

Teachers' Attitudes Toward Gamification and Its Classroom Application in Elementary Schools

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Abstract— Gamification is reshaping classroom instruction by turning ordinary learning activities into opportunities for greater participation and engagement, yet its meaningful use ultimately depends on the teachers who bring it into practice. This study determined teachers' attitudes toward gamification, the extent of its classroom application, and the relationship between these variables among elementary school teachers in the Sapang Dalaga District, Schools Division of Misamis Occidental. Using a descriptive-correlational research design, data were gathered through a researcher-made questionnaire that measured attitudes in terms of perceived usefulness, interest and willingness to use, perceived ease of use, and motivation to integrate gamification, while classroom application was examined through frequency of use, types of tools utilized, integration in lesson delivery, and use for motivation and engagement. Findings revealed that teachers had a very positive overall attitude toward gamification and applied it to a high extent in their classrooms. However, the variety of gamification tools utilized was limited, indicating that application was stronger in frequency, lesson integration, and motivational purposes than in the use of diverse tools. The relationship between teachers' attitudes and classroom application was not statistically significant, indicating that favorable attitudes did not necessarily correspond with greater classroom use. The study concludes that positive attitudes provide a favorable foundation for gamification, but practical competence, resources, and instructional support may be important in translating such attitudes into broader and more purposeful classroom application.

Keywords— gamification, teachers' attitudes, classroom application, elementary education, instructional practices.

I. INTRODUCTION

Background of the Study

Gamification is an instructional approach that incorporates game-like elements into learning activities to encourage participation, sustain interest, and support engagement. This can include points, badges, rewards, levels, challenges, competitions, and game-like quizzes that teachers leverage during their regular classroom instruction. In elementary education, gamification may be used at different stages of a lesson, such as introducing content, facilitating classroom activities, providing practice, reviewing concepts, reinforcing learning, and checking pupils' understanding. However, its classroom application is dependent on decisions made by teachers when, why and how specific game elements are used. Thus, the attitudes of teachers regarding gamification, which is manifested on perceived usefulness, perceived interest and willingness to use, perceived ease of use, and motivation to integrate gamification are relevant to the understanding of the adoption process. Equally important is its classroom application, reflected in

frequency of use, types of gamification tools utilized, integration in lesson delivery, and use for motivation and engagement. Through these two dimensions, teachers' perspectives on gamification and the way gamification is expressed in their reported classroom practices can be determined.

The rationale for examining these variables is supported by recent research on the educational use of gamification. According to Li et al. (2024), gamification positively impacted students' intrinsic motivation, specifically autonomy and relatedness, while its impact on perceived competence was constrained. Zeng et al. (2024) found a moderate positive effect of gamification on academic achievement and also showed that the impact of gamification can be different depending on the context, including educational level, subject matter, learning environment, and game elements used. In primary education, Romero-Rodríguez et al. (2024) identified generally favorable findings concerning engagement, motivation, and self-efficacy, while

reporting mixed findings for learning outcomes. Ruiz et al. (2024) also studied the gamification of school engagement in primary and secondary schools and cited the need to take into account the design and implementation of gamification. From the teacher perspective, Luo (2024) examined teachers' acceptance of gamified educational tools and demonstrated the relevance of teacher-related factors to their intention to use such tools. Taken together, this research demonstrates that gamification can be used in education, however, in order to understand its role in classroom-based instruction, focus needs to be given to the learner outcomes, as well as the teachers who are making decisions about its use.

Within the context of the Sapang Dalaga District, Schools Division of Misamis Occidental, the relevant issue is not to assume that teachers either favor or resist gamification, nor that they frequently or infrequently apply it. These are real world issues which must be decided by the teachers themselves. The district comprises public elementary and integrated schools in which teachers handle learners from Kindergarten through the elementary grade levels, providing an appropriate context for examining instructional practices involving gamification. More specifically, what needs to be established is the level of teachers' attitudes toward gamification, the extent to which they report applying it in classroom instruction, and whether these two variables are significantly related. This emphasis is not just a question of whether gamification is more or less effective for increased motivation, engagement, or achievement. It rather focuses on the teacher-side disposition-practice link in a specified elementary education context.

