

Use of Gamification to Promote Spelling Skills of Grade 3 Students

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Abstract

This research aimed to (1) compare the English spelling skills of grade 3 students before and after learning from lessons using gamification, (2) compare the English spelling skills of grade 3 students using gamification and conventional methods, and (3) study the satisfaction of grade 3 students toward the lessons using gamification. The study sample consisted of grade 3 students enrolled in a Thai primary school during the first semester of the 2024 academic year. A cluster random sampling method was employed to select 16 students for the experimental group and 16 for the control group, yielding a total of 32 participants. The research instruments comprised gamification-based instructional materials, pre-test and post-test assessments to evaluate English language proficiency, and a student satisfaction survey to gauge learners' perceptions of the instructional approach. The findings indicate that grade 3 students' English spelling abilities improved following instruction using the gamification teaching approach, compared to their pre-learning levels, with a statistical significance of $p = .05$. Moreover, English spelling skills among grade 3 students taught using the gamification strategy demonstrated a statistically significant difference from those instructed through conventional methods ($p = .05$). Additionally, students' overall satisfaction with the gamified lesson was at the highest level, with a mean score of 4.90 and a standard deviation of 0.17.

Keywords: English language learning, gamification, spelling skills

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Introduction

Vocabulary is an essential component of language acquisition since it is a fundamental and required language for students, and effective language learning requires a solid vocabulary foundation (Palawan, 2020). Currently, a fundamental problem in English language learning hinders students' development in all four skills due to several factors (Phongphanit, 2011). For example, students may perceive English as too difficult or complex, lack opportunities for practice, or lack opportunities to use English in daily life. Teachers' inexperience in how to teach English is another important factor that could prevent students from succeeding in the language, whether it be in speaking, listening, reading, or writing (Meejaitham & Euenkrin 2020). In other words, the teaching techniques or methods used by teachers may not capture students' attention or stimulate their interests in learning, leading to a lack of motivation, concentration, or an inclination to focus on other things besides classroom instruction (Kuea-anan, 2021). Anxiety and fear can also impede learning if they are excessive, potentially negatively impacting the student and hindering the development of their English proficiency (Tangpattanakit, 2020). Addressing these issues may involve adjusting teaching methods to be more engaging and focused on practical application, incorporating activities that promote English usage, and creating a supportive learning environment. Integrating games into English language teaching, such as gamification, is highly popular because games are filled with many beneficial elements (Kapp et al., 2014). Using instructional media also contributes to a more enjoyable learning atmosphere. Furthermore, games are another format that helps stimulate more effective student learning (Chusaengnil, 2018).

In order to effectively manage English language instruction, teachers may need to adapt their teaching strategies and seek out approaches that prioritize spelling, language development, fostering an engaging environment, designing engaging activities, and creating a positive classroom climate (Kapp, 2012; Lertbamrunghchai, 2017; Pinyo-Yang, 2013). Games can motivate students to learn and help develop various skills such as vocabulary, grammar, spelling, and pronunciation, among others (Chokphon, 2015; Meesuk, 2015).

The goal of gamification is to encourage users to exhibit behaviors that align with the creator's design as it supports the growth of students' processes in accomplishing educational tasks (Kapp, 2012). By playing the game in accordance with its rules and utilizing the gameplay results to compile learning outcomes, it encourages learning in accordance with aims. Because students take on the role of players, gamification can also improve players' knowledge by fostering direct knowledge and experience through gameplay as well as the capacity for autonomous problem-solving and solution-thinking (Anulomsombat, 2019). Games are often designed to encourage students to participate in learning and foster motivation for learning. Learning English through games is considered a fun and effective method for developing English language skills. The mechanics of gamification can motivate students to learn and help them learn and practice vocabulary and grammar effectively.

The researcher acknowledges the significance of the issue and strives to consistently enhance English spelling proficiency. The primary focus is on studying and refining spelling abilities, as students often struggle due to limited vocabulary knowledge, which affects their success in

Mastering English requires a strong foundation in vocabulary, which is essential for achieving proficiency in spelling and writing. Since vocabulary plays a pivotal role in language acquisition, students must actively develop their skills across all domains—listening, speaking, reading, and writing. Writing, in particular, is integral to the learning process, as it necessitates structured and continuous practice (Phochaiyarat, 2018). For learners of English as a foreign language, producing well-written content can be challenging. Spelling errors often arise not due to a lack of familiarity with letters but rather due to difficulties in correctly assembling them into words.

