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**The Impact of Gamified Learning on the Motivation and The Engagement
of Primary School Learners: A Quasi-Experimental Study of 4th-Level
Pupils at Zaoui Younes Primary School, Ain Temouchent**

*An Extended Essay Submitted in Partial Fulfillment of the Requirement for a Master's
Degree in Didactics and Applied Languages.*

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Statement of Originality

I hereby declare that this dissertation, submitted in partial fulfillment of the requirements for the Master's Degree in Didactics and Applied Linguistics, is entirely my own original work. All sources used and referenced throughout this research have been properly acknowledged and cited in the References according to academic standards. I further confirm that this dissertation has not been previously submitted for any degree or qualification at this university or any other institution.

Moreover, I acknowledge that while the work has been informed by the ideas and research findings of others, the analysis, interpretation, and conclusions presented are the result of my independent investigation and have not been copied or reproduced from any other sources.

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Signature.

Dedications

*To my beloved **Papa**,*

*though you are no longer by my side, your love remains the light
that guides my path.*

*Your strength, your wisdom, and your endless belief in me live on
in every step I take.*

I carry you in my heart, today and always.

*To my dearest **Mama**,*

your unwavering love has been my anchor,

your sacrifices my quiet inspiration,

and your faith in me the wind beneath my wings.

I am forever grateful for your endless support.

***Last but not least**, to myself,*

for enduring when it was hard,

for rising after every fall,

and for believing that I was capable of reaching this dream.

This achievement is as much yours as it is mine.

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Abstract

Gamified learning has emerged as a powerful pedagogical remains largely unexplored especially in primary education. Recognizing the transformative potential of game-based learning , this study investigates the impact of gamified activities on the motivation and engagement of 4th-level primary school pupils in learning English. The research was conducted as a quasi-experimental study involving 39 pupils from Zaoui Younes Primary school in Sidi Ben Adda, Ain Temouchent.the intervention used a custom-designed educational website, LEARNING LAND, which incorporates a variety of interactive games and songs aligned with curricular goals. The quasi-experimental sessions spanned eight sessions with pupils working in groups using pcs under guided instruction. A mixed-methods approach was adopted ,combining quantitative analysis of performance scores and engagement metrics with qualitative observation . the findings revealed a significant improvement in both motivation and active participation , as well as a notable enhancement in english language acquisition skills among the participants. Despite limitations such as a relatively short intervention period and the novelty of digital tools for the pupils. the results strongly support the efficacy of gamified learning environment in boosting learner engagement and performance . this research contributes valuable insight into the implementation of gamified strategies in Algerian primary education andunderscores the importanceof integrating digital tools to enrich language learning .

LIST OF Acronyms

ALM: Audio-lingual Method

EFL: English as Foreign Language

LLM: Language Learning Motivation

PCs: Personal Computers

SDT: Self-Determination Theory

TEFL: Teaching English as Foreign Language

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General Introduction

In a rapidly evolving world by technological advancements . E-learning has witnessed remarkable growth in recent years, establishing itself a valuable tool within global education system. In the 21st century, the integration of E-learning particularly through educational websites has become essential for supporting positive learning outcomes, to activate the learners , and enhancing the teaching of English , which remains the dominant language in today's interconnected world. Despite its global prominence , the learning of English as a foreign language continues to pose challenges in many developing countries , where it is often perceived as difficult and uninspiring . where ongoing efforts aim to elevate the status of English and motivate the pupils to engage more actively with the language . therefore, incorporating educational websites as part of E-learning initiatives is crucial . such platforms, when thoughtfully designed, have the potential to captivate learners' interest and sustain their motivation , especially among primary school pupils.

The present study investigates the impact of gamified learning on primary school learners' motivation and engagement when learning English as a foreign language. The study seeks to explore the perceptions of learners regarding the benefits, challenges, and overall effectiveness of gamification in educational settings.

The main objectives of the study are:

- To examine the effect of gamification on students' intrinsic and extrinsic motivation in primary education.
- To assess the impact of gamified learning experiences on students' engagement levels in the classroom.

To achieve these objectives, The current study is directed by the following research questions:

1. How do gamified learning experiences influence the overall motivation of a primary school pupil during the learning process ?
2. How do different gamification elements sustain the engagement among pupils?

Based on these research questions, the following hypotheses are proposed:

1. Gamified learning has a significant positive effect on the overall motivation of primary school pupils during the learning process, enhancing their interest, enjoyment, and active participation in English language learning activities.
2. Different gamified learning elements play a significant role in sustaining engagement among primary school pupils by maintaining their attention

This dissertation is structured into three chapters. The first chapter provides a theoretical framework, offering an overview of gamification in education, its pedagogical foundations, and its relevance in language learning, with a particular focus on its application in EFL classrooms. It also addresses the integration of English as a second foreign language in Algerian primary education, discussing the rationale, challenges, and potential benefits of early English instruction. Additionally, the chapter reviews key motivational theories and engagement strategies relevant to primary school learners.

The second chapter presents the research methodology, detailing the research design, sample population, data collection instruments, and procedures for data analysis. The study is based on a Quasi-experimental approach conducted in a primary school context, focusing on the impact of gamified learning activities on learners' motivation and engagement.

The third chapter focuses on data analysis and interpretation, providing an in-depth examination of the results derived from both quantitative and qualitative data. This chapter

also discusses the main findings in light of the research objectives and hypotheses, addresses the limitations encountered during the study, and offers recommendations for future research.

Chapter One

The theoretical Framework and The Literature Review

The Theoretical Framework and The Literature Review

1.1 Introduction

In recent years, gamification has emerged as a widely adopted strategy in educational settings, aiming to increase learners' motivation and engagement by integrating game-like elements into traditional learning environments. These elements often include points, badges, leaderboards, levels, and challenges, to enhance participation and foster a sense of achievement (Deterding et al., 2011; Hamari, Koivisto, & Sarsa, 2014). Gamified learning environments seek to create experiences that are not only educational but also enjoyable and rewarding, thereby encouraging sustained learner involvement (Domínguez et al., 2013). While empirical studies have demonstrated positive outcomes regarding student motivation and short-term performance, research also highlights that the effectiveness of gamification depends on several factors, such as task design, learner characteristics, and the context in which it is implemented (Hamari et al., 2014). Additionally, scholars emphasize the need for further investigation into its long-term impact and how it can be optimally integrated into diverse educational frameworks (Seaborn & Fels, 2015).

1.2 Gamification Teaching Method

Gamification has emerged as an influential pedagogical approach in recent decades, particularly in response to the growing demand for learner-centered and motivationally rich educational experiences. Defined as applying game-design elements in non-game contexts, gamification seeks to increase user engagement, motivation, and overall satisfaction in tasks that are otherwise perceived as routine or demanding (Deterding et al., 2011). In educational settings, gamification integrates components such as points, levels, badges, leaderboards, feedback loops, and challenge-based learning to foster a more interactive and participatory environment (Kapp, 2012).

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Karl Kapp (2012), one of the most influential scholars in the field, explains that gamification enhances instruction by tapping into the motivational power of game dynamics and mechanics to promote active learning. According to him, gamified environments can support cognitive development by encouraging learners to set goals, overcome challenges, and receive continuous feedback, conducive to deeper learning and retention. This method also supports both intrinsic motivation (learning for personal satisfaction) and extrinsic motivation (learning to gain rewards or recognition), which are critical in sustaining attention and participation (Su & Cheng, 2015).

The pedagogical foundation of gamification aligns closely with constructivist and behaviourist learning theories. Constructivists emphasize the learner's active role in constructing knowledge through experience, while behaviourists focus on reinforcement mechanisms to shape behavior. Gamification bridges both by providing learners with immediate rewards (points, badges) and encouraging repeated engagement with learning tasks, enhancing both retention and mastery (Domínguez et al., 2013; Seaborn & Fels, 2015).

Several key features define practical gamified learning experience. These include:

- **Clear Goals and Progression:** Learners are guided through tasks with defined objectives, often progressing through levels of increasing complexity (Hamari et al., 2014).
- **Immediate Feedback:** Systems provide real-time responses to learners' actions, reinforcing learning and allowing for correction (Kapp, 2012).
- **Reward Systems:** Points, badges, certificates, and other symbolic rewards recognize learner achievement, building motivation (Seaborn & Fels, 2015).
- **Competition and Collaboration:** Leaderboards encourage competition, while multiplayer tasks foster cooperation and peer learning (Su & Cheng, 2015).