In view of these considerations, the study sought to determine teachers' attitudes toward gamification and its classroom application in elementary schools. Specifically, it aimed to determine teachers' attitudes in terms of perceived usefulness, interest and willingness to use, perceived ease of use, and motivation to integrate gamification; determine the extent of classroom application in terms of frequency of use, types of gamification tools utilized, integration in lesson delivery, and use for motivation and

engagement; and determine whether a significant relationship exists between teachers' attitudes and classroom application. The findings can offer an empirical starting point for considering where instructional support, professional development, and/or resources on gamification might be needed. They also can furnish school and district administrators with information that is relevant to and suggestive of context-specific instructional planning and future researchers with baseline data for gamification studies.

Theoretical Framework

The Technology Acceptance Model (TAM) by Fred D. Davis (1989) is the foundation for this study. The model explains how individuals come to accept and use a technology based largely on their perceptions of its usefulness and ease of use. The present study adopts TAM as the proper theoretical lens for the following reasons: TAM indicates that there is a relationship between users' perceptions and attitudes towards a technology to the intention and the actual usage of the technology. In the context of gamification, this perspective is useful for examining whether teachers' attitudes toward gamification are associated with the extent to which they apply it in classroom instruction.

Perceived usefulness and ease of use are considered key factors in technology acceptance in the Technology Acceptance Model. An individual's perceived usefulness is the extent to which they believe that the use of a specific technology will enhance their job performance and their perceived ease of use is the extent to which they believe using the technology will not be very difficult (Davis, 1989). In the original model, these perceptions influence users' attitudes toward technology, which are associated with behavioral intention and subsequent use. The model thus suggests a sequential process whereby people will first assess the usefulness and convenience of a technology before they adopt it. Even today this theoretical relation is seen in educational research. Luo (2024) explained that TAM links perceived usefulness and perceived ease of use with attitudes, acceptance intention and actual acceptance. The study further showed that in the specific problem area of gamified educational tools, usefulness and ease

of use were still two key aspects of teachers' acceptance.

The present study uses TAM as the theoretical framework for exploring teachers' attitudes towards gamification and its use in the classroom. Teachers' attitudes are examined through perceived usefulness, interest and willingness to use, perceived ease of use, and motivation to integrate gamification. Of these dimensions, perceived usefulness and perceived ease of use correspond directly to the core constructs of TAM. Interest and willingness to use and motivation to integrate gamification reflect related dispositions toward accepting and incorporating the approach into teaching. The practice-oriented variable of the study is classroom application, which is analyzed by frequency of use, types of gamification tools used and integration in the delivery of the lesson as well as its use for motivation and engagement. TAM therefore provides a logical basis for examining whether teachers who hold more favorable attitudes toward gamification also report greater application of it in their classrooms. This relationship is not assumed by the theory but is used as a guide as the existence, direction and strength of this relation are yet to be tested.

Recent research supports the applicability of TAM to teacher acceptance and game oriented educational technologies. A TAM adaptation was used by Valencia and Duque (2023) to explore teachers' attitudes and intentions for the use of serious games as a teaching-learning strategy. They took the usefulness, ease of use, attitude, confidence, and intention to use as their model and found attitude to be an important antecedent of teachers' intention to use serious games. In a context that is more directly related to gamification, Luo (2024) used concepts from TAM and similar acceptance models to examine secondary school teachers' perceptions and adoption of gamified EFL tools. The study started by exploring a number of potential acceptance factors, though perceived usefulness and perceived ease of use remained in the validated framework, and were given direct empirical support for being applied in the context of the acceptance of gamification by teachers. Further support comes from research on secondary school mathematics teachers' adoption of microgames, in

which TAM was used to explain teachers' behavioral intention toward technology-based instructional media and the relationship among perceived benefits, ease of use, attitude, behavioral intention, and actual utilization (Wijaya et al., 2022). Taken together, these studies show that TAM remains a valuable model to study the acceptance and intended usage of approaches that involve games and technology to facilitate learning.

The significance of TAM in the current study is that it has the potential to describe how changes may be integrated into practice based on the teacher's attitude toward a change in their classroom. Teachers then have to decide if gamification is meaningful for teaching, if it's feasible to use, and if they are willing and motivated to use it. These considerations have a strong association with the attitude dimensions measured in the study. Alongside this, the study seeks to go beyond mere acceptance, and investigate the actual reported use of gamification in the classroom, how often, what is used and how it is used to enhance pupils' engagement and motivation in lessons. Thus, TAM offers a comprehensive theoretical basis for the key question addressed in this study: is there a significant relationship between teachers' attitudes towards gamification and their use of gamification in the classroom? This model provides a foundation to the investigation and highlights the fact that the use of gamification is not only dependent on the availability of the gamification elements or the use of digital tools, but also on the perceptions and dispositions of teachers in their use.