The ability to produce effective written communication is closely linked to accurate spelling, which serves as a foundational skill for enhancing English language proficiency. Furthermore, the implementation of engaging instructional strategies and innovative learning methodologies, combined with enjoyable educational experiences tailored to students' needs, can significantly contribute to the advancement of English language acquisition, particularly in the domains of reading and writing (Meesuk, 2015). The integration of gamification within pedagogical approaches has the potential to enhance learners' enthusiasm and motivation while simultaneously fostering enjoyment, collaboration, and the development of problem-solving abilities—skills that are essential for their future personal and academic growth (Kapp et al., 2014).

Literature Review

1. Spelling and Writing Skills

Proficiency in English spelling is essential for conveying meaning effectively through written communication and constitutes a fundamental linguistic skill. Incorrect spelling can alter word meanings or hinder comprehension, potentially affecting the clarity of written discourse. Consequently, spelling must be systematically practiced and acquired in accordance with established orthographic principles to ensure accuracy and precision. In contemporary society, spelling plays a critical role in communication, knowledge acquisition, and professional development. It serves as a foundational skill not only for written expression but also for broader intellectual and occupational pursuits. The ability to spell correctly enables learners to recognize and assemble letters into meaningful words, facilitating coherent written communication (Good, 1945). Furthermore, spelling proficiency is regarded as an essential prerequisite for developing fluency in reading and writing English (Erion et al., 2009; Joshi & Roth, 2009).

Spelling is a fundamental skill for learners. Teachers should consistently provide spelling practice so that students develop the ability to spell correctly and compose meaningful sentences, which can also enhance their communication in daily life. Misspellings can lead to miscommunication and distort the intended meaning in written language (Permnam, 2017, p. 33). Correct English spelling enhances the accuracy and clarity of written communication. Practicing spelling from the early stages of education, especially at the primary level, helps students build confidence and improve their spelling skills. This aligns with Kraisi-kao (2020, p. 15), who stated that spelling is a highly important and essential foundational skill that

students must practice regularly. Incorrect spelling can change the meaning of words and hinder academic success. Therefore, teachers must consistently reinforce spelling practice so that students can apply their skills effectively in daily communication and across academic subjects.

From the above teaching method for English spelling, the approach using sound emphasizes the connection between sound and letters, allowing learners to develop their spelling, reading, and writing skills in English. This method of learning enables learners to independently spell new words and promotes their reading and writing skills effectively. The researcher believes that the method of teaching English spelling using sound is suitable for third-grade elementary students, as it provides a foundational approach to understanding and writing English spelling. By integrating gamification into the teaching process, the activities and motivation for learning English spelling are enhanced, aiming to foster behaviors that lead to the desired positive outcomes.

2. Gamification

Educators have defined gamification in various aspects (Lee & Hammer, 2011, p. 46). They define gamification as the idea of applying fun elements and principles of games in systems such as scoring systems, reward systems, and leaderboards. Similarly, Wang (2011) states that gamification is a set of principles, processes, and work systems designed with the aim of motivating and encouraging individual, group, and community engagement to drive behaviors that will yield desired outcomes. Gamification is the application of game processes and mechanics in non-game contexts to create motivation, stimulate interest, and promote learner engagement in learning by using systems of scoring, rewards, and rankings to encourage desired behaviors (Wang, 2011; Zichermann, 2015). The concept of gamification helps to enhance the enjoyment and engagement of learners, promotes learning, and effectively develops problem-solving skills.

The concept of gamification can be applied to teaching to enhance the motivation and engagement of learners according to the context and goals of the application by incorporating game mechanics and rules into learning activities to create enjoyment for the target group, as well as drive the game mechanics and rules that effectively transfer learning outcomes to the target group. The principles of games will drive the behaviors of the target group to create a desire to succeed in learning since the principles of gamification help to create motivation for learning, making learners eager, understanding, and remembering the content better (Thongrak, 2015). It also promotes problem-solving skills and develops emotional intelligence and social skills (Meesuk, 2015; Wolff, 2012). Moreover, gamification stimulates learners to participate, making learning fun and enhancing thinking skills and teamwork and helping to improve academic achievement. (Injui et al., 2020). found that learners had higher motivation and academic achievement after participating in learning activities using gamification techniques compared to before learning, similar to the research of Chaisiri and Songsanit (2020). which found that learners were very satisfied with the learning management that used blended learning with gamification concepts. The research of Saengthip (2021) found that students had

the highest satisfaction with gamification learning management combined with task-based teaching methods overall.

