

INVESTIGATING PRE-SERVICE TEACHERS' PEDAGOGICAL PURPOSES BEHIND THE USE OF GAMIFIED LEARNING IN EFL CLASSROOMS

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Abstrak

Penelitian ini bertujuan untuk menyelidiki alasan pedagogis calon guru dalam menerapkan gamifikasi dalam pembelajaran Bahasa Inggris sebagai bahasa asing serta tujuan pembelajaran yang ingin dicapai melalui penggunaannya. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei. Data dikumpulkan melalui kuesioner berbasis skala Likert yang telah divalidasi oleh para ahli untuk memastikan keabsahan dan meminimalkan potensi bias penelitian. Responden dalam penelitian ini adalah calon guru yang memiliki pengalaman atau pengetahuan tentang penggunaan gamifikasi dalam pembelajaran bahasa Inggris. Data yang diperoleh kemudian dianalisis menggunakan statistik deskriptif untuk mengidentifikasi tren dalam persepsi responden mengenai alasan pedagogis dan tujuan penggunaan gamifikasi. Hasil penelitian menunjukkan bahwa calon guru memiliki persepsi yang sangat positif terhadap penggunaan gamifikasi, terutama dalam menciptakan suasana belajar yang menyenangkan, meningkatkan motivasi dan keterlibatan siswa, serta mendukung pembelajaran yang lebih bermakna dan reflektif. Temuan ini menunjukkan bahwa gamifikasi memiliki potensi untuk menjadi strategi pembelajaran yang efektif dan inovatif dalam meningkatkan kualitas pembelajaran bahasa Inggris.

Kata Kunci: Alasan Pedagogis; Calon Guru; Gamifikasi; Keterlibatan Siswa; Pembelajaran Bahasa Inggris.

Abstract

This study aims to investigate the pedagogical reasons of pre-service teachers in applying gamification in English as a foreign language learning and the learning objectives to be achieved through its use. This study uses a quantitative approach with a survey method. Data were collected using Likert-scale questionnaire that had been validated by experts to ensure validity and minimize potential research bias. Respondents in this study were pre-service teachers who had experience or knowledge of the use of gamification in English language learning. The data obtained were then analyzed using descriptive statistics to identify trends in respondents' perceptions of the pedagogical reasons and objectives for using gamification. The results of the study show that pre-service teachers have a very positive perception of the use of gamification, especially in creating a fun learning atmosphere, increasing student motivation and engagement, and supporting more meaningful and reflective learning. These findings indicate that gamification has the potential to be an effective and innovative learning strategy in improving the quality of English language learning.

Keyword: English Language Teaching; Gamification; Pedagogical Rationales; Pre-service Teacher; Student Engagement

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INTRODUCTION

The development of digital technology has brought about major changes in educational practices in various countries, including in the teaching of English as a foreign language (EFL). Education and technological development are closely linked. As globalization continues to grow, technology has become an essential tool that individuals must adopt to overcome its challenges and to support the improvement of educational quality (Yuliawati et al., 2026). The integration of technology in the learning process has become increasingly important because today's students are growing up in a digital environment that is saturated with various interactive media (Li & Deng, 2024). This situation requires teachers to develop learning strategies that are not only effective in delivering material but also capable of increasing student engagement and motivation to learn (Peña, 2025). With the growing digitalization of education, teachers must adopt digital technologies in their professional practices, which influences their work habits and the amount of work they handle (Hidayati et al., 2024). Effective instruction in English classes involves more than mastering the language, teachers must also understand and employ suitable teaching strategies to support student learning (Nafartilova & Degeng, 2025). In the context of language learning, common challenges include low student motivation, limited active participation in class, and teaching methods that tend to be conventional (Bernal & Palma, 2025). To address this, numerous cutting-edge methods have been devised to make learning more interesting and participatory (Ahmed, 2024). Recent years have seen a surge in interest in gamified learning, a strategy that takes features from games and applies them to non-game learning contexts in order to boost student engagement and motivation (Ratinho & Martins, 2023). According to studies conducted by Aminah, Rafli, and Murtadho (2024), gamification has the potential to enhance the learning experience and boost motivation for English language learners, both from within and outside the classroom. To address the learning needs of the digital age, it is crucial for modern education to incorporate learning methodologies that integrate technology, interaction, and meaningful learning experiences (Skliarenko, 2024).

