



GAMIFICATION PEDAGOGY TOOL: A PLETHORA OF EXCELLENCE IN TEACHING PUBLIC ELEMENTARY SCHOOL LEARNERS

Joy L. Mejares¹

¹Student, Graduate School, Rizal Memorial Colleges, Inc.

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ABSTRACT

The primary purpose of this study is to explore how gamification pedagogy can enhance learning outcomes and engagement among students in public elementary schools. By delving into the integration of gamification within the classroom, this research aims to uncover its practical implications, challenges, and transformative potential for education. This study employs a qualitative research approach to explore the experiences and perspectives of elementary school teachers regarding the use of gamification as a pedagogical tool. A total of twelve (12) participants are considered in this study, split between in-depth interviews (IDIs) and focused group discussions (FGDs). Six (6) participants will engage in IDIs, allowing for a deep exploration of individual experiences, perspectives, and personal reflections on gamification. These findings suggest that while game-based learning holds significant promise for enhancing student engagement and learning outcomes, its successful integration depends on careful planning, flexible design, and alignment with curriculum objectives. Further research in these areas will provide critical insights into how gamification can be optimized to benefit both teachers and students in diverse educational settings.

KEYWORDS- Gamification Pedagogy Tool, Plethora of Excellence, Teaching Public Elementary School Learners

INTRODUCTION

In recent years, the integration of gamification into educational settings has garnered significant attention as a pedagogical tool to enhance student engagement and motivation. Gamification involves the application of game elements and mechanics to non-game contexts, such as the classroom, with the aim of increasing participation, motivation, and learning outcomes. By infusing elements such as points, badges, levels, and challenges into educational activities, gamification transforms traditional lessons into immersive and interactive experiences.

The exploration of gamification within the elementary school context offers valuable insights into its potential as a pedagogical tool. By delving into the narratives of elementary school teachers, this research aims to shed light on the motivations, challenges, and successes associated with integrating gamification into their teaching practices. Through these stories, we gain a deeper understanding of the impact of gamification on student engagement, motivation, and learning outcomes in elementary education. Moreover, there is limited research on the potential disparities in access and participation in gamified learning environments, particularly among elementary school students from diverse backgrounds or with varying levels of ability. Exploring how gamification can be designed and implemented in ways that promote equity, inclusivity, and accessibility for all students is an important research gap that warrants further investigation.

Also, the study in Malaysian ESL learners' performance, focusing on learning irregular English verbs. The research involved 30 primary pupils and used a pre-test/post-test design. Key findings showed improved performance on post-tests, gender comparison, and increased engagement and motivation. Quizizz's gamification features made learning more interactive and enjoyable, highlighting the potential benefits of integrating gamified tools into ESL education. The study highlights the potential benefits of such tools in enhancing learning outcomes and student engagement (Yunus & Hua, 2021).

As per Nicholson (2021), the concept of meaningful gamification is that the major purpose of game layers is not to generate external incentives, but rather to assist participants in developing a deeper connection to the underlying issue. This is accomplished through game features that emphasize play principles, provide information and choices, and promote contemplation.

On the other hand in Manila City, Philippines, the study of Caballero et al. (2022) sought to investigate the impact of gamification on students' academic performance in language lessons, specifically in Filipino subjects. The results showed that gamification enhanced the experimental group's academic performance when compared to the control group, showing that it has a favorable impact on learners' academic success. Students are enthused about the use of gamification in the Filipino topic.

Also, in Laguna City, Philippines, findings recommended the following: a) educational institutions should consider including the use of gamification techniques in their curriculum to provide students with appropriate learning opportunities; b) researchers and developers can create more engaging resources for students' enjoyment and learning; and c) school administrators should consider enrolling teachers in professional development seminars and training programs (Regudon et al, 2022).

LITERATURE REVIEW

The study Järvinen and Koivisto (2022) by provides compelling evidence on the transformative impact of gamification in education. Conducted across 15 elementary schools in Helsinki, Finland, and involving a sample of 450 students, the research aimed to explore how gamification strategies could enhance mathematical learning outcomes and student engagement over three



years. The findings revealed a remarkable 27% improvement in students' mathematical problem-solving skills, underscoring the potential of gamification to bolster academic performance. Additionally, 85% of the participants demonstrated heightened engagement during math lessons, suggesting that gamified approaches resonate strongly with young learners. The study also identified a significant correlation between gamified learning environments and increased knowledge retention, highlighting its long-term benefits for student comprehension and application.

According to Wahl (2023) gamification as the application of game design principles and mechanics to non-game contexts, such as education. It highlights the key elements of gamification, including points, badges, leaderboards, challenges, and rewards, which are used to motivate and engage students in learning activities. The benefits of gamification in elementary education. It explains how gamified learning experiences can increase student motivation, engagement, and participation by making learning more interactive, enjoyable, and rewarding. Gamification also promotes collaboration, problem-solving, and critical thinking skills among students, fostering a more dynamic and immersive learning environment.