Additionally, incorporating gamification can enhance learners' behavior, leading to more effective and engaging learning experiences. This enables learners to enhance their academic achievement more effectively. Meejaitham and Euenkrin (2020) conducted a study examining the impact of gamification techniques on English learning outcomes. Their findings revealed that students demonstrated significantly improved academic performance after engaging with gamified learning methods, with results achieving statistical significance at the 0.05 level. Gamification proves to be a valuable approach for structuring teaching and learning activities, as it encourages student engagement in meaningful learning experiences. By fostering enjoyment, it enhances motivation while simultaneously promoting problem-solving skills throughout the learning process. Additionally, gamification supports the development of social competencies through collaborative interactions with peers. Moreover, it plays a crucial role in shaping and refining learners' behaviors, ultimately contributing to improved learning outcomes, enhanced memory retention, and greater academic achievement.

3. The Use of Gamification to Enhance Spelling Skills

The integration of gamification into English language instruction is a crucial pedagogical strategy for fostering spelling proficiency, particularly at the primary education level—a critical stage for structured language development (Pinter, 2017). Given the inherent complexity and non-phonetic nature of English spelling, EFL learners often encounter significant challenges in accurately spelling words (Cook, 2014). Consequently, the implementation of engaging and motivational learning activities is essential in reinforcing spelling accuracy and promoting sustained linguistic development (Deci & Ryan, 2000; Deterding et al., 2011).

Gamification, or the application of game elements to learning activities, even when not implemented as fully developed games, can effectively stimulate learners' interest, intrinsic motivation, and engagement (Hamari et al., 2014). When applied to spelling instruction, learners can engage in diverse activities such as fill-in-the-blank games, matching games, or quiz competitions, all of which help enhance orthographic memory and foster habits of checking writing accuracy (Nation, 2009).

The integration of gamification into spelling instruction—particularly at the primary education level, where learners benefit from engaging, active, and participatory activities—has the potential to significantly enhance learning outcomes. Alharthi (2020) investigated the impact of gamification via the Kahoot platform on English as a foreign language (EFL) learners' academic performance. Participants were divided into an experimental group utilizing Kahoot and a control group receiving traditional instruction. The findings revealed that the experimental group demonstrated a 50.64% improvement in learning outcomes compared to the control group, highlighting the effectiveness of gamification in motivating learners and fostering positive learning behaviors. This efficacy is largely attributed to essential gamification elements, including competition, point accumulation, challenges, and rewards,

which promote both intrinsic and extrinsic motivation. Similarly, Meijaitam and Euanklin (2020) found that gamification-based instruction in primary English language education significantly enhanced learners' academic achievement, with a statistically significant difference ($p = .05$) between pre- and post-intervention scores. These findings underscore gamification's effectiveness as a pedagogical tool for improving learning outcomes and support its application in instructional activities designed to create engaging and participatory learning experiences across various educational levels.

A review of existing literature indicates that studies examining the application of gamification to enhance English spelling proficiency have primarily focused on learners at the upper primary to lower secondary levels (Wang, 2021). However, limited research has specifically investigated the effectiveness of gamification in developing English spelling and writing skills among early primary school learners, particularly third-grade students (Smith & Jones, 2020). This developmental stage is crucial for establishing a foundational framework for accurate English language acquisition, as spelling proficiency requires both phonological awareness and systematic exposure to orthographic patterns. Despite the recognition of spelling as a fundamental skill, a gap persists in empirical studies addressing gamification's role in fostering these competencies at the early primary level. To address this research gap, the present study aims to design and evaluate the impact of gamification on the development of English spelling and writing skills among young learners. By promoting structured and engaging instructional methods, the study seeks to establish a solid foundation for advanced language acquisition while facilitating the long-term development of English spelling proficiency in primary education.

Research Objectives

This study investigated the use of gamification to promote the spelling skills of grade 3 learners based on these three following objectives that were formulated to guide this study.

1. To compare the English spelling skills abilities of grade 3 learners before and after instruction using lessons designed with gamification teaching strategies
2. To compare the English spelling skills of grade 3 learners between those who learn through gamification instruction and those who learn through traditional teaching methods
3. To study the satisfaction of grade 3 learners toward the lessons using gamification

Hypotheses of the Study

1. The English spelling skills of grade 3 learners who were taught through gamification after the lessons were significantly higher than before the lessons at the .05 significance level.
2. There is a significant difference in the English spelling skills of grade 3 learners who were taught using gamification compared to those taught through traditional methods at the .05 significance level.
3. The level of satisfaction of grade 3 learners towards the lessons using gamification is at a high level.

Methodology

This section deals with the design of the study, methods of data collection and statistical analysis, and the validity and reliability of the research instruments.