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- **Autonomy and Mastery:** Learners are offered choices in approaching tasks, supporting autonomy and the pursuit of mastery over time (Hamari et al., 2014).

Empirical studies have shown promising outcomes from the use of gamification in educational contexts. Domínguez et al. (2013), for instance, found that students exposed to gamified learning tools demonstrated higher levels of participation, improved academic performance, and greater satisfaction compared to those in traditional classroom settings. However, the effectiveness of gamification depends on careful instructional design. If the game elements overshadow pedagogical goals or are poorly aligned with learners' needs, they may lead to disengagement or superficial learning (Hamari et al., 2014).

Gamification offers a framework through which educators can transform traditional classroom tasks into dynamic, student-centered experiences. By appealing to learners' need for recognition, feedback, and challenge, it has the potential to address motivational deficits often observed in conventional instructional models. Its strategic integration into educational settings, particularly through digital platforms, reflects a broader shift toward engagement-based and experience-driven learning in 21st-century pedagogy.

1.3 Differences between Gamification and Serious Games

In educational research and practice, several game-related approaches have been developed to enhance motivation, engagement, and learning effectiveness. Among these, gamification, serious games, simulations, and traditional games are often discussed, though their conceptual boundaries are frequently blurred (Deterding et al., 2011; Seaborn & Fels, 2015). Understanding the nuanced differences between these terms is essential for effectively integrating game-based strategies into formal educational environments.

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Gamification is broadly defined as applying gamedesign elements and game principles in non-game contexts (Deterding et al., 2011). These elements include points, levels, badges, leaderboards, feedback systems, and challenges, all designed to motivate and influence user behaviour. In educational settings, gamification does not attempt to develop full games, but instead introduces these motivational features into existing learning environments—such as learning management systems, digital classrooms, or paper-based activities—to stimulate participation and encourage sustained learning (Kapp, 2012; Marczewski, 2013).

Unlike gamification, serious games are complete and self-contained digital or physical games developed for purposes beyond entertainment. They include clear objectives aligned with instructional or training goals and incorporate narrative, gameplay mechanics, and assessment elements to deliver a structured learning experience (Michael & Chen, 2006). Serious games are frequently used in disciplines such as medicine, military training, environmental education, and language acquisition, allowing learners to explore complex problems and make decisions within a risk-free environment (Boyle et al., 2016). Unlike gamification, serious games require more substantial resources for development and implementation, as they are essentially full-fledged games with embedded pedagogical content.

Simulations, although closely related to serious games, are primarily designed to replicate real-world systems or processes in a highly realistic and immersive way. The aim of simulations is often procedural training or decision-making practice, and while they may contain game-like features, their primary focus is not on entertainment or engagement but on accuracy and realism (Aldrich, 2009). For example, flight simulators used in aviation training or patient diagnosis simulators used in medical education are examples of simulation-based tools that emphasize experiential learning through replicating real-life scenarios.

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A more loosely structured approach is game-inspired design (also known as gameful design), which focuses not on incorporating of formal game mechanics but on the spirit or aesthetics of games. This may involve playful interaction, exploratory activities, or creative problem-solving tasks that mimic the feel of gameplay without having actual game rules, scores, or win conditions (McGonigal, 2011). Such designs are handy in early childhood education and creativity-based learning, where rigid structures may inhibit exploratory learning.

Traditional games, meanwhile, are primarily developed for entertainment purposes, such as board games, video games, or playground games. Although they are not explicitly designed with educational outcomes in mind, many support the development of skills such as critical thinking, collaboration, and decision-making. When used intentionally by educators, traditional games can also be repurposed as informal learning tools to enhance classroom interaction and engagement (Gee, 2003).

Despite these distinctions, all of the above approaches share a common foundation: they leverage the psychological appeal of games—such as challenge, competition, narrative, achievement, and feedback—to foster user engagement and improve learning outcomes. The choice between gamification, serious games, or simulations depends mainly on the educational context, desired learning outcomes, available resources, and the specific needs of learners (Hamari et al., 2014).

Gamification is often favoured for its flexibility and integration cost into existing systems, making it accessible to a broader range of educational institutions. Serious games, though more costly, offer immersive and context-rich learning experiences. Simulations provide procedural and hands-on training essential in professional contexts. Each approach contributes uniquely to the educational process, and in some cases, hybrid models that

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combine gamification and serious games are developed to optimize learner engagement and effectiveness (Seaborn & Fels, 2015).

1.4 The Role of Gamification in Education

Understanding the role of gamification in education requires a dual focus on both its underlying rationale and its practical implementation. This section explores why gamification is increasingly adopted as a pedagogical strategy and how it is effectively integrated into classroom settings to enhance learner motivation, engagement, and academic outcomes.

1.4.1 Rationale for Gamification

Gamification, defined as the application of game design elements in non-game contexts, has emerged as a prominent pedagogical approach in contemporary education. This strategy integrates elements such as points, levels, badges, leaderboards, and structured challenges to enhance learner engagement, motivation, and academic achievement. Rather than replacing traditional instruction, gamification serves as a complementary tool that supports motivational principles through interactive and dynamic learning experiences.

The theoretical underpinnings of gamification are closely linked to motivational frameworks that emphasize autonomy, competence, and relatedness as critical drivers of sustained engagement. In this context, gamified systems offer immediate feedback, incremental goals, and recognition, all of which contribute to a learner's sense of competence and progress. Such features are particularly effective in primary education, where learners often respond more positively to visually stimulating and participatory formats.

Empirical evidence supports the claim that gamification can positively influence both motivation and learning outcomes across educational levels. In younger learners, such as those in the fourth level of primary school, gamified experiences can help address common

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issues of disengagement by presenting academic content through playful, goal-oriented tasks. Furthermore, gamification accommodates diverse learning needs through differentiated instruction, enabling learners to advance at their own pace and according to their individual abilities. This adaptability is crucial in heterogeneous classrooms, where students vary in prior knowledge, language skills, and cognitive development.

Gamification also supports collaborative learning by incorporating elements of competition and teamwork. Features such as leaderboards, team challenges, and cooperative problem-solving activities foster social interaction and peer-to-peer learning, which align with constructivist educational models. From a cognitive standpoint, gamified activities frequently involve higher-order thinking skills such as analysis, decision-making, and critical reasoning, especially when embedded in narrative or role-based tasks that simulate real-world problems.

Additionally, the iterative and feedback-rich nature of gamified tasks promotes deeper cognitive processing and sustained attention to content. The integration of multimodal stimuli—visual, auditory, and kinesthetic—supports diverse learning styles and enhances knowledge retention. Gamification can also contribute to emotional development by reducing academic anxiety and encouraging risk-taking in a psychologically safe environment, where mistakes are framed as part of the learning process rather than as failures.

However, the effectiveness of gamification is not universal and depends largely on thoughtful design and alignment with pedagogical goals. Poorly executed implementations may rely excessively on extrinsic rewards, potentially undermining intrinsic motivation and overloading learners with superficial stimuli. As such, careful integration and pedagogical coherence are essential to ensure gamification functions as a meaningful and impactful educational strategy.

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1.4.2 Implementation of Gamification

The practical application of gamification in educational contexts involves the intentional integration of game mechanics into learning environments. These mechanics include points, badges, progress bars, levels, and leaderboards, all designed to enhance learner engagement, provide a sense of progression, and create a more dynamic classroom experience. Unlike full-fledged educational games, gamification selectively applies these elements to enrich existing instructional practices without transforming the curriculum into an entirely game-based format.

This approach draws on psychological principles such as goal-setting, challenge, and reward to create structured and motivating experiences. By providing students with clear objectives and consistent feedback, gamified systems encourage active participation and cultivate a sense of achievement. In primary education settings, where learners are particularly responsive to novelty and playfulness, gamification can serve as a powerful tool to capture attention and sustain interest in academic tasks.

Gamification also facilitates learner autonomy and personalized learning pathways. Adaptive systems can adjust the difficulty of tasks based on learner performance, allowing students to progress according to their individual capabilities. This level of personalization supports differentiated instruction, making gamification particularly effective in classrooms with diverse academic profiles.