Laksanasut (2025) notes that gamification's use to EFL instruction has grown substantially alongside the expansion of technological tools used in the classroom. Gamification has been shown in multiple studies to improve language learning outcomes, student engagement, and intrinsic motivation. For example, research shows that the use of gamification in EFL learning can increase student participation by up to 89% and increase learning motivation in English classes (Siregar & Degeng, 2025). More research supports the idea that gamification, when applied to language learning via ICT, can boost students' interest in reading and engagement with the subject (Anggrainy et al., 2023). According to a recent literature review conducted in Indonesia, the majority of studies on the use of gamification in language learning have demonstrated a favorable effect on students' vocabulary growth, reading comprehension, and motivation to learn (Nugroho, 2026). The growing body of research on the subject of gamification in language learning is indicative of the topic's rising popularity.

Several studies have shown that gamification can improve students' English language skills, but there are still several obstacles to incorporating it into classroom instruction. Dhehganzadeh (2023) notes that one of the biggest obstacles is for educators to create gamification tactics that are both aesthetically pleasing and in line with learning objectives. Inadequately designed gamification has the potential to divert students' attention away from the learning content and into the game itself. Another barrier to gamification-based learning in the classroom is instructors' inadequate digital literacy and training in its creation. According to studies conducted by Joyonegoro and Agustina (2024), many EFL teachers still require specialized training in gamification literacy in order to comprehend how game aspects might be successfully included into the design of learning. This

shows that the successful application of gamification depends not only on the technology used, but also on teachers' pedagogical understanding in designing meaningful learning experiences.

Research has shown that gamification can improve EFL students' motivation, engagement, and performance in the classroom. For example, research shows that gamification can increase student motivation and create a more interactive learning atmosphere in EFL classrooms (Hardianti, 2024). In addition, other studies have also found that the use of gamification can improve students' communication skills in English language learning (Safitri, Zuniati & Hidayatullah, 2024). However, most previous studies have mainly focused on the impact of gamification on students' learning outcomes or students' perceptions of its use in the classroom. Research that specifically explores the pedagogical reasons behind teachers' decisions to use gamification, particularly from the perspective of pre-service teachers, is still relatively limited. In fact, understanding these pedagogical considerations is important because teachers' choices of instructional strategies are closely related to the learning goals they intend to achieve (Zhu, 2025).

Focusing on pre-service teachers is especially important in the context of teacher education. As individuals who are currently preparing to become professional educators, pre-service teachers are still in the process of developing their pedagogical beliefs, teaching identities, and instructional decision-making skills (Aleksieva, 2025). During this stage, they are introduced to various teaching approaches and innovative learning strategies, including the integration of technology in the classroom (Caiga et al., 2025). Exploring their perspectives therefore provides valuable insights into how future teachers understand and interpret the use of gamification as a learning strategy in English language teaching. In addition, pre-service teachers often approach instructional innovation with fresh perspectives. Unlike experienced teachers who may already have established teaching routines shaped by years of classroom practice, pre-service teachers are generally more open to experimenting with new methods and technologies (Chen & Liu, 2022). Examining their pedagogical purposes can therefore help reveal how future educators conceptualize the role of gamification in supporting meaningful learning experiences for students. Therefore, this study aims to investigate the pedagogical rationales of pre-service teachers in using gamified learning in English language teaching and the instructional goals they want to achieve through its use.

METHOD

This study uses a quantitative approach to investigate the pedagogical objectives of pre-service teachers in using gamification-based learning in EFL classes. A quantitative approach was chosen because this study aims to measure and analyze the perceptions and pedagogical reasons of respondents through numerical data obtained from a structured questionnaire. Quantitative research is commonly used in educational studies to measure attitudes, perceptions, and behavioral tendencies through statistical analysis of numerical data (Creswell & Creswell, 2023). The participants in this study were 60 students from the English Education Study Program at Universitas Brawijaya. All participants were pre-service teachers who had completed the teaching practice program. Therefore, they were considered relevant respondents because they had experience in classroom learning practices and had the potential to use various digital learning media, including gamification, in English language learning. This study used a questionnaire consisting of 17 statements. The questionnaire was designed to identify and measure the pedagogical reasons and learning objectives underlying the use of gamification in EFL instruction. Each statement is measured using a 5-point Likert scale, namely 1 (Strongly Disagree), 2 (Disagree), 3 (Neutral), 4 (Agree), and 5 (Strongly Agree). Educational researchers often use Likert scales to measure participants' opinions and views, as this scale allows them to assess the extent to which participants agree with specific statements (Joshi et al., 2022). To ensure high data quality, the questionnaire

instrument was validated and its reliability was tested before the main analysis was conducted. To determine whether each statement item could measure the targeted construct, we conducted a validity test. All seventeen items comprising the statements passed the validity test. Furthermore, Cronbach's Alpha was used to measure reliability. Compared to the 0.60 threshold, the reliability test results showed a Cronbach's Alpha value of 0.929. This demonstrates that the research instrument is reliable and suitable for this study due to its high level of reliability. A Cronbach's Alpha value above 0.70, which is a popular indicator of a survey instrument's internal consistency, is generally considered appropriate for educational research (Taber, 2022).