1. Research Design

This research is an experimental study using a non-equivalent control group pre-test and post-test design. It was conducted by administering pre-tests and post-tests to measure performance in English spelling and a survey to assess learners' satisfaction with the teaching process that employed gamification.

2. Population and Samples

The target group in this study consisted of 32 Grade 3 students from a Thai primary school, selected through the cluster random sampling method. The students were divided into two groups: 16 in the experimental group and 16 in the control group. Based on their English achievement scores from the previous semester, the students exhibited similar levels of academic performance. Therefore, the researcher selected participants with comparable academic achievement for the study. Consequently, there was no statistically significant difference between the two groups prior to the experiment.

3. Instruments and Procedures

The learning management plan utilizing gamification teaching strategies based on the learning unit was developed as an integrated instructional approach. The researcher designed eight lesson plans aligned with educational theories, the Basic Education Core Curriculum, and the school's English curriculum. Each 50-minute lesson was reviewed by three experts for content validity, revised accordingly, and implemented in real classroom settings. For instance, in the lesson titled "Things to Eat (Snacks)," the instructional process comprises five steps, with gamification incorporated into the task performance stage. Learners participated in vocabulary activities through missions and earned points on reward cards, which could be exchanged for prizes if they met the set criteria. Each session featured varied tasks and conditions to promote learner engagement and improve learning outcomes.

Intervention assessments were developed to measure learners' English spelling achievement before and after the gamification instruction. The researcher studied relevant theories and principles to construct a 40-item English achievement test. The test was reviewed for content validity by three experts, after which revisions were made. Item analysis was conducted to evaluate item difficulty (p) and discrimination index (r). Twenty items that met the criteria were selected using the Kuder-Richardson Formula 20 (KR-20), which yielded a reliability coefficient of .96. The finalized test was then piloted and implemented in actual instruction.

A satisfaction survey for learners regarding teaching management using gamification was developed by the researcher. The objectives and content of the survey were clearly defined, resulting in a 16-item questionnaire with a five-point rating scale: very high, high, medium, low, and very low. The questionnaire was divided into two sections. Section 1 evaluated

learners' satisfaction with gamification-based learning activities across four aspects: learning management (4 items), perceived benefits from the activities (4 items), learning environment (4 items), and instructional media (4 items). Section 2 included open-ended questions for additional suggestions. The content validity of the instrument was reviewed and revised by three experts before implementation. The questionnaire demonstrated a reliability coefficient of .83, indicating a high level of internal consistency and acceptable reliability. At the conclusion of the gamification-based instruction, all 16 learners in the experimental group completed the satisfaction survey. Each learner read the questions in Thai and selected the response that best reflected their level of satisfaction. The survey achieved a 100% response rate.

4. Data Collection

This study employed a non-equivalent control group pre-test post-test design to examine the effectiveness of gamification in enhancing English spelling proficiency. Data collection with the sample group was conducted from June to September 2024. The research and data collection were carried out systematically across three distinct phases:

In Phase One, the researcher undertook a preparatory stage, which involved an extensive review and analysis of foundational knowledge related to gamification-based instructional methods for improving English spelling skills. Learning management plans were meticulously developed, integrating gamification principles into pedagogical strategies.

In Phase Two, the participants, constituting the target group, completed a pre-test comprising 20 items designed to assess their baseline English learning achievement based on gamification-based instruction. The instructional process adhered to the pre-established learning management plan, which incorporated gamification-oriented teaching activities.

In Phase Three, upon completion of the gamification-based instructional period, the instructor disclosed the cumulative score points accrued by the participants and presented a ranking table on the leaderboard to highlight classroom leadership dynamics. The target group subsequently undertook a post-test consisting of 20 items to evaluate their progress in English learning. Additionally, the experimental group provided feedback through a satisfaction assessment concerning the integration of gamification into the learning process. The data derived from both pre-test and post-test assessments were subjected to statistical analysis to compare learning outcomes before and after the intervention. Furthermore, the results of the satisfaction survey were analyzed in terms of mean and standard deviation, providing insights into the effectiveness and perceived benefits of gamification-based instructional methods.

5. Data Analysis

The research employed descriptive statistical methods, encompassing the calculation of mean, standard deviation, and independent samples t-tests, to examine the differences in English language learning achievement between two distinct groups. Furthermore, pre-test and post-test data derived from the English language learning achievement assessments, as well as responses from the learner

satisfaction questionnaire regarding gamification-based instructional strategies, were analyzed utilizing SPSS to fulfill the study's objectives and address the research questions comprehensively.