Moreover, the use of competitive and collaborative elements encourages students to work both independently and in groups, reinforcing social learning and communication skills. Leaderboards can motivate through healthy competition, while team-based challenges promote cooperation and mutual support.

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Nevertheless, successful implementation of gamification requires deliberate planning and an emphasis on intrinsic motivation. Overreliance on external rewards such as badges or points may lead to a decline in genuine interest in learning. To avoid this, gamified systems must be carefully balanced, integrating reward structures that support rather than replace students' internal drive to learn and explore. When designed with pedagogical intent, gamification becomes not merely a motivational strategy but a transformative component of effective teaching and learning.

1.5 Benefits of Gamification in Education

Gamification in educational contexts has been widely recognized for its potential to transform traditional learning environments by enhancing student engagement, promoting motivation, and supporting the development of critical thinking and problem-solving skills. When applied effectively, gamified learning can address the limitations of conventional pedagogy by introducing interactive, dynamic, and rewarding experiences that better align with the preferences and cognitive needs of contemporary learners.

One of the most consistently cited benefits of gamification is its ability to increase student engagement. Traditional teaching methods can sometimes lead to passive learning and student disengagement, particularly in repetitive or abstract subject areas. Gamification addresses this issue by incorporating game elements—such as progression systems, visual rewards, and immediate feedback—that stimulate student interest and encourage active participation. As Huang and Soman (2013) explain, “Gamification increases engagement by making learning environments more interactive and by providing learners with frequent reinforcement through rewards and feedback” (p. 8). This heightened engagement can, in turn, contribute to improved attention, persistence, and, ultimately, better academic performance.

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In addition to fostering engagement, gamification has been shown to support the development of problem-solving and critical-thinking skills. Many educational games are designed with complex challenges, puzzles, or real-life scenarios that require learners to apply their knowledge strategically and analytically. According to Gee (2003), video game-based learning environments provide opportunities for “active, critical learning” in which learners must interpret rules, test hypotheses, and adapt to changing situations (p. 45). These features simulate the cognitive processes involved in problem-solving and encourage students to think more deeply about the content they engage with.

Furthermore, gamification plays a significant role in enhancing student motivation, both intrinsic and extrinsic. While external motivators such as points, badges, and leaderboards are commonly used in gamified systems, these elements can also promote intrinsic motivation when they align with learners' goals and sense of achievement. Deterding et al. (2011) argue that game elements can “trigger the same motivational affordances as games themselves, such as competence, autonomy, and relatedness” (p. 2), which are central components of self-determination theory. When students are given clear goals, frequent feedback, and opportunities for self-paced progression, they are more likely to feel competent and autonomous—two psychological needs critical for sustained motivation (Ryan & Deci, 2000).

Moreover, gamified learning environments often incorporate progression tracking and reinforcement mechanisms, crucial for maintaining student engagement and encouraging consistent learning behaviour. As students advance through levels or stages, they receive feedback that helps them recognize their achievements and areas for improvement. This ongoing feedback loop reinforces learning and supports the internalization of knowledge through repetition and reflection. Stewart (2015) notes that “repeated exposure to content

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within game-based systems leads to better retention than passive forms of instruction,” emphasizing the importance of active engagement and iterative learning in educational success (p. 442).

Lastly, gamification may also support social learning and collaborative engagement, particularly when implemented through team-based activities or shared leaderboards. These collaborative structures promote peer interaction and a sense of community within the classroom, enhancing both academic motivation and social skills. As Huang and Soman (2013) highlight, gamified environments that include “elements of competition and cooperation contribute to a sense of belonging and shared purpose among learners” (p. 9), thereby fostering a more inclusive and interactive learning culture.

1.6 Motivation in Language Learning

Motivation is a foundational component of effective language learning and is particularly critical in the context of English as a Foreign Language (EFL). In primary education, where learners are still developing self-regulation and cognitive maturity, motivation plays a central role in shaping not only engagement but also achievement and long-term interest in the subject. Numerous scholars regard motivation as one of the most significant predictors of second language acquisition success (Dörnyei, 2001; Gardner, 2010). It affects learners' willingness to initiate learning, their perseverance in the face of difficulties, and the degree of effort they invest throughout the learning process (Schunk, Meece, & Pintrich, 2013).

In practical terms, motivated pupils are more likely to actively participate in classroom activities, take ownership of their learning, and persist through challenges, which results in

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higher levels of language proficiency (Noels et al., 2000; Ushioda, 2013). This is particularly important in primary EFL classrooms, where learners often have little exposure to the target language outside school. In such environments, motivation becomes a key internal resource that can compensate for the lack of external input. Without sufficient motivation, even pupils with high cognitive ability or supportive environments may struggle to make meaningful progress (Dörnyei & Ushioda, 2011).

Over time, researchers have examined how motivation functions in language learning and how it evolves. According to Dörnyei and Ushioda (2011), theories of Language Learning Motivation (LLM) have developed through three main periods: the social-psychological period (1959–1990), focusing on attitudes and cultural affiliation; the cognitive-situated period (1990s), emphasizing individual learning experiences and contexts; and the process-oriented period (from the 2000s), which recognizes motivation as dynamic, context-dependent, and changeable over time.

16.1 Motivation and Educational Outcomes in EFL

The importance of motivation in improving language outcomes is supported by empirical research that links it to better academic performance, deeper cognitive engagement, and greater willingness to communicate (WTC) in the target language (MacIntyre, Clément, Dörnyei, & Noels, 1998). This connection is especially relevant for young learners who are in the early stages of language acquisition and may need both structured guidance and emotional encouragement to succeed.

Studies have demonstrated that highly motivated pupils are more likely to:

- Spend more time on task and complete language-learning activities more thoroughly.

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- Retain vocabulary and grammatical structures more effectively.
- Display higher levels of oral and written fluency (Gardner, 1985; Dörnyei, 2001).
- Develop a more positive attitude towards the language and culture, which contributes to long-term achievement.

For primary school pupils, positive motivation can even spark interest in language learning as a lifelong endeavor, fostering not only academic success but also future educational and career opportunities. As such, motivation does not merely support short-term academic goals but also facilitates the development of a more sustainable learner identity (Lamb, 2011).

1.6.2 Types of Motivation in Language Learning

Motivation in language learning is a multidimensional construct that can be classified into two broad categories: **intrinsic** and **extrinsic** motivation. These overarching types have further subtypes that provide deeper insight into learners' goals, behaviors, and attitudes. Understanding these distinctions allows educators to tailor instructional strategies that effectively address the diverse motivational needs of young learners.

1.6.2.1 Intrinsic Motivation

Intrinsic motivation refers to engaging in an activity for its own sake—out of interest, enjoyment, or a genuine desire to learn. It is internally driven and is considered to be more enduring and associated with higher quality learning outcomes (Deci & Ryan, 2000). For EFL learners, intrinsic motivation might stem from a personal curiosity about foreign cultures, a love for English songs or stories, or the pleasure of mastering a challenging skill.

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According to Self-Determination Theory (SDT), intrinsic motivation is nurtured when three basic psychological needs are fulfilled:

- **Autonomy:** The sense of having control over one's own learning.
- **Competence:** The feeling of being effective and capable in learning tasks.
- **Relatedness:** The sense of connection and belonging with peers and teachers.

In a gamified learning context needs can be addressed through choice-based tasks, scaffolded difficulty levels, and collaborative activities. For instance, when children choose their own avatar or learning game, or receive immediate positive feedback, their sense of autonomy and competence is reinforced.

Intrinsic motivation divided into (Vallerand, 1997):

- **Intrinsic motivation to know:** Engaging in learning to gain knowledge and understand.
- **Intrinsic motivation to accomplish:** Driven by the pleasure of completing or mastering a task.
- **Intrinsic motivation to experience stimulation:** Seeking sensory pleasure or aesthetic enjoyment (e.g., enjoying the sounds of English or engaging animations in a game).

1.6.2.2 Extrinsic Motivation

Extrinsic motivation, in contrast, involves performing an activity to attain a separable outcome—such as obtaining rewards, avoiding punishment, or meeting external expectations. While extrinsic motivation is often considered less effective than intrinsic motivation in sustaining long-term engagement, it remains a powerful and sometimes necessary component in educational settings, especially among younger learners who are still developing their self-regulation skills.