II. RESEARCH METHODOLOGY

The study employed a descriptive-correlational research design to determine teachers' attitudes toward gamification, the extent of its classroom application, and the relationship between these variables among Kindergarten to Grade 6 teachers in Sapang Dalaga District, Schools Division of Misamis Occidental. Data were gathered using a researcher-made questionnaire measuring teachers' attitudes in terms of perceived usefulness, interest and willingness to use, perceived ease of use, and motivation to integrate gamification, and classroom application in terms of frequency of use, types of gamification tools utilized,

integration in lesson delivery, and use for motivation and engagement. The instrument underwent expert content validation and pilot testing, with Cronbach's alpha used to establish reliability. After securing the necessary permissions and informed consent, the questionnaires were administered, retrieved, checked, coded, and tabulated while ensuring voluntary

participation, anonymity, confidentiality, and responsible data handling. Mean and standard deviation were used to determine the level of teachers' attitudes and extent of classroom application, while Pearson Product-Moment Correlation (Pearson r) was used to test their significant relationship at the 0.05 level of significance.

III. PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

Table 1.1 Level of Teachers' Attitudes toward Gamification in terms of Perceived Usefulness

Indicators	SD	Mean
I believe gamification can make classroom instruction more effective.	0.51	3.39
I believe gamification can encourage pupils to participate actively in learning activities.	0.50	3.48
I believe gamification can help sustain pupils' attention during lessons.	0.54	3.32
I believe gamification can support the achievement of lesson objectives.	0.49	3.43
I believe gamification can make learning activities more meaningful to pupils.	0.55	3.33
I believe gamification can be a useful strategy for reinforcing concepts and skills.	0.50	3.35
Grand Mean	3.38 (Very Positive)	

Scale: 3.26–4.00 = Very Positive; 2.51–3.25 = Positive; 1.76–2.50 = Negative; 1.00–1.75 = Very Negative

Table 1.1 presents the level of teachers' attitudes toward gamification in terms of perceived usefulness. The findings revealed a grand mean of 3.38, interpreted as Very Positive, indicating that teachers generally recognize gamification as a useful instructional approach.

This suggests that they perceive gamification as having value in supporting classroom instruction, pupil participation, lesson objectives, attention, meaningful learning, and reinforcement of concepts and skills.

Among the six indicators, the belief that gamification can encourage pupils to participate actively in learning activities obtained the highest mean of 3.48 (SD = 0.50), followed by its perceived ability to support the achievement of lesson objectives with a mean of 3.43 (SD = 0.49).

Meanwhile, the belief that gamification can help sustain pupils' attention during lessons obtained the lowest mean of 3.32 (SD = 0.54). Nevertheless, all indicators remained within the Very Positive range.

This pattern indicates that teachers particularly value gamification for promoting active participation and supporting instructional objectives, while its capacity to sustain attention, although still viewed very favorably, was perceived relatively less strongly.

The finding is consistent with Luo (2024), who identified perceived usefulness as an important dimension in teachers' acceptance of gamified educational tools.

Similarly, Vázquez-Cano et al. (2023) emphasized the instructional value of gamified applications when aligned with curriculum, feedback, and assessment, while Romero-Rodríguez et al. (2024) reported generally favorable findings regarding motivation and engagement in primary education.

These findings support the present result that teachers perceive gamification as having meaningful instructional value.

Thus, their Very Positive attitude toward its usefulness provides a favorable foundation for its potential integration into elementary classroom instruction.

Table 1.2 Level of Teachers' Attitudes toward Gamification in terms of Interest and Willingness to Use

Indicators	SD	Mean
I am interested in using gamification in my classroom.	0.50	3.38
I am willing to explore different ways of using gamification in my lessons.	0.47	3.29
I am open to trying new gamification strategies in teaching.	0.53	3.41
I am willing to use gamification when it is appropriate for the lesson.	0.48	3.36
I am interested in learning more about the use of gamification in education.	0.49	3.34
I am willing to participate in training that can improve my ability to use gamification.	0.48	3.30
Grand Mean	3.35 (Very Positive)	

Scale: 3.26–4.00 = Very Positive; 2.51–3.25 = Positive; 1.76–2.50 = Negative; 1.00–1.75 = Very Negative

The results in Table 1.2 reveal a Very Positive level of teachers' attitudes toward gamification in terms of interest and willingness to use, as reflected by the grand mean of 3.35. This indicates that teachers are generally interested, open, and willing to explore and employ gamification in their classroom instruction. The finding suggests a favorable disposition toward learning about and experimenting with gamification when it is considered appropriate for their lessons.