Distributing surveys online to respondents was the method used to gather data. As pre-service English instructors, respondents were asked to read each statement attentively and rate their level of agreement based on their experiences and perspectives. The research data was examined with the use of SPSS version 30. For each statement item, descriptive statistics were used to analyze the data and show how respondents responded. In educational research, descriptive statistics are frequently employed for data summarization and response pattern description using metrics like standard deviation and mean (Field, 2023). Means and standard deviations were among the descriptive statistics employed. The mean value was subsequently classified using a five-point Likert scale interval to make data interpretation easier. These categories help to explain it

Table 1. Mean Interval

Mean Interval	Description
4.21 – 5.00	Strongly Agree
3.41 – 4.20	Agree
2.61 – 3.40	Neutral
1.81 – 2.60	Disagree
1.00 – 1.80	Strongly Disagree

The classification in Table 1 is used to interpret the mean values obtained from the questionnaire responses. Through this categorization, the researcher can determine the level of agreement of pre-service teachers regarding the pedagogical rationales and instructional goals of using gamification in English language learning. This categorization also helps provide clearer interpretation of the statistical findings and supports the analysis of how pre-service teachers perceive the role of gamification.

RESULT

The interpretation of respondents' perceptions was determined based on the mean interval classification. The results of the descriptive statistical analysis provide an overview of how pre-service teachers perceive the role of gamification. To present the findings more clearly, the researcher provides a table showing the minimum & maximum score, mean and standard deviation values for each questionnaire item.

Table 2. Descriptive Statistics of Joyful Learning

Item	N	Minimum	Maximum	Mean	Std. Deviation
Q1	60	4.00	5.00	4.7667	.42652
Q2	60	3.00	5.00	4.5667	.56348
Q3	60	3.00	5.00	4.6500	.54695
Valid N (listwise)	60				

Based on table 2, pre-service teachers have very strong pedagogical reasons for using gamification to create joyful learning in English language learning. Item Q1 received a mean score of 4.7667, which falls into the strongly agree category. This shows that most respondents strongly agree that gamification helps create a fun and positive classroom atmosphere in English language

learning. Item Q2 also received a mean score of 4.5667, which falls into the strongly agree category, indicating that respondents believe that gamification can reduce students' anxiety and fear of making mistakes when learning English. In addition, item Q3 obtained a mean value of 4.6500, which is also in the strongly agree category. This shows that respondents believe that gamification-based learning activities can increase students' motivation to engage in English learning.

Table 3. Descriptive Statistics of Meaningful Learning

Item	N	Minimum	Maximum	Mean	Std. Deviation
Q4	60	3.00	5.00	4.5000	.62436
Q5	60	3.00	5.00	4.3667	.66298
Q6	60	2.00	5.00	4.1833	.87317
Valid N (listwise)	60				

Table 3 show that respondents also have cognitive reasons for using gamification to support meaningful learning. Item Q4 obtained a mean value of 4.5000, which falls into the strongly agree category. This shows that respondents strongly agree that gamification helps students understand English material in a more meaningful way. Item Q5 obtained a mean of 4.3667, which also falls into the strongly agree category. This finding shows that respondents believe that gamification allows teachers to connect English learning with the real-life contexts of students. Meanwhile, item Q6 had a mean of 4.1833, which falls into the agree category. This shows that most respondents agree that gamified learning can support deeper understanding compared to learning that is only rote memorization.

Table 4. Descriptive Statistics of Mindful Learning

Item	N	Minimum	Maximum	Mean	Std. Deviation
Q7	60	3.00	5.00	4.5167	.56723
Q8	60	1.00	5.00	4.3000	.80885
Q9	60	3.00	5.00	4.5000	.59660
Valid N (listwise)	60				

Table 4 show that gamification is also used to support mindful learning. Item Q7 has a mean of 4.5167, which falls into the strongly agree category. This shows that respondents strongly agree that gamification can encourage students to stay focused and mentally engaged during learning. Item Q8 obtained a mean of 4.3000, which is also in the strongly agree category. This shows that respondents believe that gamified learning can increase students' awareness of their own learning process. Item Q9 obtained a mean of 4.5000, which falls into the strongly agree category, indicating that respondents believe that gamification is in line with the principles of reflective learning and student-centered learning.