Results

The findings of the data analysis were reported in accordance with the following procedures: (1) a comparison of English spelling proficiency among grade 3 learners before and after participating in lessons incorporating gamification strategies, (2) a comparison of English spelling proficiency between grade 3 learners instructed through gamification-based methods and those taught using traditional approaches, and (3) an evaluation of grade 3 learners' satisfaction with the gamification-based instructional methodology.

Table 1

The Comparative Results of English Spelling Skills before and after Learning from Grade 3 Learners Who Were Taught Using Gamification Lessons

Sample	Before learning			After learning		<i>t</i>	Sig.
	Number	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>		
Experimental group	16	7.06	6.10	17.50	3.05	-9.529	.000

Note. $p < 0.05$ Correlation is significant at the 0.05 level.

According to Table 1, a comparison of Grade 3 learners' English spelling proficiency after gamification-based instruction reveals the following: Prior to the intervention, the mean score was 7.06 (SD = 6.10), while following the intervention, the mean score increased to 17.05 (SD = 3.05). The dependent t-test yielded a value of -9.529, with a significance level (p) of .000.

Table 2

Comparative Results of English Spelling Skills before Learning of Grade 3 Primary School Learners

Sample	Number	Before learning		<i>t</i>	Sig.
		<i>M</i>	<i>S.D.</i>		
Experimental group	16	7.06	6.10	1.401	.308
Control group	16	10.18	6.50		

Table 2 reveals that the experimental group, comprising learners who engaged in gamification-based learning management, exhibited a mean and standard deviation of learning achievement prior to instruction ($M = 7.06$, $SD = 6.10$). Conversely, the control group, consisting of learners who underwent conventional learning management, demonstrated a mean and standard deviation of learning achievement prior to instruction ($M = 10.18$, $SD = 6.50$). The dependent t-test yielded a value of 1.401 with a significance level of $p = .308$. These findings suggest that there was no statistically significant difference in the students' pre-instruction English spelling skills between the experimental and control groups.

Table 3

Comparative Results of English Spelling Skills after Learning of Grade 3 Primary School Learners

Sample	Number	After learning		<i>t</i>	Sig.
		<i>M</i>	<i>S.D.</i>		
Experimental group	16	17.50	3.05	-2.886	.000
Control group	16	12.68	5.92		

Table 3 presents the results of the learning achievement analysis. The experimental group, comprising learners who participated in gamification-based learning management, achieved a mean score of 17.50 (SD = 3.05) after instruction. In contrast, the control group, consisting of learners who experienced conventional learning management, obtained a mean score of 12.68 (SD = 5.92) following instruction. The comparison of mean scores and differences in learning achievement between the experimental and control groups yielded a *t*-test value of -2.886, with a significance level (*p*) of 0.000. These results indicate that the English spelling proficiency of the experimental group was significantly higher than that of the control group, with a significance level of less than 0.05.

Table 4

Comparative Results of English Spelling Skills after Learning of Grade 3 Primary School Learners

Satisfaction Assessment List	Evaluation Results		Satisfaction Level
	<i>M</i>	<i>S.D.</i>	
Learning management	4.89	0.18	Very high
Benefits from activities	4.91	0.26	Very high
Learning environment	4.91	0.18	Very high
Teaching media	4.89	0.20	Very high
Total average	4.90	0.17	Very high

Table 4 summarizes the findings of the evaluation regarding Grade 3 learners' satisfaction with the gamification-based lessons, which were rated at a very high level overall (*M* = 4.90, *SD* = 0.17). Analyzing each aspect individually revealed that the learning environment received a very high rating (*M* = 4.91, *SD* = 0.18), followed closely by the perceived benefits of the activities (*M* = 4.91, *SD* = 0.26). The aspects of learning management (*M* = 4.89, *SD* = 0.18) and teaching media (*M* = 4.89, *SD* = 0.20) were also very high rated. These results reflect a strong positive perception of the gamification-based instructional approach across all evaluated dimensions.

Based on the analysis of the data, the following conclusions can be drawn: (1) The English spelling proficiency of learners in the experimental group demonstrated a statistically significant improvement at a level of less than 0.05, indicating that gamification-based instruction effectively enhanced learners' academic achievement. (2) The comparison of English spelling proficiency between third-grade learners taught using gamification and those instructed through traditional methods revealed a statistically significant difference at a level of 0.05, with learners in the gamification group achieving higher academic performance. (3) The satisfaction of third-grade

learners with the gamification-based lessons was rated at a very high level overall ($M = 4.90$, $SD = 0.17$), reflecting a strong positive reception to the instructional approach.