Notably, the highest-rated indicator was the teachers' openness to trying new gamification strategies in teaching, with a mean of 3.41 (SD = 0.53), followed by their interest in using gamification in the classroom at 3.38 (SD = 0.50). On the other hand, willingness to explore different ways of using gamification in lessons obtained the lowest mean of 3.29 (SD = 0.47). Despite being the lowest, it remained within the Very Positive range. This pattern suggests that teachers demonstrate strong openness toward gamification, although actively exploring varied ways of incorporating it may

require greater familiarity, experience, or instructional support.

This finding is consistent with Bacsá-Károlyi and Fehérvári (2024), who found that teachers generally expressed favorable attitudes toward gameful practices, although positive attitudes did not always translate directly into implementation. Similarly, López et al. (2021) emphasized the relevance of teachers' predispositions toward the adoption of gamification, while Araújo and Carvalho (2022) demonstrated that teachers' engagement with gamification can be strengthened through opportunities to learn, plan, implement, and reflect on gamified activities.

Thus, the Very Positive level of interest and willingness indicates that teachers are receptive to gamification, while continued exposure and professional learning may help translate this receptiveness into more purposeful classroom application.

Table 1.3 Level of Teachers' Attitudes toward Gamification in terms of Perceived Ease of Use

Indicators	SD	Mean
I find the basic principles of gamification easy to understand.	0.49	3.33
I find it easy to identify game elements that can be used in classroom activities.	0.49	3.17
I find it manageable to incorporate gamification into my lesson plans.	0.54	3.10
I find it easy to select gamification strategies appropriate to my pupils.	0.51	3.14
I find it manageable to conduct gamified activities during classroom instruction.	0.47	3.17
I find it easy to adapt gamification strategies to different lessons.	0.47	3.20
Grand Mean	3.19 (Positive)	

Scale: 3.26–4.00 = Very Positive; 2.51–3.25 = Positive; 1.76–2.50 = Negative; 1.00–1.75 = Very Negative

A different pattern emerges in Table 1.3, where teachers' attitudes toward gamification in terms of

perceived ease of use obtained a grand mean of 3.19, interpreted as Positive. This indicates that teachers

generally consider gamification understandable and manageable, although their perceptions are less favorable in this dimension compared with aspects that may be easier to appreciate conceptually. The result suggests that teachers recognize their capacity to use gamification but may encounter some practical difficulty when translating its principles into actual instructional planning and classroom activities.

The highest-rated indicator was understanding the basic principles of gamification, with a mean of 3.33 (SD = 0.49), which falls within the Very Positive range. In contrast, incorporating gamification into lesson plans obtained the lowest mean of 3.10 (SD = 0.54), interpreted as Positive. This difference suggests that while teachers readily understand the basic concept of gamification, applying it systematically in lesson planning may be comparatively more challenging. The finding points to a possible gap between conceptual understanding and practical

integration, particularly when teachers need to align gamified activities with instructional content and lesson requirements.

This finding corresponds with Luo (2024), who identified perceived ease of use as an important dimension in teachers' acceptance of gamified educational tools. Vázquez-Cano et al. (2023) likewise emphasized that adopting gamified applications involves practical considerations such as curriculum alignment, accessibility, feedback, and assessment, while Araújo and Carvalho (2022) demonstrated that implementing gamification requires teachers to progress from understanding its concepts to planning and actual classroom application. Therefore, the Positive rating suggests that teachers possess a favorable foundation for using gamification, but additional practical experience and instructional support may help make its integration into lesson planning more manageable.