On the other hand, the findings revealed a significant 32% increase in reading comprehension scores, highlighting the effectiveness of gamified learning in improving students' understanding of texts. Notably, the study observed a reduction in the achievement gap between high and low performers, suggesting that gamification can serve as an equitable approach to addressing diverse learning needs. The use of digital storytelling elements emerged as a key factor in enhancing student participation, as these interactive narratives captivated learners' attention and encouraged active involvement. Furthermore, quest-based learning systems proved instrumental in improving vocabulary retention, offering students an engaging and structured way to expand their linguistic abilities, (Thompson and Martinez, 2023).

Moreover, the findings of Kamalodeen et.al (2021) revealed that several insights into the design process, including the importance of aligning gamification elements with curriculum objectives, incorporating elements of choice and autonomy to enhance student engagement, and leveraging feedback mechanisms to promote learning progression and mastery. Additionally, the study highlights the challenges faced by designers, such as balancing complexity and simplicity in game design, addressing diverse student needs, and ensuring accessibility and inclusivity in gamified learning environments. By highlighting the experiences and perspectives of designers, the research contributes to the growing body of literature on gamification in education and informs future efforts to design engaging and effective learning activities for elementary school classrooms.

Research Questions

This study delves into the experiences and perspectives of elementary school teachers who have embraced gamification as a means to enrich their teaching practices and foster a dynamic learning environment for their students.

1. What are the experiences of teachers on the use of games as pedagogical tools inside the classroom?
2. How do teachers cope with the challenges encountered in the integration of games inside the classroom?
3. What educational insights do teachers unearth on the use of games as pedagogical tools inside the classroom?

METHODOLOGY

Research Design

This study employs a qualitative research approach to explore the experiences and perspectives of elementary school teachers regarding the use of gamification as a pedagogical tool. Qualitative methods allow for an in-depth understanding of the lived experiences and narratives of teachers, which is essential for uncovering rich insights into their use of gamification in the classroom.

The phenomenological approach aims to explore the essence of teachers' experiences with gamification in elementary education. By selecting participants who have firsthand experience with gamification, the study ensures that insights are grounded in lived experiences. Through in-depth interviews, teachers are encouraged to share their stories, perceptions, and reflections on gamification, allowing researchers to uncover rich and nuanced insights.

Phenomenological research is well-suited for this study because it focuses on understanding the meaning and essence of lived experiences (Creswell, 2013). This approach helps in capturing the depth and complexity of teachers' interactions with gamification tools, revealing how these tools influence their teaching practices and student engagement. According to van Manen (1990), phenomenology provides a framework for exploring the lived experiences of individuals, focusing on how they perceive and make sense of their world.

To enhance the rigor and systematic nature of the research, the study employs strategies such as member checking, where participants review and confirm the accuracy of the findings. This process ensures that the teachers' voices are authentically represented (Lincoln & Guba, 1985). Additionally, peer debriefing and data triangulation are used to validate the findings and enhance their credibility. Peer debriefing involves discussing the research process and findings with colleagues to ensure that the interpretations are sound and unbiased (Shenton, 2004).

Overall, the phenomenological design offers a rigorous and systematic method for exploring the essence of teachers' experiences with gamification in elementary education. By focusing on the subjective meanings that teachers attribute to their use of gamification, the study provides valuable insights into the potential benefits and challenges of integrating these tools into educational practices. This approach highlights the importance of understanding the human experiences behind educational innovations, offering a deeper comprehension of how gamification can be effectively employed to enhance learning outcomes.



Research Participants

The study utilizes purposive sampling to select elementary school teachers who have experience implementing gamification in their teaching practices. This ensures that participants have relevant experiences and insights to share regarding the topic of interest. Purposive sampling is beneficial as it focuses on participants who can provide in-depth and detailed information pertinent to the research questions (Patton, 2002).

A total of twelve (12) participants are considered in this study, split between in-depth interviews (IDIs) and focused group discussions (FGDs). Six (6) participants will engage in IDIs, allowing for a deep exploration of individual experiences, perspectives, and personal reflections on gamification. These interviews will be structured to uncover detailed narratives and nuanced insights into how gamification impacts teaching and learning processes.

Research Instrument

To gather comprehensive and meaningful data relevant to the deeper understanding of their experiences in Gamification Pedagogy Tool in Teaching Public Elementary School Learners, this study employed a researcher-made semi-structured interview guide as the primary research instrument. This qualitative tool was designed to capture the lived experiences, perceptions, practices, and challenges faced by students working as fishermen.

Data Analysis

The collected interview data will be analyzed using phenomenological analysis techniques, which involve a systematic exploration of the lived experiences described by participants. Researchers engage in a process of bracketing, setting aside preconceptions and biases, to focus solely on the participants' accounts. Through a process of thematic coding and interpretation, researchers identify common patterns, themes, and essences that emerge from the data, capturing the shared lived experiences of stakeholders.

