



Implementation of Gamification as a Classroom Management Strategy to Increase Learning Motivation in Elementary School Students

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ABSTRACT

Low learning motivation among elementary school students often stems from monotonous conventional teaching methods and a lack of meaningful interaction in elementary education. This context underscores the urgent need for innovative pedagogical strategies. Therefore, this study aims to examine the role of gamification in enhancing elementary school students' learning motivation using a quantitative survey. The results showed that the highest positive scores were recorded for varied teaching methods (4.69) and the use of interactive applications such as Kahoot! and Quizizz (4.44). The study, conducted over one month in October 2025, used questionnaires administered to teachers and prospective teachers and found high average scores, indicating a positive response to gamification. These data indicate that implementing gamification elements significantly increases motivation and engagement. Therefore, it can be concluded that gamification is an effective pedagogical strategy for increasing learning motivation. The implication of this study is the need for teacher creativity in designing contextual, curriculum-aligned, gamification-based learning environments to ensure optimal implementation.

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1. INTRODUCTION

Learning motivation is a fundamental factor that determines the success of the educational process. In the context of 21st-century learning, characterized by technological advancement and shifts in learning paradigms, low student motivation remains a major issue across all levels of education. Several studies have reported that some students exhibit low levels of learning motivation (Sanjaya, Misdalina, & Suryani, 2023; Iyai & Helsa, 2025). This condition is reflected in passive behaviors during learning activities, such as minimal participation in discussions, lack of initiative in asking questions, and low independence in completing assignments. These phenomena indicate that the learning process has not yet fully succeeded in fostering intrinsic motivation and active engagement among learners. Low learning motivation is often attributable to conventional teaching methods that remain predominantly one-directional and monotonous (Sanjaya, Misdalina, & Suryani, 2025). Such instructional models often lead students to lose interest quickly because they do not provide meaningful or challenging learning experiences. Therefore, it is necessary to develop innovative learning strategies that can foster interest, increase active participation, and create a learning atmosphere that is both enjoyable and relevant to the needs of modern learners.

One approach that has the potential to address these challenges is gamification, which involves applying game elements such as points, badges, levels, and challenges to the learning process (Fadilla & Nurfadhilah, 2022; Septiani, Juliansyah, & Rachman, 2025). According to Sari and Kartikasari (2021, as cited in Adawiyah & Rahmawati, 2022), gamification is a learning approach that uses game or video game elements to increase students' motivation and feelings of happiness in learning. The gamification approach is believed to provide a more engaging, competitive, and interactive learning experience. In addition to enhancing learning motivation, gamification supports the development of 21st-century skills, including creativity, collaboration, and critical thinking.

Findings from various studies indicate that implementing gamification can increase students' enthusiasm, participation, and engagement in learning (Fadilla & Nurfadhilah, 2022; Septiani, Juliansyah, & Rachman, 2025). However, the effectiveness of this approach depends heavily on teachers' and pre-service teachers' understanding and readiness to design gamification-based learning activities. In this regard, teachers and future educators play a strategic role in ensuring the successful implementation of such innovative strategies.

Building on this background, this study aims to analyze the role of gamification in enhancing learning motivation among both teachers and pre-service teachers. This research is expected to make both conceptual and empirical contributions to the development of innovative learning strategies that are relevant to educational needs in the digital era. Furthermore, the findings of this study are expected to serve as a reference for educators in designing gamification-based learning to enhance students' motivation to learn.

2. METHODS

This research uses a quantitative approach. This approach was chosen to analyze and explore the role of gamification in enhancing learning motivation by comprehensively synthesizing perceptual data and theoretical frameworks. Data were collected using two complementary primary techniques: Questionnaires and Literature Reviews.

The questionnaire was used to analyze in depth the role of gamification in enhancing learning motivation. It explored the opinions, perceptions, and experiences of respondents, including teachers and prospective teachers, regarding the effectiveness of implementing gamification

elements in elementary schools. The collected data consisted of average scores, which were then interpreted both descriptively and qualitatively to provide insight into how gamification strategies could influence students' motivation and engagement in the learning process.

The literature review was conducted by synthesizing relevant sources, including scientific journals, prior research findings, and theoretical texts. This method was employed to construct a robust theoretical framework, validate findings from the field, and provide a deeper analysis of the questionnaire results. The analysis was conducted based on established learning and motivation theories, such as Self-Determination Theory and Constructivist Theory, to strengthen the study's conceptual foundation. The research subjects in this study were teachers and prospective teachers from the Indonesian University of Education (UPI) Purwakarta campus, as well as from related elementary schools, who had experience with, or held views on, the implementation of gamification in learning activities.