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Extrinsic motivation is not monolithic; it can range from externally controlled to more self-determined forms, depending on the degree of internalization of the external goals (Deci & Ryan, 1985). SDT distinguishes between four subtypes of extrinsic motivation:

- External regulation: Learning solely to gain rewards or avoid punishment (e.g., studying English to get a good grade).
- Introjected regulation: Motivation based on internal pressures such as guilt or obligation (e.g., learning English to feel proud or avoid shame).
- Identified regulation: A more autonomous form, where the learner values the outcome (e.g., recognizing that English is important for future success).
- Integrated regulation: The most self-determined form of extrinsic motivation, where learning aligns with the learner's sense of self and personal values (though this is rare in young children).

These gradations reveal that extrinsic motivation can still lead to meaningful engagement if the external reasons for learning are internalized and personally endorsed.

1.7 Engagement in Language Learning

Intrinsic motivation (Hamari et al., 2014; Kapp, 2012). Its relevance is particularly pronounced in early education, where fostering enthusiasm and consistent Learning engagement is the active participation, involvement, and dedication of students to learning. It is cognitive, emotional, and behavioural, comprising attention, interest, effort, and persistence. Engagement is a multifaceted and multidimensional concept with various factors affecting it, such as motivation, self-efficacy, and learning environment.

The Self-Determination Theory (SDT), theorized by Ryan and Deci (2000), focuses on learner autonomy in learning. The theory holds that human beings possess three innate

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psychological needs—autonomy, competence, and relatedness—that regulate their motivation and engagement (Anja et al., 2016). Ryan and Deci (2017) observe that the degree to which teachers fulfil these needs directly affects learners' attainment, motivation, and general engagement in learning.

SDT offers a model in which instructional practices can have a significant part in supporting student engagement (Núñez & León, 2019). By creating of autonomy-supportive classrooms, instructors can allow students to feel competence and relatedness, which translates to classroom engagement. Deci and Ryan (2016) believe that satisfying students' autonomy, competence, and relatedness needs is conducive to intrinsic motivation, engagement, and long-term commitment to learning. Nevertheless, when these needs are not met, students become disengaged, use extrinsic motivation, and experience well-being problems.

1.7.1 Conceptualizing Learner Engagement

Student engagement refers to the degree of involvement, commitment, and interest students apply to their learning experience. It is cognitive, affective, and behavioral in nature, and each of these dimensions is responsible for academic achievement as well as for personal development. Engagement is regarded by the majority as a fundamental element in the definition of student success, with students who are high-engaged more likely to be inquisitive, motivated, and dedicated to learning.

Student engagement has been defined by Gonzalez (2013) as the level of attentiveness, curiosity, and excitement students possess during learning. Student engagement is a significant contributor to their motivation and academic development. Students are more involved and persistent in their activities when they find learning meaningful and engaging, while disengagement leads to boredom, disinterest, and academic failure. It is an ultimate aim

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for instructors to provoke student engagement since it has been linked with better language learning results, higher motivation, and greater learner independence.

1.7.2 Types of Engagement in Language Learning

In the context of EFL education—particularly for primary school pupils—engagement plays a pivotal role in determining the quality and depth of language acquisition. Engagement refers to the degree of attention, curiosity, interest, and emotional involvement that students exhibit while learning (Fredricks, Blumenfeld, & Paris, 2004). It is a multifaceted construct that encompasses not only the behavioral dimension of participation but also cognitive and emotional investment in learning tasks. Engagement is widely considered a mediating factor between motivation and academic outcomes, as it transforms motivational states into observable, productive learning behavior (Appleton, Christenson, & Furlong, 2008; Skinner & Pitzer, 2012).

Fredricks et al. (2004) propose a three-dimensional model of engagement—behavioral, emotional, and cognitive—which has since been expanded in some studies to include agentic engagement. These categories are not mutually exclusive; rather, they interact dynamically and collectively influence learning success in language classrooms.

1.7.2.1 Behavioral Engagement

Behavioral engagement refers to students' active participation in academic and social activities. It includes attendance, attention during lessons, effort, and persistence in completing tasks (Finn & Zimmer, 2012). In EFL classrooms, behaviorally engaged learners are those who respond to teacher prompts, complete language exercises, participate in speaking tasks, and follow classroom norms.

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Behavioral engagement is particularly critical in early language education, as it lays the groundwork for forming good study habits and consistent exposure to the language. It is often the most observable form of engagement, making it easier for teachers to assess and reinforce (Connell & Wellborn, , 1991)

1.7.2.2 Emotional Engagement

Emotional engagement involves students' affective reactions to school, learning tasks, teachers, and peers. It includes feelings of interest, enjoyment, boredom, anxiety, and a sense of belonging (Pekrun, 2006). Emotionally engaged students are more likely to form positive attitudes toward English, develop confidence, and persist despite language difficulties.

Positive emotional experiences in the classroom contribute to a willingness to communicate (MacIntyre, 2007), which is essential for language development. Moreover, when pupils feel emotionally safe and supported, they are more inclined to take linguistic risks and explore new vocabulary or grammar structures (Dewaele & MacIntyre, 2014).

1.7.2.3 Cognitive Engagement

Cognitive engagement refers to the investment in learning and the use of deep learning strategies, such as critical thinking, problem-solving, and self-regulation (Fredricks et al., 2004). Cognitively engaged learners go beyond rote memorization to make meaningful connections with the content and apply metacognitive strategies to monitor their understanding.

In EFL contexts, this might be reflected in pupils using newly learned vocabulary in their own sentences, asking questions about word meanings, or demonstrating curiosity about cultural elements embedded in language use. Cognitive engagement is strongly linked to

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intrinsic motivation and has been found to predict long-term academic achievement (Pintrich & De Groot, 1990).

1.7.2.4 Agentic Engagement

Agentic engagement, a more recently defined dimension, refers to students' proactive and constructive contributions to the learning process (Reeve & Tseng, 2011). This includes learners expressing preferences, asking questions, offering input into classroom activities, and taking initiative in their learning. Unlike behavioral engagement, which focuses on compliance, agentic engagement emphasizes learners' active shaping of their educational experience.

1.8 Motivation and Engagement in Gamified Learning

In recent years, gamified learning has emerged as a pedagogical approach with considerable promise for enhancing learner motivation and engagement, particularly in primary and secondary educational contexts. Gamification involves the integration of game design elements—such as points, badges, levels, leaderboards, and real-time feedback—into non-game contexts with the aim of increasing user involvement and satisfaction (Deterding et al., 2011). This approach aligns with contemporary educational goals emphasising active participation, learner autonomy, and sustained attention. In learning environments, gamification transforms traditional tasks into interactive experiences, stimulating both extrinsic and engagement which is foundational to effective learning outcomes.

1.8.1 The Function of Gamified Learning in Motivation

Motivation is a crucial determinant of academic performance, influencing learners' effort, persistence, and willingness to engage in educational tasks. According to Self-Determination Theory (SDT), developed by Deci and Ryan (1985), intrinsic motivation

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flourishes when three fundamental psychological needs—autonomy, competence, and relatedness—are fulfilled. Gamified learning environments are especially conducive to supporting these needs. Autonomy is encouraged as learners are often free to make choices, such as selecting tasks or navigating pathways. Competence is reinforced through incremental challenges and immediate feedback, enabling students to observe their progress. Relatedness is supported through collaboration and peer interaction (Deci & Ryan, 2017; Sailer & Homner, 2020).

Empirical studies further confirm the motivational benefits of gamification. For instance, Deterding et al. (2011) highlight that game mechanics such as progress tracking and achievement systems stimulate intrinsic motivation by enhancing learners' sense of accomplishment. Similarly, Hamari et al. (2014) demonstrate that gamification positively impacts learners' commitment and effort through goal orientation and reward-based systems. Kapp (2012) underscores that gamified activities sustain motivation over time, as learners respond positively to consistent reinforcement through points, virtual rewards, and recognition. These elements encourage learners not only to begin a task but to persist through challenges and strive for improvement.

1.8.2 The Role of Gamified Learning in Engagement

Student engagement is a multifaceted construct encompassing behavioural, emotional, and cognitive dimensions (Fredricks et al., 2004). Effective engagement implies that students are not only participating in classroom activities but are emotionally invested and intellectually involved in their learning. Gamified learning environments are structured to enhance engagement by offering interactivity, challenge, instant feedback, and clear goals—all of which align the core components of engaged learning (Zichermann & Cunningham, 2011).