Table 1.4 Level of Teachers' Attitudes toward Gamification in terms of Motivation to Integrate Gamification

Indicators	SD	Mean
I am motivated to incorporate gamification into my teaching practices.	0.50	3.38
I am motivated to develop gamified activities for my pupils.	0.52	3.31
I am motivated to improve my knowledge and skills in using gamification.	0.49	3.42
I am encouraged to integrate gamification when it can support pupils' learning.	0.53	3.40
I am motivated to devote time to preparing appropriate gamified learning activities.	0.49	3.25
I am motivated to explore new ways of integrating gamification into my lessons.	0.51	3.40
Grand Mean		3.36 (Very Positive)

Scale: 3.26–4.00 = Very Positive; 2.51–3.25 = Positive; 1.76–2.50 = Negative; 1.00–1.75 = Very Negative

Table 1.4 reveals a Very Positive level of teachers' motivation to integrate gamification, as indicated by the grand mean of 3.36. This shows that teachers are highly motivated to incorporate gamification into their teaching practices, improve their competence in its use, and explore ways of applying it to classroom instruction. The result reflects a favorable inclination toward developing and utilizing gamification, particularly when it can contribute to pupils' learning.

The highest-rated indicator was teachers' motivation to improve their knowledge and skills in using gamification, with a mean of 3.42 (SD = 0.49). This was closely followed by their motivation to explore new ways of integrating gamification and their

encouragement to use it when it can support pupils' learning, both with a mean of 3.40. Conversely, devoting time to preparing appropriate gamified learning activities received the lowest mean of 3.25 (SD = 0.49), interpreted as Positive. This suggests that although teachers demonstrate strong motivation to develop their competence and integrate gamification, the time required to prepare appropriate gamified activities may be a practical consideration.

This finding is supported by Bacsá-Károlyi and Fehérvári (2024), who emphasized the importance of professional development and supportive conditions in promoting teachers' gameful practices. Likewise, Araújo and Carvalho (2022) demonstrated that

implementing gamification involves learning, planning, classroom application, and reflection, while López et al. (2021) highlighted the importance of teachers' predispositions in adopting gamification. These findings reinforce the present result that

teachers possess strong motivation toward gamification, although translating such motivation into sustained classroom integration may also depend on the time, preparation, and support available to them.

Table 2 Summary of the Level of Teachers' Attitudes toward Gamification

Domains	Mean	Interpretation
Perceived Usefulness	3.38	Very Positive
Interest and Willingness to Use	3.35	Very Positive
Perceived Ease of Use	3.19	Positive
Motivation to Integrate Gamification	3.36	Very Positive
Grand Mean	3.32	Very Positive

Scale: 3.26–4.00 = Very Positive; 2.51–3.25 = Positive; 1.76–2.50 = Negative; 1.00–1.75 = Very Negative

Table 2 summarizes the level of teachers' attitudes toward gamification across the four domains. The findings yielded an overall grand mean of 3.32, interpreted as Very Positive, indicating that teachers generally hold favorable attitudes toward the use of gamification in classroom instruction. This suggests that teachers recognize its instructional value, demonstrate interest and motivation toward its use, and generally perceive it as manageable to integrate into teaching.

Among the domains, Perceived Usefulness obtained the highest mean of 3.38 (Very Positive), followed by Motivation to Integrate Gamification at 3.36 (Very Positive) and Interest and Willingness to Use at 3.35 (Very Positive). In contrast, Perceived Ease of Use registered the lowest mean of 3.19 (Positive). This pattern indicates that teachers are strongly convinced of the value of gamification and are motivated and willing to use it; however, they are comparatively less confident about the ease of incorporating it into their

instructional practices. The result points to a distinction between appreciating and being motivated to use gamification and finding its actual implementation easy and manageable.

The overall finding is consistent with Bacsa-Károlyi and Fehérvári (2024), who reported generally favorable teacher attitudes toward gameful practices while noting that positive attitudes do not always translate directly into implementation. Luo (2024) likewise emphasized perceived usefulness and perceived ease of use as important dimensions of teachers' acceptance of gamified educational tools, while Araújo and Carvalho (2022) showed that applying gamification requires knowledge, planning, implementation, and reflection. Thus, the Very Positive overall attitude provides a favorable foundation for the adoption of gamification, although the comparatively lower rating for ease of use suggests that practical competence and implementation support remain important considerations.

Table 3.1 Extent of Classroom Application of Gamification by Teachers in terms of Frequency of Use

Indicators	SD	Mean
I conduct learning activities that include game-like elements.	0.54	2.81
I use gamification during regular classroom instruction.	0.54	2.70
I incorporate gamified activities into classroom exercises.	0.53	2.63
I use gamification during classroom review activities.	0.54	2.82
I use gamification when providing pupils with opportunities to practice learned skills.	0.53	2.72
I conduct gamified activities as part of my planned classroom instruction.	0.57	2.61
Grand Mean		2.72 (High)

Scale: 3.26–4.00 = Very High; 2.51–3.25 = High; 1.76–2.50 = Low; 1.00–1.75 = Very Low

The findings in Table 3.1 indicate a High extent of classroom application of gamification in terms of frequency of use, with a grand mean of 2.72. This shows that teachers generally incorporate gamification into their classroom practices, although its use may not yet be highly frequent or consistently embedded across all instructional activities. The result suggests that gamification forms part of teachers' instructional practices but is applied selectively depending on the learning activity or purpose.