The research was conducted over approximately one month in October 2025 and followed several systematic stages. The procedure began with the development and validation of the research instrument, a questionnaire designed based on relevant theories of motivation, learning, and gamification. After the instrument was finalized, data were collected by distributing the questionnaire to teachers and prospective teachers who met the research criteria, and a parallel literature review was conducted to strengthen the theoretical foundation. The process then continued with the organization, coding, and analysis of the collected data, both quantitatively and qualitatively, to interpret the findings in relation to existing theories and to answer the research questions comprehensively.

Data analysis in this study was conducted in several integrated stages to yield comprehensive findings on the role of gamification as a classroom management strategy. First, a quantitative-descriptive analysis was conducted, in which the questionnaire data were processed to calculate average scores that represented respondents' perceptions of the effectiveness of gamification in the learning process. These average scores were used as the basis for a quantitative synthesis, in which the results were interpreted and discussed in depth by linking them to relevant theoretical concepts identified in the literature review. Through this process, the numerical data were transformed into a qualitative interpretation that explained how gamification supports classroom management, influences student motivation, and contributes to a more engaging and structured learning environment.

3. RESULTS AND DISCUSSION

This section presents the results of the quantitative-descriptive data analysis obtained through the questionnaire, followed by an in-depth analysis of the score findings and their synthesis with the learning theory framework.

3.1. Description of Questionnaire Results on Gamification

This study examined teachers' and pre-service teachers' perceptions regarding the role of gamification as a classroom management strategy. The quantitative-descriptive analysis indicated that respondents held a very positive view of the implementation of gamification. This was evidenced by the overall average questionnaire score of 4.44, categorized as High–Very High (Vargas-Sánchez et al., 2024; Lampropoulos & Sidiropoulos, 2024)

Table 1. Summary of Gamification in Learning Questionnaire Results

No	Statement	Average	Category
1	Monotonous learning is the main cause of students' low learning motivation.	4,38	High
2	The variety of learning methods and media plays an important role in enhancing students' motivation to learn.	4,69	Very High
3	I understand the concept of gamification and its application to the learning process.	3,60	High
4	Gamification (points, levels, challenges, and rewards) enhances the engagement of elementary school students in learning activities.	4,51	Very High
5	The use of interactive applications such as Kahoot or Quizizz can increase students' active participation.	4,44	High
6	The reward system and digital badges can motivate students to achieve better learning outcomes.	4,55	Very High
7	The implementation of leaderboards and learning challenges fosters a positive competitive spirit in the classroom	4,47	Very
8	Gamification not only increases motivation but also helps students better understand lesson concepts.	4,63	Very High
9	Teachers play an important role in designing and managing gamification to ensure that it remains educational rather than merely entertaining.	4,53	Very High
10	I am interested in and plan to implement gamification as a classroom management strategy to enhance students' motivation for learning.	4,40	High
Overall average: 4.44 (Category: High - Very High)			

3.2. Analysis of Score Findings and Root Causes of Motivation

The high average scores across gamification-related items indicate that respondents perceive

this strategy as an effective and relevant solution to low student motivation (Lampropoulos & Sidiropoulos, 2024).

3.2.1 Gaps in Conventional Learning

The root cause of low motivation among elementary students lies in conventional teaching approaches, which are often monotonous, lack methodological variation, and provide limited active interaction. Repetitive lecturing quickly leads students to become bored, lose interest, and adopt a passive listening role, ultimately limiting engagement and conceptual understanding (Smiderle et al., 2020). The questionnaire confirms this issue, with a score of 4.38 (High) for the statement that monotonous teaching is the primary cause of low motivation.

3.2.2 Reinforcement through Variation and Innovation

The highest score (4.69, Very High) on the statement regarding the importance of varied teaching methods and media highlights the crucial role of teachers in addressing this problem. Teachers' and pre-service teachers' preference for gamification is driven by the need to shift from conventional lectures toward interactive approaches, such as group discussions and the use of educational technology (Li, 2024; Vargas-Sánchez et al., 2024).

3.2.3 Effectiveness of Gamification Elements

High scores obtained for gamification elements, points, digital badges, leaderboards, learning levels, and challenges (mean > 4.40) empirically demonstrate that these features create a more engaging, active, and competitive learning environment. Meta-analyses and experimental studies indicate a positive relationship between gamification elements and motivation (Li, 2024), as well as the effectiveness of student-response applications like Kahoot in increasing engagement (Anane et al., 2024). The use of interactive applications (Kahoot/Quizizz), with a score of 4.44, further confirms their effectiveness in enhancing students' active participation, providing immediate feedback, and fostering intrinsic motivation (Janković et al., 2023; Anane et al., 2024).