Table 5. Descriptive Statistics of Joyful Learning Goals

Item	N	Minimum	Maximum	Mean	Std. Deviation
Q10	60	4.00	5.00	4.8000	.40338
Q11	60	4.00	5.00	4.6833	.46910
Valid N (Listwise)	60				

Table 5 shows that gamification used by pre-service teachers is to create more enjoyable English learning. Item Q10 obtained a mean score of 4.8000, which is the highest score in this study and falls into the strongly agree category. This shows that respondents strongly agree that gamification is used to increase students' enjoyment in learning English. Item Q11 had a mean of 4.6833, which also falls into the strongly agree category. This shows that gamified activities are designed to encourage students' active participation in EFL class.

Table 6. Descriptive Statistics of Meaningful Learning Goals

Item	N	Minimum	Maximum	Mean	Std. Deviation
Q12	60	2.00	5.00	4.3333	.68064
Q13	60	3.00	5.00	4.3000	.67145
Q14	60	2.00	5.00	4.2167	.80447
Valid N (listwise)	60				

In terms of meaningful learning goals, table 6 show that all items received a mean score above 4.21, which falls into the strongly agree category. Item Q12 received a mean score of 4.3333, indicating that respondents use gamification to help students apply their English knowledge in a meaningful context. Item Q13 had a mean of 4.3000, indicating that gamified learning was designed to help students understand learning objectives more clearly. Meanwhile, item Q14 obtained a mean of 4.2167, indicating that respondents aimed to improve their understanding of English concepts more deeply through gamified activities.

Table 7. Descriptive Statistics of Mindful Learning Goals

Item	N	Minimum	Maximum	Mean	Std. Deviation
Q15	60	3.00	5.00	4.2667	.73338
Q16	60	3.00	5.00	4.2167	.66617
Q17	60	3.00	5.00	4.3333	.65527
Valid N (listwise)	60				

Table 7 show that gamification is also used to support mindful learning goals. Item Q15 has a mean of 4.2667, indicating that respondents strongly agree that gamification is used to encourage students' critical thinking skills. Item Q16 obtained a mean of 4.2167, which is also in the strongly agree category, indicating that gamified learning aims to develop students' responsibility for their own learning process. Item Q17 has a mean of 4.3333, indicating that gamification is used to encourage students to reflect on their learning progress during the learning process.

DISCUSSION

The study's findings highlight the significant pedagogical rationale that pre-service instructors hold for incorporating gamification into EFL classrooms to foster engaging and positive student learning. As a teaching tool, gamification has the potential to make class time more engaging for students and increase their engagement with course material. Affective variables, including interest, motivation, and learning anxiety, significantly impact the success of learning a foreign language. Consequently, it is crucial to employ learning practices that might establish a comfortable learning environment. A student's intrinsic motivation grows when their fundamental psychological needs autonomy, competence, and relatedness are satisfied, according to the Self-Determination Theory (Ryan & Deci, 2017).

To make learning both challenging and entertaining, gamified learning combines game elements such as points, badges, levels, and leaderboards. These features boost students' confidence and motivation to learn by allowing them to see their progress in real time. According to previous research, gamification increases students' interest in learning English. By incorporating game-like aspects such as challenges, incentives, and healthy competition into EFL lessons, gamification tactics can enhance student motivation and engagement, according to various studies (Hardianti, 2024). Gamification makes digital English language learning more engaging and participatory, which in turn boosts student motivation and knowledge retention (Aminah, Rafli, & Murtadho, 2024). Several studies in Indonesia have found that gamification tools such as Baamboozle, Quizizz, and Blooket can spark students' interest in learning English. Students become more engaged and

enthusiastic about learning when these platforms incorporate game elements (Ranti & Degeng, 2024).

For EFL students, gamification has two benefits: first, it gets them more involved in the material, and second, it makes reading more appealing. Anggrainy et al. (2024) found that gamification-based technology can boost reading motivation and student engagement in learning activities. Additional evidence from previous studies supports the idea that gamification can make learning more engaging and fun for students, which in turn increases their emotional investment in the material (Tsai, 2024). In sum, the results show that future educators know how important it is to incorporate fun activities into their lessons while teaching English as a second language. Motivating pupils to actively participate in their own learning is possible through the creation of a pleasant and engaging learning environment.

