer methods. This is confirmed by the rise in scores on each language skill being measured.

#### **4. Conclusion**

The primary aim of this study was to examine the impact of gamification on the field of English language instruction. More precisely, the study aimed to investigate the impact of gamified learning environments on students engagement, motivation, and performance the overall learning experience. The study's findings show the substantial impact of gamification in English language teaching. Participants consistently reported having increased engagement, motivation, and the development of effective and pleasurable learning activities as a consequence of competition. The t-test table indicates that the significance level (two-tailed) of 0.001 for the overall English Score is lower than the threshold of 0.05 when using Quizizz, Kahoot!, ClassPoint, Flippity, and Educaplay for gamification. This demonstrates a notable disparity in students' English language aptitude when using Quizizz, Kahoot!, ClassPoint, Flippity, and Educaplay gamification methods for English language acquisition. Gamification not only improved attendance but also increased the learning environment by fostering a more dynamic and engaged culture. Consequently, this encouraged a sense of excitement and pleasure in the overall process of learning. In summary, this research emphasizes the potential of gamification to revolutionize English language teaching by fostering positive learning



experiences. As educators and policymakers investigate innovative approaches, the integration of gamification emerges as a feasible way to develop dynamic, engaging, and efficient language learning environments.

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