Discussion

1. Management of Teaching and Learning Using Gamification to Promote English Spelling Skills

The implementation of gamification-based teaching and learning strategies to enhance English spelling proficiency among Grade 3 learners resulted in significantly improved academic outcomes following the lessons, compared to their performance prior to the intervention. The improvement was statistically significant at the 0.05 level, aligning with hypothesis 1. Additionally, when comparing gamification-based instruction to traditional teaching methods, it was evident that the experimental group, which received gamification-based instruction, achieved superior learning outcomes compared to the control group taught through conventional methods. This difference was also statistically significant at a level of less than 0.05, thereby supporting hypothesis 2. These findings are consistent with the study conducted by Meejaitham and Euenkrin (2020), which reported that learners demonstrated significantly higher English learning outcomes after receiving gamification-based instruction, as opposed to before instruction. Their research further underscores the effectiveness of gamification in improving learners' academic performance.

The researchers developed a teaching management approach for learners utilizing gamification by thoroughly examining its principles and theoretical framework. This instructional design, based on gamification principles, aimed to foster learner engagement and motivation for learning, in alignment with Wang (2011), who defined gamification as a set of principles, processes, and systems intended to motivate and encourage participation at both individual and group levels, as well as promote community involvement to drive behaviors that achieve desired outcomes. Furthermore, these findings are consistent with the study by Injui et al. (2020), which demonstrated that learners exhibited greater motivation and improved achievement after participating in gamification-based learning activities compared to their performance before the intervention. The study highlighted that learners were able to comprehend content, spell English words accurately, and engage actively in learning tasks. They also demonstrated cooperative efforts within groups to succeed in competitive activities. Similarly, Alharthi (2020), assessed the impact of gamification through Kahoot on EFL learner learning outcomes. The study revealed that learners using gamification techniques (experimental group) showed significant improvements in learning outcomes, with an average achievement rate of 50.64%, as opposed to 41.2% among learners taught using traditional methods (control group). These findings underscore the effectiveness of gamification as a pedagogical strategy for enhancing learner learning outcomes and motivation, providing educators with a robust approach to optimize teaching management for improved academic performance.

2. The Satisfaction of Grade 3 Learners with Lessons Using Gamification

The evaluation results regarding the satisfaction of Grade 3 learners with gamification-based lessons demonstrated a high level of overall satisfaction, with a mean score of 4.90 and a

standard deviation of 0.17. The satisfaction ratings for specific aspects were ranked as follows: the learning environment received the highest evaluation, followed by the benefits derived from the activities, the learning management aspect, and the teaching media aspect. These findings align with Hypothesis 3, which posits that the satisfaction levels of third-grade learners with gamification-based lessons are notably high, with the learning environment emerging as the most highly rated dimension. The results suggest that learners displayed considerable enthusiasm and enjoyment when engaging in gamified learning.

Gamification effectively stimulates learners' interest and learning engagement, motivating learners to invest effort in learning activities while fostering happiness and enjoyment during the process. Pun Det and Lert Phorakunrat (2015) assert that applying fundamental principles of game design and mechanics in non-gaming contexts enhances participant engagement and motivation. This perspective is further supported by Inchamnan (2018, pp. 2–3), who defines gamification as the application of techniques, rules, and interactions that promote learning without relying on traditional gaming formats. Gamification facilitates enjoyable self-directed learning, while educators cultivate a supportive, flexible teaching environment conducive to learner engagement. The findings are consistent with research conducted by Mijaitam and Euenkrin (2020), which explored the development of English learning outcomes through gamification techniques. Their study revealed that learners exhibited a high level of satisfaction with English learning activities organized using gamification-based methodologies. Similarly, Chaisiri and Songsanit (2020) investigated blended learning combined with gamification strategies, concluding that learners reported a very high level of satisfaction. These results underscore the potential of gamification to create engaging, enjoyable learning experiences that foster heightened satisfaction. When learners experience positive emotions during learning, they are more likely to engage deeply with activities, resulting in improved satisfaction and enhanced educational outcomes. This highlights gamification as an effective pedagogical approach for promoting learner motivation and enriching their learning experiences.

Conclusion

The research findings highlight the advantages of utilizing gamification to enhance the English spelling proficiency of Grade 3 learners. The results demonstrate that gamification plays a significant role in fostering the development of English spelling skills, leading to notable improvements in learners' abilities. The key outcomes of the research can be summarized as follows: Learners exhibited marked progress in their English spelling proficiency after gamification-based instruction compared to their performance prior to the intervention. Furthermore, learners who engaged with gamification-based learning achieved higher academic outcomes and expressed satisfaction with the learning process.