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Research supports the assertion that gamification has a measurable impact on student engagement. For instance, Kapp (2012) explains that learners exposed to gamified content are more likely to immerse themselves in academic tasks due to the interactive nature of the environment. Domínguez et al. (2013) conducted a controlled experiment in higher education settings and found that students in gamified courses exhibited significantly higher levels of participation, task completion, and interaction than those in traditional, non-gamified courses. These findings suggest that gamification not only sustains attention but also fosters a deeper commitment to learning tasks. In this context, gamification serves not merely as a motivational tool but as a structured method for facilitating sustained and meaningful engagement with content..

1.9 Traditional vs. Gamified Learning Methods

In the Algerian primary school context, traditional teaching methods remain the dominant instructional approach, particularly in English as a foreign language classrooms. These methods are typically teacher-centered, emphasizing rote memorization, textbook-based exercises, and direct instruction with limited opportunities for student interaction or autonomy (Harmer, 2007). Instruction in such settings often involves repetition, grammar-translation, and passive reception of content, which may not sufficiently address the developmental and motivational needs of young learners. Pupils are frequently positioned as passive recipients of knowledge, and engagement primarily depends on external discipline rather than intrinsic interest (Brown, 2007). As a result, these conventional practices may restrict active participation and reduce learners' motivation and attentiveness, particularly when dealing with abstract language concepts.

Gamified learning, by contrast, introduces elements of game design into the learning environment to foster motivation, enhance engagement, and support a more interactive and

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participatory learning experience. Deterding et al. (2011) define gamification as using game-like features—such as points, levels, badges, rewards, and time constraints—in non-game contexts to increase user involvement and motivation. In educational settings, gamification has been shown to increase learners' attention, provide immediate feedback, and encourage persistence through goal-setting and progressive achievement (Kapp, 2012). These features align well with the cognitive and emotional needs of young learners, as they introduce challenge, curiosity, and enjoyment into the learning process. Moreover, gamified platforms often promote autonomy and a sense of competence, which are central to sustaining intrinsic motivation as outlined in the self-determination theory (Deci & Ryan, 2000).

In this study, implementing a gamified digital platform, *Learning Land*, served as a pedagogical alternative to the traditional methods previously experienced by the participants. The platform incorporated games involving vocabulary practice, sentence construction, timed challenges, and audio-visual elements to promote repetition and engagement. By comparing the effects of this gamified environment with the outcomes of conventional instruction, the study aimed to determine whether game-based learning could better support motivation and engagement among fourth-level primary pupils who had never been exposed to digital learning tools. This comparison is particularly relevant in under-researched educational contexts like Algeria, where empirical studies on the integration of gamification in primary language classrooms remain scarce.

1.10. Implications of Gamified Learning for Primary Education

At the primary level, where children need interactive and dynamic learning processes, gamified learning is an effective way to ensure continuous interest and attention. Gee (2003) believes that learning through games increases intellectual development as it provokes problem-solving and critical thinking. Prensky (2001) also believes that children, being digital

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natives, learn more effectively with gamified learning materials since it is closer to their natural learning inclination.

Gamification also enables personalized learning by supporting diverse skill levels and learning styles. Werbach and Hunter (2012) highlight that adaptive game mechanics allow students to learn at their own speed, which helps in building competence and confidence. This is particularly helpful in primary education, where foundational skills in literacy and numeracy must be developed in an engaging manner in order to induce retention in the long term.

The incorporation of gamified learning in primary school has been demonstrated to increase engagement and motivation, respectively, by making learning more interactive and fun. By addressing basic psychological needs, gamification increases intrinsic motivation and offers extrinsic rewards to bolster persistence and participation. Gamification also increases engagement because it makes learning activities more goal-oriented and interactive. As has been illustrated by Deci and Ryan (1985), Kapp (2012), and Hamari et al. (2014), gamified learning is a practical pedagogical framework that motivates students more to learn course material. Gamification in elementary school has the potential to provide more effective and enjoyable learning experiences, enabling young learners to cultivate a love for learning.

1.11. Teaching English as a Second /Foreign Language

English has become the dominant global language, utilized by approximately 1.5 billion speakers worldwide, and is considered the second most spoken language after Mandarin Chinese (Crystal, 2003). As a result, English is widely taught as a Foreign Language (TEFL) in both English-speaking and non-English-speaking countries, serving various purposes such as education, business, and cultural exchange (Graddol, 2006). In Algeria, the growing significance of English has led curriculum developers to include it

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alongside French as part of the national education system. Consequently, English language education is now mandatory in secondary schools, universities, and public institutions, including military, economic, and cultural sectors (Slimani, 2016).

Traditionally, English language learning in Algeria has commenced at the middle school level; however, recent educational reforms emphasize the importance of introducing English at the primary school level. Early exposure to foreign languages has been shown to enhance language learning, pronunciation, and overall academic performance, providing young learners with a strong linguistic foundation (Brewster, Ellis, & Girard, 2002). In this context, primary school students, particularly those ages 8 and 9, benefit from interactive and developmentally appropriate pedagogical methods that align with their natural curiosity and learning preferences. Given this, gamified learning is increasingly recognized as a highly effective approach for teaching English at this stage. Gamification, which integrates game-like elements such as points, badges, and interactive tasks into the learning process, can transform English language education into a dynamic and engaging experience. Research has shown that such approaches not only aid in vocabulary acquisition but also significantly boost student motivation and classroom engagement (Kapp, 2012). As such, the present study explores how gamification-based learning websites can be leveraged to enhance English language acquisition among 4th-grade primary school students in Algeria, contributing to both pedagogical practices and the ongoing digitalization of language education.

1.12 The Use of The Audio-Lingual Method in Teaching EFL

The Audio-Lingual Method (ALM) is a behaviorist-based approach to language teaching that emphasizes forming language habits through repetitive drills and structured

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dialogues (Richards & Rodgers, 2014). Rooted in structural linguistics and influenced by B.F. Skinner's theory of operant conditioning, this method promotes learning through mimicry, memorization, and pattern practice, with minimal emphasis on grammatical explanations or translation (Skinner, 1957). The teacher's role is directive, providing consistent modelling and immediate correction of errors to reinforce accurate responses. In the present study, elements of the Audio-Lingual Method were incorporated into the design of the digital gamified platform, particularly in listening and speaking tasks that rely on repetition and controlled practice. The purpose was to combine the structured oral practice of ALM with the motivational benefits of gamified content, thereby aligning traditional methodology with contemporary educational technology

1.13 The Integration of English as a Second/ Foreign Language in Algerian Primary Education

The global expansion of the English language has firmly established it as the dominant medium for international communication across diverse sectors, including commerce, science, technology, and education (Crystal, 2003). In response to these global dynamics, many countries have revised their language education policies to prepare future generations for active participation in the global community. Algeria, historically influenced by French colonialism, has traditionally prioritized French as the primary foreign language in its education system (Benrabah, 2007). However, in recent years, Algeria has initiated a gradual but significant policy shift toward English, aligning itself with international trends and national developmental goals.

A pivotal step in this transition occurred in 2022, when the Algerian Ministry of National Education formally introduced English as the second foreign language in the primary school curriculum, beginning in the third grade (Ministère de l'Éducation Nationale, 2022).

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This policy reform was also officially endorsed by the President, who underscored both the educational and political significance of early English instruction. The initiative aims to introduce pupils to English at a formative stage in their cognitive and linguistic development, leveraging the documented advantages of early language acquisition, such as improved pronunciation, fluency, and cognitive flexibility (Brewster, Ellis, & Girard, 2002; Nikolov & Mihaljević Djigunović, 2006).

It is worth noting that English was not entirely absent from Algerian primary education prior to 2022. During the 1990s, a pilot program allowed selected schools to offer English in place of French, giving parents the choice to enroll their children in English language classes. Although this initiative demonstrated early interest in English language learning, it was discontinued due to systemic challenges, including a lack of qualified teachers and inadequate teaching resources (Boulahia, 2020).