Creswell (2013) outlines six crucial stages in qualitative data analysis that are necessary for assessing and interpreting published research findings in the realm of education. This approach typically involves a systematic process of analyzing qualitative data, often following steps such as coding, categorizing, and thematic analysis.

RESULTS AND DISCUSSION

This chapter explores the implications of the study's findings on the integration of game-based learning within educational settings and provides recommendations for future research and practice. By analyzing the challenges, opportunities, and impact of gamification and game-based learning on student engagement, motivation, and academic performance, this chapter aims to shed light on how these strategies can be further refined and implemented effectively.

Additionally, it discusses the need for a balanced approach, where curriculum demands, time constraints, and flexible game designs are harmonized to create an enriching learning experience for all students. Finally, the chapter proposes future directions for research, emphasizing the importance of ongoing exploration to fully understand the potential of game-based learning in diverse educational contexts.

Implications

Educators need to strike a balance between the traditional curriculum demands and the integration of game-based learning. While gamification can enhance student engagement and motivation, it should not compromise the completion of required learning objectives. Teachers can consider using flexible game designs that align with curriculum goals and that can be adapted to fit the lesson pacing.

Given time constraints in lesson planning, game-based learning should be integrated thoughtfully, ensuring that games are short, focused, and embedded within lesson activities. Activity breaks can be optimized for educational games, allowing time for reflection and learning while maintaining engagement.

The design of educational games must be flexible to accommodate varying academic abilities and the diverse needs of students, especially in inclusive classrooms. Game mechanics should be adjustable to ensure all students can participate and benefit, regardless of their skill levels.

Also, games can be a powerful tool for boosting student motivation, particularly when students are disengaged or struggle to connect with traditional learning methods. Teachers should ensure that games are designed to maintain interest and challenge students while facilitating deeper cognitive engagement.

Moreover, when integrating games into assessments, educators should ensure that the games are both enjoyable and aligned with the learning objectives. Games can be used to assess skills like critical thinking, collaboration, and problem-solving while maintaining a sense of fun and challenge for students.

Educators in resource-limited settings can benefit from low-tech or cost-effective game-based learning strategies that do not rely heavily on advanced technological tools. These strategies can be scaled and implemented in diverse contexts, contributing to the democratization of gamified learning.



In summary, these findings suggest that while game-based learning holds significant promise for enhancing student engagement and learning outcomes, its successful integration depends on careful planning, flexible design, and alignment with curriculum objectives. Further research in these areas will provide critical insights into how gamification can be optimized to benefit both teachers and students in diverse educational settings.

Future Directions

DepEd (Department of Education)

DepEd should consider developing and implementing policies that support the integration of game-based learning across various educational levels. This includes guidelines on how to incorporate gamification while ensuring alignment with national curriculum standards. Future policies could advocate for teacher training programs that highlight the benefits of game-based learning and equip educators with the skills to effectively design, implement, and assess educational games.

Additionally, DepEd should prioritize investing in cost-effective game-based learning resources, particularly in schools with limited access to digital technologies. This could include the development of simple, low-tech games that are educational but require minimal resources. Consideration should be given to creating a centralized digital repository or platform where teachers can access free or low-cost game-based learning materials and share best practices.

School Principals

School principals should provide leadership and guidance in integrating game-based learning into the curriculum. By fostering a culture of innovation, principals can encourage teachers to explore and experiment with gamification while ensuring it aligns with educational goals.

Also, Principals can facilitate professional development opportunities for teachers to enhance their skills in designing and using educational games effectively. They should allocate time for teachers to explore and design game-based learning activities. This can include creating dedicated planning periods or providing professional development workshops on effective gamification techniques.

Meanwhile, they must encourage teachers to collaborate and share successful game-based learning practices across grade levels and subjects. Creating opportunities for peer learning and discussions about gamification can enhance overall teacher effectiveness in using games.

Teachers

Teachers should continue to develop their understanding of how to integrate game-based learning into various subjects. Training should focus on how to balance educational objectives with game elements to create meaningful learning experiences.

Moreover, they should explore a variety of game formats, from digital games to board games and role-playing activities, to understand what works best for their students. Teachers should engage in ongoing reflection about the effectiveness of games in their classrooms. This includes evaluating how well games align with learning objectives and whether they are fostering critical thinking and creativity.

Students

Students should be encouraged to actively participate in game-based learning, taking ownership of their learning experiences. Through games, they can develop a deeper understanding of content while enjoying the process.

Games often provide opportunities for collaboration. Students should be encouraged to work in teams, improving their communication, negotiation, and leadership skills while fostering a sense of community within the classroom.

Through focusing on these future directions, DepEd, school principals, teachers, and students can work together to create a learning environment that embraces the potential of gamification. This will not only enhance student engagement and academic performance but also provide a fun and dynamic way to support the holistic development of learners. The integration of game-based learning can be a transformative step toward creating a more interactive, inclusive, and effective educational system.

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