Among the indicators, the use of gamification during classroom review activities obtained the highest mean of 2.82 (SD = 0.54), closely followed by conducting learning activities that include game-like elements at 2.81 (SD = 0.54). Meanwhile, conducting gamified activities as part of planned classroom instruction obtained the lowest mean of 2.61 (SD = 0.57). Although all indicators remained within the High range, the pattern suggests that teachers tend to use gamification more readily for review and specific

learning activities than as a consistently planned component of regular instruction. This may indicate that gamification is more commonly employed as a supplementary strategy rather than systematically incorporated into lesson planning.

This finding aligns with Bacsa-Károlyi and Fehérvári (2024), who observed that favorable perceptions of gameful practices do not necessarily correspond to equally extensive implementation.

Similarly, Bayrak and Liman-Kaban (2024) distinguished teachers' acceptance of gamified tools from their actual classroom usage, while Araújo and Carvalho (2022) emphasized that implementation requires deliberate planning, application, and reflection. Thus, the High extent of use indicates that gamification is already present in teachers' classroom practices, but its comparatively lower incorporation into planned instruction suggests an opportunity for more systematic and purposeful integration.

Table 3.2 Extent of Classroom Application of Gamification by Teachers in terms of Types of Gamification Tools Utilized

Indicators	SD	Mean
I use points or scoring systems in learning activities.	0.54	2.31
I use badges, stars, stickers, or other achievement symbols.	0.53	2.55
I use rewards or incentives for accomplishing learning tasks.	0.55	2.46
I use levels, stages, or progressive challenges in learning activities.	0.50	2.27
I use team-based games or friendly competitions.	0.55	2.46
I use game-based quizzes or digital gamification tools in classroom activities.	0.56	2.14
Grand Mean		2.37 (Low)

Scale: 3.26–4.00 = Very High; 2.51–3.25 = High; 1.76–2.50 = Low; 1.00–1.75 = Very Low

Table 3.2 reveals a Low extent of classroom application of gamification in terms of the types of tools utilized, as indicated by the grand mean of 2.37. This finding suggests that although teachers may apply gamification in their classrooms, their use of varied gamification tools and elements remains limited. The result further indicates that teachers tend to rely on selected or familiar game-like strategies rather than employing a broad range of gamification tools in their instructional activities.

Among the indicators, the use of badges, stars, stickers, or other achievement symbols obtained the highest mean of 2.55 (SD = 0.53), interpreted as High.

In contrast, the use of game-based quizzes or digital gamification tools received the lowest mean of 2.14 (SD = 0.56), interpreted as Low. This pattern suggests that teachers are more inclined to use simple and readily applicable achievement symbols than digital or technology-supported gamification tools. The lower use of digital tools may reflect differences in teachers' familiarity, accessibility, or ease of integrating such resources; however, these possible factors were not directly measured in the study and therefore cannot be established from the present data.

The finding is consistent with Romero-Rodríguez et al. (2024), who identified both technological and analog

forms of gamification in primary education, demonstrating that gamification is not limited to digital platforms. Similarly, Ratinho and Martins (2023) identified points, badges, rankings, and related game mechanics among commonly employed gamification strategies, while Oliveira et al. (2023) emphasized that gamification may involve different

combinations of game elements depending on the educational context. Thus, the Low extent observed in the present study indicates that teachers utilize a relatively limited range of gamification tools, highlighting room for broader exploration and integration of appropriate game elements and tools in classroom instruction.