The 2022 reform represents a more comprehensive and structured approach to language education. It is supported by a national strategy that includes the development of age-appropriate English textbooks and the implementation of teacher training programs tailored to the needs of primary education. To ensure the effective delivery of the new curriculum, President Tebboune mandated the establishment of a specialized training track within higher education institutions to prepare future primary-level English teachers. This program, set to launch in the 2023–2024 academic year, emphasizes recruiting highly qualified candidates, including those holding Magister and Doctorate degrees, to ensure instructional quality and sustainability.

The curriculum for fourth-year primary students is organized into eight learning sequences, each divided into two parts, with three instructional hours allocated per part over a

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two-week period. This structure reflects an effort to create a consistent and pedagogically sound framework for English language acquisition at an early educational stage.

Beyond addressing linguistic competencies, the reform aligns with Algeria's broader educational modernization agenda, which emphasizes digital literacy, internationalization, and pedagogical innovation. By embedding English instruction within the primary education system, Algeria not only promotes multilingualism and intercultural competence but also signals a strategic shift from its francophone legacy toward greater global integration. The policy thus reflects both national aspirations for socio-economic development and a recognition of English as a key driver of academic and professional mobility in the 21st century (Graddol, 2006).

1.14 Review of Previous Studies

A growing body of research has investigated the potential of gamified learning to enhance motivation and engagement among primary school pupils. Gamification, broadly defined as the application of game elements in non-game contexts (Deterding et al., 2011), has been shown to positively influence learners' attitudes, classroom behaviors, and academic performance. Domínguez et al. (2013), for instance, integrated gamified features into a university-level learning management system and reported improved student participation and academic outcomes, although they noted that the benefits were not uniform across all learners. Muntean (2011) similarly emphasized the motivational impact of gamification, arguing that goal-oriented and interactive tasks help sustain learners' attention and perseverance, especially among younger audiences.

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Studies focusing specifically on primary education have highlighted similar trends. Su and Cheng (2015) examined the effects of gamified mathematics applications on children aged 8 to 10, finding that such tools significantly enhanced learners' motivation and cognitive engagement. Likewise, Cheong et al. (2013) observed increased behavioral engagement among primary pupils exposed to point-based reward systems within digital learning environments. A broader meta-analysis by Hamari et al. (2014) confirmed that gamification generally leads to higher engagement levels, although the success of implementation varies depending on the type and context of the game elements used.

In the context of early education, Alsawaier (2018) found that gamified instruction in primary schools resulted in increased attention spans, greater enthusiasm for learning tasks, and more active participation. These findings align with developmental psychology insights suggesting that children at the primary level are highly responsive to visual stimuli, immediate feedback, and play-based learning formats (Slavin, 2012). However, some studies have also identified limitations. Hanus and Fox (2015) argued that certain gamified features—particularly those relying heavily on extrinsic rewards like points and badges—may diminish learners' intrinsic motivation over time. This concern echoes earlier findings by Deci, Koestner, and Ryan (1999), who cautioned that excessive use of external rewards can undermine learners' sense of autonomy and reduce internal interest in learning tasks.

Sailer et al. (2017) further elaborated on this distinction by suggesting that different types of game elements have varying effects on motivation. Feedback and progress indicators, for example, tend to support long-term learning goals, while competitive elements such as leaderboards may foster short-term excitement but do not always sustain engagement over time.

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In reviewing prior research, the investigator recognized a significant gap concerning the integration of gamified learning tools in traditional classroom setting, particularly within the context of young learners accustomed to conventional methods, the pervasive influence of technology in modern life, coupled with the increasing demands of 21st century, education has reshaped learners' expectations and engagement levels. Numerous studies have highlighted that traditional teaching approaches often fail to sustain learners' attention and motivation over time, resulting in disengagement and decreased academic performance. The creation of the website emerged as a strategic response to this gap, aiming to enhance learners' motivation and engagement through interactive and gamified activities. By blending educational content with game-based elements, the researcher sought to offer a dynamic learning environment that could reinvigorate pupils' interest and participation.

1.15 Conclusion

The aim of this chapter is to provide a detailed insight into gamified learning and how it adds to enhancing motivation and engagement in learning, particularly in the field of teaching English as a foreign language to primary school children. The chapter consists of two general sections. The first section elaborates on the concept of gamification in learning, such as its definition, key elements, psychological foundations, and its impact on student motivation and engagement. It explains how gamified learning provides a more interactive and dynamic learning environment, making language learning more enjoyable and effective for young learners. The second part is concerned with the introduction of English as a foreign language in Algerian primary schools, after the background of English language teaching, its position in the national curriculum, and the pedagogical concerns involved in teaching young learners. Furthermore, it highlights the potential of digital and gamified solutions to enhance early language acquisition and classroom motivation.

Chapter Two

Research Design and Methodology

2.1 Introduction

This chapter outlines the research methodology used in this study, with the primary goal of giving a complete description of the procedures used, including aspects such as research design, methodology, target population, sampling techniques, and the data collection and analysis methods utilized. In addition, it addresses the validity and reliability concerns applicable to the study.

2.2 Research Aims and Motivation

This study is aimed at investigating the impact of engagement and motivation on the learning process of primary school pupils, in this case, English language acquisition in Algerian primary schools. The research will determine how teaching methods and tools, including a specially prepared website, can enhance students' engagement and motivation towards learning English

2.3 Research Design

Selltiz et al. (1962) define research design as the structured organization of conditions under which data is collected and analyzed, aligning with the goals of the research while maintaining procedural efficiency. A well-constructed research design plays a crucial role in ensuring the reliability, validity, and ethical soundness of a study. Regardless of the research type, it offers a systematic plan for collecting, analyzing, and interpreting data in a way that supports the research objectives.

Kothari (2004) highlights that the strength of a research design lies in its ability to provide “advance planning of the methods to be employed for data collection and analysis, considering the research objectives and the availability of resources such as staff, time, and finances” (p. 32). A clearly structured design not only improves the execution of the study but

also allows researchers to anticipate limitations and subject their plans to peer feedback and critical review.

For the purposes of this research, a Quasi-experiment mixed-methods design was employed. This approach combined both quantitative and qualitative methods to investigate the impact of the *Learning Land* gamified website on the motivation and engagement of 4th-level primary school students in learning English as a foreign language. The quantitative component involved administering a post-test at the end of each session to measure pupil's motivation and engagement levels after using the platform. This design followed a one-group post-test format, without a pre-test or control group focusing on detecting patterns over time within the same group (Bell, 2009; Creswell, 2014).

The qualitative component consisted of systematic classroom observation during all sessions to capture baseline behaviors, classroom dynamics, and initial responses before and after introducing the gamified learning tool.

By combining both approaches, the study was able to provide a comprehensive understanding of how gamified digital learning tools can influence both the measurable outcomes and observable behaviors of young learners (Bell, 2005).

2.4 Setting and sample population

Research setting is that social, physical, or experimental setting where a research is undertaken, while sampling is research method and surveying process, it entails selecting a representative sample of individuals or objects from a larger population to gather data

and make inferences or make inferences about the entire population (Kothari, 2004).

This study was conducted in École Primaire Younès Zaoui, a primary school in a village (Sidi Ben Adda), within the Aïn Témouchent Province of northwest Algeria.

The study was initiated on April 9, 2025, during the third trimester of the 2024–2025 academic year, and consisted of eight instructional sessions.

The sample for this study consisted of 39 primary school pupils from Zaoui Younes Primary School in Sidi Ben Adda. The participants were selected using a convenience sampling method, as they were part of a class that was introduced to the *Learning Land* platform as their first experience with gamified learning tools. The pupils, aged between 9 and 10 years, were all in the 4th grade and had no prior exposure to gamified educational methods, having only been taught through traditional instructional techniques until the commencement of this study.

The sample consisted of 39 fourth-year primary school pupils from Zaoui Younes Primary School in Sidi Ben Adda, including 20 boys and 19 girls. The pupils had been introduced to the English language during the previous academic year, which provided them with a basic foundation in English, including simple vocabulary and everyday expressions."

2.5 Research Approache

Research methodology describes the approaches and strategies applied throughout a study—from the development of hypotheses to the specific techniques used for collecting, analyzing, and interpreting data (Creswell, 2015). In a similar perspective, Grover (2015) defines a research approach as a strategy of inquiry and identifies three primary types: qualitative, quantitative, and mixed-methods. The selection of a research approach is guided

by the nature of the research questions, the researcher's experience, and the intended audience.