The results of the study demonstrate that future educators employ gamification not just to make learning more engaging, but also to facilitate meaningful learning. This type of learning allows students to grasp the information on a deeper level and makes it more applicable to their real-life experiences. Students are able to make connections between linguistic ideas and real-life contexts through meaningful learning when they study English. Learning takes on a more contextual nature. Students actively build their knowledge through meaningful learning experiences, which aligns with Constructivism Theory (Fosnot, 2013). Students in a constructivist classroom actively participate in the learning process by asking questions, exploring topics, and constructing their own answers rather than only receiving knowledge. Because game-based activities promote active thinking and the solution of different learning obstacles, gamification might enhance this constructivist process. Students not only commit the information to memory, but also gain a deeper comprehension of English topics.

Because gamification makes learning activities more participatory and contextual, it can improve students' knowledge of English learning materials (Neman, 2024). Adding the Quizizz app to reading classes can boost students' interest in reading and comprehension of narrative texts, according to another study (Qomariyah & Taufiq, 2025). According to current studies on digital game-based learning, gamification can enhance students' understanding of grammar and motivate them to learn on their own (Zuhri, Lidinillah, & Nashihin, 2025). This study's findings corroborate those of previous research that has shown that gamification, by making students more actively involved in their own learning, can improve the outcomes of English language acquisition (Nugroho, 2025). Though this study found that pleasant learning was more important, it also found that meaningful learning was somewhat less important. This suggests that future educators place a greater emphasis on gamification's motivating than its cognitive functions. This is a reasonable concern, given many aspiring educators are still in their student teaching roles and must prioritize boosting student engagement.

The results also demonstrate that future educators make use of gamification to promote mindful learning, which places an emphasis on students' capacity for self-reflection, concentration, and awareness of their own learning. Students of English must cultivate a growth mindset in order to comprehend the progressive nature of their language acquisition. Because most gaming systems often give fast feedback, letting students know their learning outcomes instantly, gamification can encourage mindful learning. The students can learn from their mistakes and get a better grasp of the material with this kind of feedback. Because gamification allows students to track their own learning progress through a points system and level progression, it can boost their cognitive engagement, according to research (Aminah et al., 2024). Furthermore, students can gain a clearer understanding of learning objectives and remain engaged in learning activities with the help of game aspects like

levels, badges, and prizes (Hardianti, 2024). In addition, gamification helps students hone their capacity for self-regulation, or the capacity to take charge of their own learning. The ability to speak and understand a language well calls for consistent exposure to the target language as well as thoughtful analysis of one's own progress toward mastery. Research by Tsai (2024) and others has shown that gamification can boost digital learning engagement and long-term memory retention. As a result, gamification is a tool for boosting students' interest in learning and for encouraging them to reflect on their own learning processes.

According to Muzakkir et al. (2022) and Zhang and Hasim (2023), gamification can be used to create a more motivating and interactive learning environment for students. This, in turn, increases their interest in learning and their engagement in class. Moreover, gamification aids students in making connections between what they have learned about English and the actual world through experience-based learning activities, which in turn allows them to better grasp topics (Fosnot, 2013; Zuhri et al., 2025). On the other hand, gamification promotes mindful learning objectives such as students taking ownership of their learning, reflecting on their progress, and developing critical thinking abilities (Wardani et al., 2024; Anggrainy et al., 2024).

Several significant implications for the study of English language acquisition stem from the results of this research. The first is that gamification is a powerful tool for improving education and boosting engagement among students. Teachers can make learning more interesting and participatory by including game components. Second, gamification can help with meaningful learning by exposing students to different contexts in which they can apply English language ideas through game-based learning activities. Third, certain gamification platforms have feedback and learning progress monitoring tools that can help students become more self-reliant learners. The results of this study indicate that gamification can greatly enhance three aspects of learning: emotional (joyful), cognitive (meaningful), and reflective (mindful) learning in the context of English language acquisition.

CONCLUSION

The research findings suggest that pre-service instructors utilize gamification to enhance English language learning. This approach is motivated by many pedagogical goals that aim to create engaging, purposeful, and conscious learning environments for their students. The research aims to examine the pedagogical reasons for using gamification in EFL classrooms. According to pre-service teachers, gamification can create a more engaging and interactive learning environment, which in turn increases student motivation, engagement, and active participation. Moreover, gamification has the potential to enhance students' contextual understanding of English subject through experience-based learning activities. It can also motivate students to cultivate learning awareness, accountability, and reflection on their own learning journey. The results of this study show that gamification may be used to make learning English easier and more engaging, and it can also help students focus on their own learning and make it more meaningful. Language acquisition, student engagement, and the growth of critical thinking abilities are just a few areas that could benefit from more investigation into the use of gamification in authentic classroom settings.

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