Table 3.3 Extent of Classroom Application of Gamification by Teachers in terms of Integration in Lesson Delivery

Indicators	SD	Mean
I incorporate gamification when introducing a lesson.	0.59	2.47
I incorporate gamification when presenting or developing lesson content.	0.60	2.54
I incorporate gamification during guided classroom activities.	0.43	2.79
I incorporate gamification during individual or group practice.	0.59	2.51
I incorporate gamification when reviewing or reinforcing lessons.	0.55	2.55
I incorporate gamification when checking pupils' understanding of the lesson.	0.57	2.30
Grand Mean		2.53 (High)

Scale: 3.26–4.00 = Very High; 2.51–3.25 = High; 1.76–2.50 = Low; 1.00–1.75 = Very Low

The results shown in Table 3.3 indicate a High extent of classroom application of gamification in terms of integration in lesson delivery, with a grand mean of 2.53. This implies that teachers generally incorporate gamification at different stages of instruction, although the overall mean is near the lower boundary of the High category. The finding suggests that gamification is integrated into lesson delivery, but the extent of its use varies depending on the particular stage of instruction.

Among the indicators, incorporating gamification during guided classroom activities obtained the highest mean of 2.79 (SD = 0.43), interpreted as High. Conversely, using gamification when checking pupils' understanding of the lesson registered the lowest mean of 2.30 (SD = 0.57), interpreted as Low. This pattern indicates that teachers are more likely to integrate gamification while actively facilitating classroom activities than when determining pupils'

understanding. It suggests that gamification is used more prominently as a strategy for facilitating learning activities than as a means of checking learning.

This finding is supported by Vázquez-Cano et al. (2023), who emphasized that meaningful adoption of gamified applications involves curriculum connection, feedback, and assessment.

Similarly, Araújo and Carvalho (2022) highlighted the importance of deliberate planning in translating gamification into classroom practice, while López et al. (2024) demonstrated the didactic possibilities of gamification within elementary education. Taken together, the High extent of integration indicates that gamification has a place in teachers' lesson delivery, particularly during guided activities, while its comparatively limited use in checking pupils' understanding points to an area where its instructional application may be further explored.

Table 3.4 Extent of Classroom Application of Gamification by Teachers in terms of Use for Motivation and Engagement

Indicators	SD	Mean
I use gamification to encourage pupils to participate in classroom activities.	0.56	2.77
I use gamification to sustain pupils' attention during lessons.	0.54	2.74
I use gamification to encourage pupils to complete learning tasks.	0.55	2.71
I use gamification to encourage interaction among pupils.	0.56	2.67

I use gamification to encourage hesitant pupils to participate.	0.56	2.63
I use gamification to sustain pupils' interest in classroom learning activities.	0.58	2.70
Grand Mean	2.70 (High)	

Scale: 3.26–4.00 = Very High; 2.51–3.25 = High; 1.76–2.50 = Low; 1.00–1.75 = Very Low

Table 3.4 demonstrates a High extent of classroom application of gamification for motivation and engagement, with a grand mean of 2.70. This indicates that teachers generally use gamification to promote pupils' participation, attention, task completion, interaction, and interest in classroom activities. The finding suggests that gamification serves as an instructional strategy for encouraging pupils to become more actively involved in the learning process.

The highest-rated indicator was the use of gamification to encourage pupils to participate in classroom activities, with a mean of 2.77 (SD = 0.56), followed by its use to sustain pupils' attention during lessons at 2.74 (SD = 0.54). On the other hand, using gamification to encourage hesitant pupils to participate obtained the lowest mean of 2.63 (SD = 0.56). Although all indicators were interpreted as High, the results suggest that teachers apply gamification more extensively to promote general classroom

participation and attention than specifically to draw hesitant pupils into classroom activities.

The finding corresponds with Li et al. (2024), whose meta-analysis showed that gamification can enhance students' intrinsic motivation and perceptions of relatedness and autonomy.

Similarly, Ratinho and Martins (2023) identified motivation as an important outcome associated with gamified learning strategies, while Kim and Castelli (2021) found that gamification can positively influence behavioral change in educational settings.

These studies support the present finding that teachers utilize gamification as a means of promoting motivation and engagement. Thus, its High extent of application reflects the instructional value teachers place on gamification for encouraging active involvement and sustaining pupils' engagement in classroom learning.

Table 4 Summary of the Extent of Classroom Application of Gamification by Teachers

Domains	Mean	Interpretation
Frequency of Use	2.72	High
Types of Gamification Tools Utilized	2.37	Low
Integration in Lesson Delivery	2.53	High
Use for Motivation and Engagement	2.70	High
Grand Mean	2.58	High

Scale: 3.26 – 4.00 = Very High; 2.51 – 3.25 = High; 1.76 – 2.50 = Low; 1.00 – 1.75 = Very Low

The overall results presented in Table 4 indicate a High extent of classroom application of gamification, as reflected by the grand mean of 2.58. This shows that teachers generally apply gamification in their classroom practices, particularly in terms of frequency of use, lesson delivery, and promoting pupils' motivation and engagement. However, the overall mean is relatively close to the lower boundary of the High category, suggesting that the extent of application is not equally strong across all aspects of gamification.