2.5.1 Qualitative vs. Quantitative Approach

The qualitative approach centers on interpreting subjective meaning. It explores individual behaviors, attitudes, and opinions, relying heavily on the researcher's interpretation (Kothari, 2004). According to Creswell (2007), qualitative research is a process of exploring and understanding the meanings individuals or groups attribute to a human or social problem. It involves flexible data collection in natural settings and uses inductive reasoning to develop themes and insights from the data.

In contrast, the quantitative approach involves systematic data collection and numerical analysis to test hypotheses and examine relationships between variables. It focuses on objectivity, employing structured instruments such as surveys or usage tracking tools to collect measurable data (Kothari, 2004; Creswell, 2008). Quantitative research is characterized by its statistical rigor and structured format, allowing for clear, replicable conclusions.

2.5.2 Mixed-Methods Approach

A mixed methods approach combines qualitative and quantitative methodologies within a single study. It reflects underlying philosophical assumptions and involves more than just gathering and analyzing data; it requires the thoughtful integration of both approaches to enrich and reinforce the research (Creswell & Plano Clark, 2007). The selection of a research approach is generally guided by the study's objectives, the researcher's expertise and the expectations of the intended audience (Haradhan, 2017).

Research Design and Methodology

This study adopted a mixed-methods approach, integrating both qualitative and quantitative techniques to evaluate the impact of the *Learning Land* gamified platform on pupil motivation and engagement. This approach brings together the numerical precision of quantitative methods with the contextual richness of qualitative observations, offering a comprehensive view of the research problem (Creswell & Plano Clark, 2007).

Quantitatively, the study assessed variables such as task completion rates, time spent on activities, and frequency of interaction. These metrics provided objective evidence of how pupils responded to the platform. Qualitatively, classroom observations were conducted to capture real-time behaviors, emotional engagement, and interpersonal interaction, which offered insights that could not be measured statistically.

The choice of this methodology was intentional—it aligned with the research objectives and enabled a deeper exploration of both behavioral patterns and statistical trends. According to Haradhan (2017), mixed-methods research enhances validity by allowing researchers to view the same phenomenon through multiple lenses. As Creswell (2007) also notes, this integrated approach allows for concurrent data collection, strengthening the overall interpretation and richness of the findings.

2.6 Variable

In experimental research, variables are attributes or factors that are deliberately manipulated or measured to test the hypothesis. These variables are typically categorized into three main types: independent variables, dependent variables, and extraneous variables. The independent variable is the factor that the researcher manipulates or controls in order to observe its effect on other variables, while the dependent variable is the outcome being measured, influenced by the independent variable. Extraneous variables are

those that are not of primary interest in the study but can still affect the dependent variable, potentially confounding the results (Kothari, 2004; Zubair, 2022).

In this study, which aims to evaluate the effectiveness of a gamified learning platform for teaching English as a foreign language to Algerian primary school students, the independent variable is the use of gamified learning tools via the *Learning Land* website, which serves as the experimental treatment. The dependent variables are the students' motivation, engagement, and learning performance in English, which are measured to assess the impact of the gamified learning intervention. By focusing on these key variables, this study explores how gamified learning affects students' academic performance and engagement in the primary school setting .

2.7.Data collection Instruments

Research tool are crucial building blocks in monitoring and evaluation (M&E) since they facilitate various aspects of data collection, analysis, visualization, and reporting. According to Frankel (2005) "Instrument is the device the researcher uses to collect the data"(p.112). Selection of the research tools should be supported by particular goals, context, and data requirements of the evaluation. In research, there are a number of experiment options, each involves various tools to facilitate the research that would be necessary to answer questions.

2.7.1 Observation

Observation is a fundamental research instrument used to systematically collect and document real-time data within a specific setting (Dwijja, 2002). It is particularly valuable in educational research as it allows for the direct examination of current events without relying on participants' self-reporting, which may be influenced by memory limitations or personal

bias. According to Kothari (2004), observation is advantageous because it can minimize subjective bias when conducted properly and does not require active cooperation from participants.

Kothari (2004) distinguishes between two main types of observation: non-participant and participant. In non-participant observation, the researcher remains external to the activity, merely observing without taking part, while in participant observation, the researcher actively engages in the setting under investigation.

In the present study, both types of observation were employed to compare pupils' motivation and engagement under two different instructional approaches. Initially, non-participant observation was used to assess how 4th-year primary school pupils at Zaoui Younes Primary School in Sidi Ben Adda responded to traditional teaching methods. The goal was to objectively document the level of attention, enthusiasm, and participation shown during conventional English lessons.

Following this, the researcher adopted a participant observer role during the implementation of the *Learning Land* gamified website. This enabled the researcher to closely interact with the learners and gain deeper insight into their levels of engagement and motivation as they navigated the gamified learning activities.

This dual observation strategy provided a comprehensive basis for comparing the motivational and engagement outcomes of traditional versus gamified learning approaches, thereby supporting the study's aim to evaluate the educational effectiveness of the gamified platform.

2.7.2 Quasi-Experimental Design

Research Design and Methodology

Experiments are extensively employed in the social sciences because of their strong reliability and efficiency in collecting , verifying data, and testing theories . their primary purpose is to explore casual links, specifically assessing wether modifications in an independent variable(Taheri et al., 2015). Unlike surveys , experiments offer researchers enhanced control over variables and conditions , typically conducted in controlled environments such as laboratories. According to Boehlert (2000),experiments also enable precise comparisons. Reducing potential biases and inaccuracies. In this context, the experimental subject,regarded as the sampling unit, yields data derived from that applied experimental manipulations.

A quasi-experimental design was employed to explore the relationship between the use of gamified learning tools and pupils' motivation and engagement. Specifically, a one-group post-test-only design was utilized, wherein data on motivation and engagement were collected following each intervention session involving the Learning Land platform. Unlike a true experimental design, no pre-test or control group was included due to practical constraints. Given that the pupils had already been introduced to the targeted lessons through traditional instructional methods prior to the intervention, the researcher deemed a pretest unnecessary. Instead, the effectiveness of the gamified learning experience was evaluated by comparing pupils' post-test performance with their academic results from the second-semester examinations. Notably, the post-test scores were automatically generated and recorded within the Learning Land platform upon the completion of all games by the pupils. Although the absence of a pretest limits causal interpretations, the quasi-experimental approach still provided valuable insights into the impact of gamified learning on pupil engagement and motivation (Bell, 2009; Creswell, 2014).

2.7.3 Quasi-Experimental Procedures

The study was organized into three main stages: preparation, implementation, and data processing. Each phase was carefully structured to maintain the research's validity and ensure systematic execution.

2.7.3.1 Preparation Stage:

- Conducted a thorough literature review on gamified learning, student motivation and engagement, and English language instruction at the primary level.
- Developed a comprehensive research proposal detailing research questions, hypotheses, methodology, and the quasi-experimental design.
- Submitted the proposal for academic review to evaluate its feasibility and theoretical grounding. Upon approval, the study advanced to the implementation phase.
- Created the gamified educational platform “Learning Land” and prepared supporting research tools, such as observation checklists and post-test rubrics, to measure pupil interaction and engagement.

2.7.3.2 Implementation Stage:

- Carried out the quasi-experimental study following the structured research plan.
- Conducted non-participant observation during the first session to establish a baseline of pupils' natural behavior and classroom dynamics before the intervention.
- Introduced the gamified platform starting from the second session, working with the same group of 4th-level primary school pupils during English language classes.
- Administered a post-test at the end of each session to quantitatively assess pupils' motivation and engagement after using the gamified activities.

- Continued observing and recording behavioral patterns throughout the intervention period to complement the quantitative data.

2.7.3.3 Data Processing Stage:

- Checked the accuracy and completeness of the collected posttest and observational data to ensure reliability.
- Analyzed the data using recognized analytical frameworks to determine the effects of gamified learning on pupil motivation and engagement.
- Interpreted the results in relation to key theories and prior research identified during the literature review.
- Developed recommendations for future research, particularly concerning the integration of gamified tools in Algerian primary education, with a focus on language learning.
- Compiled the final research report, integrating all findings, analyses, and recommendations into a cohesive document.