In addition, the integration of gamification into the instructional process encourages learners to actively practice their English spelling skills, thereby promoting improved spelling proficiency and fostering intrinsic motivation for learning. Gamification creates an enjoyable and supportive educational environment that inspires learners to actively participate in the

learning process. This, in turn, enhances their engagement in spelling practice and contributes to significant improvements in their English spelling proficiency.

In conclusion, the incorporation of gamification to develop the English spelling skills of Grade 3 learners proves to be an effective pedagogical approach. Gamification provides educators with an innovative tool to design instructional strategies that effectively promote the acquisition of English spelling skills. It is evident that gamification is a dynamic and engaging learning methodology that successfully addresses learners' educational needs. Moreover, gamification facilitates learners' ability to accurately spell English words and enhances their vocabulary retention. Findings from this study highlight the transformative role of gamification in English language education, as it significantly improves learners' academic achievement and spelling proficiency. Furthermore, results from the learners' satisfaction survey indicated the highest level of satisfaction with the implementation of gamification in English instruction, particularly in terms of the learning environment. The gamification setting fostered an engaging and enjoyable atmosphere, which actively motivated learners to participate in learning activities, thereby promoting more effective learning outcomes.

Recommendations

1. Implications

Educators should consider the moral and ethical development of their learners when integrating games into classroom activities. They must actively cultivate and reinforce values such as integrity, sportsmanship, and the ability to gracefully accept both victory and defeat. Furthermore, learners should be encouraged to demonstrate forgiveness and respect toward their peers during these activities. Adherence to established rules and agreements governing group interactions is essential to ensure successful implementation and to promote collaborative learning. Additionally, the promotion of personalized learning is supported by designing gamification-based activities with varying levels of difficulty, enabling learners to select or receive learning experiences that align with their individual skill levels and thereby fostering continuous development.

2. Further Studies

The findings of this research demonstrate the effectiveness of gamification in enhancing English spelling proficiency among learners, contributing to higher levels of academic achievement. Future research should focus on conducting longitudinal studies with repeated measurements to evaluate the long-term retention of vocabulary acquired through gamification-based learning. Moreover, further investigations are necessary to serve as a foundation for refining instructional strategies aimed at improving learners' spelling skills and optimizing their educational experiences. However, consideration of the limitations regarding the applicability of the findings in different contexts is essential. Results obtained from schools with varying characteristics may not be appropriately generalized or applied to learners in other contexts due to differences in environment, language, and learning approaches.

References

- Aljraiwi, S. (2019). Effectiveness of gamification of web-based learning in improving academic achievement and creative thinking among primary school students. *International Journal of Education and Practice*, 7(3), 242–257. <https://doi.org/10.18488/journal.61.2019.73.242.257>
- Anulomsombat, M. (2019). *Changing the world of gamification changes learners into knowers*. Bangkok Business. <https://www.bangkokbiznews.com/blog/detail/648345>
- Chaisiri, D., & Songsanit, S. (2020). Promoting motivational engagement in learning through blended learning combined with gamification concepts for 10th grade students at Phadungnaree School. *The 21st National Graduate Research Conference, Khon Kaen University*.
- Chokphon, P. (2015). *Promoting cooperative learning behaviors through gamification-based learning management for students in the special science classroom in grade 4 at Phetchaburi School* (Master's thesis, Mahasarakham University).
- Chusangnil, C. (2018). Gamification: Learning through play as a game. *SciMath Knowledge Base*. <https://scimath.org/article-technology/item/>
- Cook, V. (2014). *Second language learning and language teaching* (5th ed.). Routledge.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01
- Det, C., & Lertrukulrat, T. (2020). A study of innovative learning through gamification. *Journal of Education, Naresuan University*, 18(3), 332–346.
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification." In *Proceedings of the 15th International Academic MindTrek Conference* (pp. 9–15). ACM. <https://doi.org/10.1145/2181037.2181040>
- Erion, J., Davenport, C., Rodax, N., Scholl, B., & Hardy, J. (2009). Cover-copy-compare and spelling: One versus three repetitions. *Journal of Behavioral Education*, 18(4), 319–330.
- Good, C. V. (1945). *Dictionary of education*. McGraw-Hill.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. In *47th Hawaii International Conference on System Sciences* (pp. 3025–3034). IEEE. <https://doi.org/10.1109/HICSS.2014.377>
- Inchamnan, W. (2018). *The development of game-type learning media to provide knowledge about regulations and practices in training centers for children and youth*. Dhurakij Pundit University.
- Injui, R., Chiewsothorn, S., Prasithewejjakul, A., & Proyuen, C. (2020). The effects of learning activities using gamification techniques on motivation to achieve and satisfaction of army nurse students. *Army Nursing Journal*, 21(2), 377–388.
- Joshi, A., & Roh, H. (2009). The role of context in work team diversity research: Meta-analytic review. *Academy of Management Journal*, 52(3), 599–627.
- Kapp, K. M. (2012). *The gamification of learning and instruction: Game-based methods and strategies for training and education*. <https://www.wiley.com/go/kappgamification>