Among the domains, Frequency of Use obtained the highest mean of 2.72 (High), closely followed by Use for Motivation and Engagement at 2.70 (High). In contrast, Types of Gamification Tools Utilized registered the lowest mean of 2.37 (Low), while Integration in Lesson Delivery obtained 2.53 (High). This pattern suggests that although teachers use gamification and employ it to encourage pupils' participation and engagement, the variety of gamification tools they utilize remains limited. Thus, teachers appear to apply gamification more in terms of

instructional activities and motivational purposes than through the use of diverse gamification tools.

This finding is consistent with Bacsa-Károlyi and Fehérvári (2024), who noted that teachers' favorable views toward gameful practices do not always correspond to extensive or varied classroom implementation. Similarly, Araújo and Carvalho (2022) emphasized that the successful implementation of gamification involves appropriate planning,

knowledge, and practical conditions, while Romero-Rodríguez et al. (2024) identified a range of digital and non-digital approaches to gamification in primary education.

Taken together, the findings indicate that gamification is already incorporated into teachers' classroom practices to a High extent, but the limited variety of tools utilized represents an area where classroom application may still be broadened and strengthened.

Table 5 Test of Significant Relationship Between Teachers' Attitudes Toward Gamification and Classroom Application of Gamification

Test Variables	Correlation Coefficient	p value	Decision
Teachers' Attitudes Toward Gamification and Classroom Application of Gamification	0.182	0.395	Retain the H_0

Note: If $p \leq 0.05$, there is a significant relationship

Table 5 presents the test of significant relationship between teachers' attitudes toward gamification and their classroom application of gamification. The analysis yielded a correlation coefficient of $r = 0.182$ and a p-value of 0.395. The correlation coefficient indicates a weak positive relationship between the two variables, suggesting that more positive attitudes tend to correspond with slightly higher classroom application. However, the relationship is weak.

Since the p-value of 0.395 is greater than the 0.05 level of significance, the relationship is not statistically significant. Therefore, the null hypothesis is retained. This means that the data do not provide sufficient statistical evidence to establish a significant relationship between teachers' attitudes toward gamification and their classroom application. Although teachers generally demonstrated Very Positive attitudes toward gamification, as shown in Table 2, these favorable attitudes were not significantly associated with the extent to which they actually applied gamification in the classroom.

This finding corresponds with Bacsa-Károlyi and Fehérvári (2024), who noted that favorable teacher perceptions of gameful practices do not necessarily translate directly into classroom implementation, as actual practice may also be shaped by contextual and practical conditions. Similarly, Araújo and Carvalho

(2022) identified several considerations affecting gamification implementation, including preparation, knowledge, resources, and classroom conditions. The present finding therefore suggests that positive attitudes alone may not be sufficient to explain teachers' classroom application of gamification, and that other factors not examined in the study may contribute to differences in actual implementation.

IV. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The study concludes that elementary school teachers hold very positive attitudes toward gamification and apply it to a high extent in classroom instruction. However, their favorable attitudes do not significantly correspond with the extent of their actual classroom application. This indicates that positive perceptions, interest, and motivation toward gamification alone may not be sufficient to ensure its consistent and varied integration into teaching practices. The comparatively limited use of diverse gamification tools further suggests that classroom application may depend on practical considerations beyond teachers' attitudes. Therefore, strengthening teachers' practical capacity and opportunities to meaningfully integrate varied gamification strategies may be essential in

translating favorable attitudes into more purposeful classroom practice.

Recommendations

School administrators and division or district officials may provide targeted professional development, Learning Action Cells, demonstration sessions, and adequate resources to strengthen teachers' skills in integrating a wider variety of gamification tools into instruction. Elementary teachers may explore both online and offline gamification approaches and align them with learning objectives, pupils' needs, and different phases of the lesson while considering pupils' responses and experiences. Pupils may be provided with meaningful and age-appropriate gamified activities that promote participation, interaction, sustained interest, and task completion. Future researchers may examine other factors influencing gamification practices, such as technological competence, training, resource availability, teaching experience, workload, and institutional support, using larger samples or other research designs.

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