3.3. Synthesis of Findings with Theoretical Frameworks

The high and positive scores from respondents are synthesized using three main theoretical frameworks to provide a comprehensive qualitative interpretation.

3.3.1 Self Determination Theory (SDT)

Gamification functions as a motivational system that addresses the fundamental psychological aspects of students. The positive questionnaire results are consistent with SDT, which posits that gamification fulfills three basic psychological needs: competence, social relatedness, and autonomy. Competence is achieved through points, badges, and levels that provide recognition of achievement, strengthen self-efficacy, and increase intrinsic motivation. This is consistent with the findings of Baah, Govender, and Subramaniam (2024), who demonstrated that reward elements in gamification significantly affect students' perceived competence and learning engagement. Social relatedness is fostered through leaderboards and team activities that cultivate a positive competitive spirit in the classroom, as shown by Sujarwo and Rejekiningsih (2023), who found that collaborative gamification enhances students' sense of belonging and social motivation. Meanwhile, autonomy is reflected through the design of challenges and missions that allow students to take initiative in the learning process. These findings are consistent with those of Li, Hew, and Du (2024),

who reported that gamified designs that provide freedom of choice positively affect students' autonomy and learning satisfaction. Thus, the high scores in this study reinforce the SDT perspective that fulfilling basic psychological needs is the key to the emergence of intrinsic motivation and learning engagement.

3.3.2 Constructivist and Social Theory (Vygotsky)

The high score for the use of interactive applications (4.44) also supports constructivist theory. Digital gamification applications provide opportunities for students to construct knowledge through collaborative and reflective experiences. Gamification creates a participatory learning environment that enables students to focus on the learning process and the experience itself, in accordance with constructivist principles. This finding is supported by Nguyen Viet and Nguyen Viet (2025), who found that integrating gamification into constructivist learning can increase students' cognitive engagement and creativity. Perez Aranda, Medina Claros, and Urrestarazu Capellan (2024) also emphasized that collaborative game-based learning environments strengthen social interaction and foster positive emotions in the classroom. Therefore, the implementation of gamification in this context is consistent with Vygotsky's social constructivist theory, which views learning as an active process of constructing meaning through collaboration and shared reflection.

3.3.3 Multiple Intelligences Theory

The highest score in the aspect of method variation (4.69) supports Gardner's Multiple Intelligences Theory. Gamification serves as an adaptive platform that supports diverse learning styles and intelligences, such as visual, kinesthetic, and interpersonal, through challenge-based learning, point tracking, and team-based activities. This is consistent with the research by Hui, Jawawi, and Jamal (2024), who found that interactive game-based learning effectively develops multiple aspects of intelligence among elementary school students. Astiti et al. (2024) emphasized that multimedia-based interactive methods can increase learning motivation among students with different types of intelligence. Therefore, the use of gamification in learning not only promotes cognitive learning outcomes but also accommodates students' diverse learning styles and potential, in accordance with the principles of multiple intelligences.

3.4. Discussion

Overall, the data show that gamification is not merely a technological trend but a pedagogical approach with great potential to create meaningful and adaptive learning experiences. Gamification is effective in enhancing motivation, collaborative skills, and positive character formation. However, its effectiveness largely depends on teachers' active role as creative and reflective designers and facilitators, ensuring that game elements are harmoniously integrated with curriculum objectives and educational values. Increasing teachers' digital literacy is therefore a key prerequisite for optimal implementation. These findings are consistent with the research of Gonzalez Fernandez, Revuelta Dominguez, and Fernandez Sanchez (2022), who emphasized that the success of gamification is determined by instructional design that integrates psychological needs (SDT), socio-collaborative contexts (constructivism), and method variations that accommodate learners' diverse characteristics (multiple intelligences).

4. CONCLUSION

Low learning motivation among elementary school students is attributable to monotonous teaching methods, a lack of variation, and limited active interaction between teachers and students. These conditions make students easily bored, lose interest, and experience a decline in understanding and learning outcomes. The implementation of gamification as a classroom management strategy has been shown to increase students' motivation, engagement, and conceptual understanding. Through game elements such as points, digital badges, leaderboards, and learning challenges, gamification creates a more engaging, interactive, and healthy-competitive learning environment. Moreover, this approach fosters positive character, strengthens collaboration, and develops 21st-century skills aligned with curriculum objectives.

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