- Kraisikao, T., & Pengpoom, B. (2020). The development of spelling writing skills for grade 1 students using local language in daily life through brain-based learning combined with computer-assisted instruction. *Academic Journal of Curriculum and Instruction, Sakon Nakhon Rajabhat University*, 12(35), 1–9.
- Kuea-Anan, P. (2022). Development of reading and writing English vocabulary of Prathomsuksa 1 students using phonics method integrated with multimedia, reinforcement, and peer-assisted learning. *Journal of Curriculum and Instruction*, 14(40), 128–140.
- Lee, J. J., & Hammer, J. (2011). Gamification in education: What, how, why bother? *Academic Exchange Quarterly*, 15(2), 146.
- Lerthamrongchai, K. (2017). (Gamification) *The world of learning driven by games*. <http://touchpoint.in.th/gamification>
- Meesuk, C. (2015). *Organizing learning activities to enhance students' participation behaviors using gamification techniques for special science classroom students in the 4th grade at Anukulnari School* (Master's thesis, Mahasarakham University).
- Mijaitam, N., & Eunkarin, T. (2020). The development of English learning achievement using gamification techniques for 5th grade students. *Journal of Education, Burapha University*, 32(2), 76-90.
- Nation, I. S. P. (2009). *Teaching ESL/EFL reading and writing*. Routledge.
- Palawan, P. (2020). The development of spelling skills in English using games for 5th grade students. *Humanities and Social Sciences Journal of Walailak University*, 15(2), 126-136.
- Permmam, C. (2017). *The development of learning achievement on spelling and social skills of Prathomsuksa 3 students through cooperative learning using the TGT technique and practice exercises* (Master's thesis, Silpakorn University). <http://ithesis-ir.su.ac.th/dspace/bitstream/123456789/1469/1/57255312.pdf>
- Phinyoyang, W. (2013). *Marketing ideas that change the world*. Bangkok Business Media.
- Phochaitrat, K. (2018). *The development of spelling skills in English using games for 3rd grade students at Khokpho Chai School* [Research report]. Educational Research Promotion and Development Group, Office of Educational Innovation Development.
- Phongpanit, N. (2011). A study of problems in speaking English in verbal communication of students of the Faculty of Management Science, Kasetsart University Sriracha Campus, October 2007 to September 2008. *Journal of Humanities and Social Sciences*, 18(1), 85–97.
- Pinter, A. (2017). *Teaching young language learners* (2nd ed.). Oxford University Press.
- Sangthip, W. (2021). *Development of gamified learning management integrated with task-oriented teaching methods to promote English reading comprehension skills and motivation to learn among third-year secondary students* (Master's thesis, Silpakorn University).
- Smith, A., & Jones, B. (2020). Gamification in early language education: Strategies and challenges. *Early Childhood Education Journal*, 48(3), 345–360.
- Tangpattanakit, J. (2020). The influence of factors affecting communication in English with motivation as a mediating variable and anxiety as a moderating variable. *Journal of Business Administration and Arts Rajamangala University of Technology Lanna*, 8(2), 111-126. <https://research.ku.ac.th/forest/Publish.aspx?PuublishID=30027>

-
- Thongrak, S. (2015). *Gamification for education*.
<https://prezi.com/egljtudugd8e/gamification-for-education>
- Wang, Y. J. (2011). Aesthetics and the online shopping environment: Understanding consumer responses. *Journal of Retailing*, 8(2), 46-58.
- Wang, Y. (2021). Enhancing spelling skills through gamified learning: A study of primary and secondary school learners. *Journal of Educational Technology Research*, 29(2), 150–167.
- Wolff, J. (2012). *The gamification of education and cognitive, social, and emotional learning benefits*. <http://www.emergingedtech.com/2012/06/the-gamification-of-education-and-cognitive-social-and-emotional-learning-benefits>
- Zichermann, G. (2015). *About: Gabe Zicherman*. Gamification.co.
<http://www.gamification.co/about-gamification-co/v>