2.7.3.4 Overview of The Learning Land Website

The development of the “Learning Land” website was motivated by the researcher’s observation of low motivation and limited engagement among pupils during traditional English language instruction. Drawing on pedagogical approaches that highlight the effectiveness of gamified and interactive learning, the platform was conceived as an alternative instructional tool specifically tailored to the needs of young learners. In collaboration with a programmer, the researcher designed and developed the website to combine educational games with audio-lingual components, fostering greater

participation, promoting collaboration, and supporting language acquisition within a dynamic, learner-centered environment.



Figure 2.1 Homepage Interface of the *Learning Land*

The website is organized into two primary sections: Games and Songs. Both sections are carefully designed to align with and reinforce the content covered in the pupils' English textbooks. The games offer an engaging, interactive means of practicing language skills, while the songs provide additional reinforcement through music, catering to diverse learning styles and introducing an enjoyable, multisensory dimension to language learning.

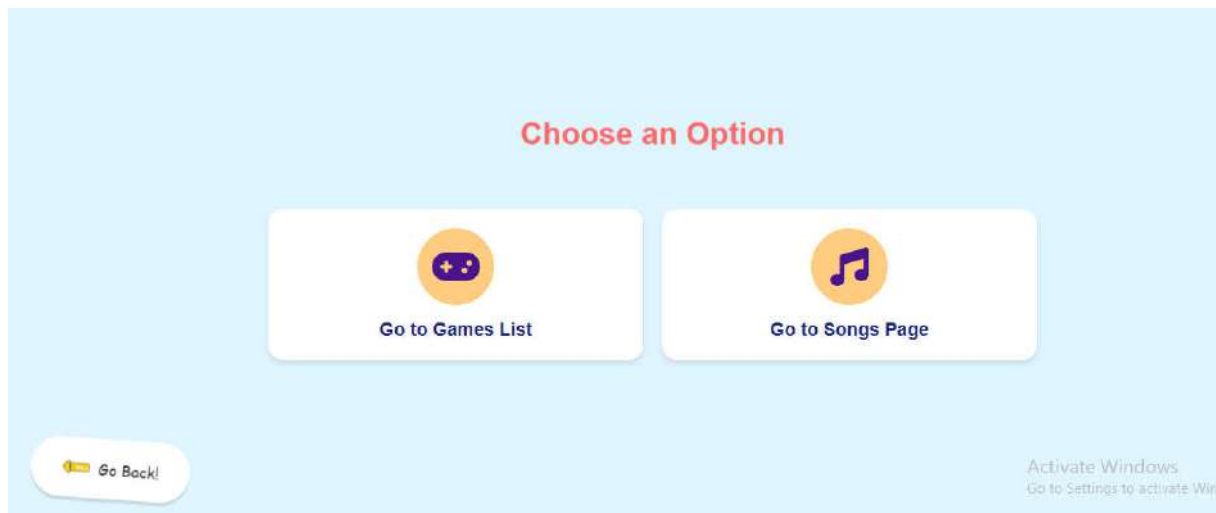


Figure 2.2 Songs and Games

2.7.3.4. a) Games on Learning Land

The Games section of the platform includes a variety of educational activities that align directly with the lessons from the textbook. These games are designed to turn traditional lesson content into engaging and interactive experiences.

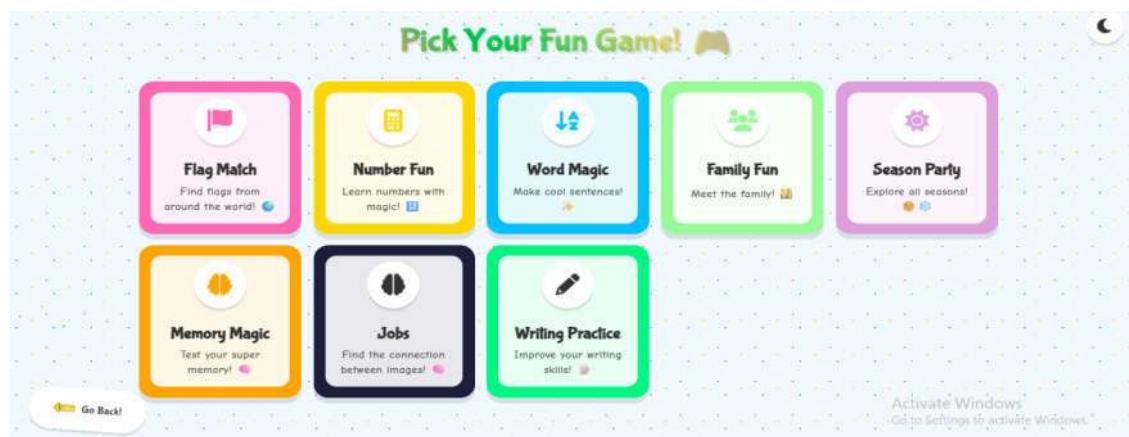


Figure 2.3 Pick Your Fun Game

- **Card Game with Numbers (Limited Time):**

This game helps students quickly memorise how numbers are written by engaging them in time-limited number recognition and simple arithmetic tasks.

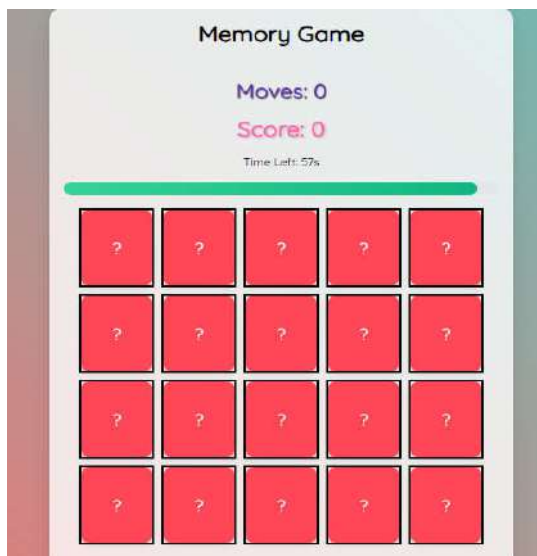


Figure 2.4 Nember Fun

- **Flags Game:**

Aligned with geography lessons, this game challenges pupils to match flags with their corresponding countries. By reinforcing visual recognition and verbal recall, this game engages both listening and speaking skills, particularly when pupils are asked to name the countries aloud after identifying the flags.



Figure 2.5 Flag Match

- **Jobs and Occupations Game:**

This game reinforces vocabulary related to various professions and occupations. Pupils are shown clues or images related to different jobs and must match them with the

correct names. The game involves listening to the prompts and practicing the pronunciation of job titles, encouraging repetition.

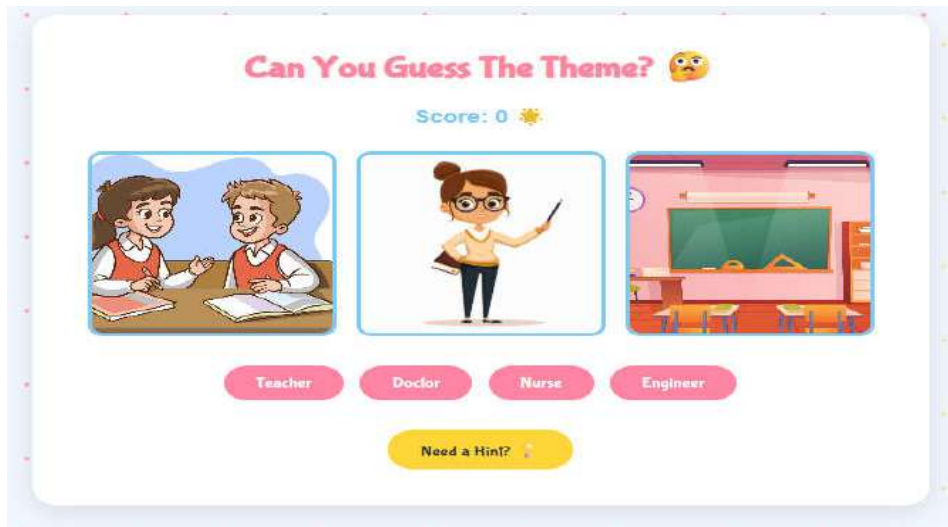


Figure 2.6 Jobs

- **Reordering**

Words

Game:

A language-focused game where pupils practice sentence structure and grammar by rearranging scrambled words. The Audio-Lingual Method is applied here by encouraging pupils to read the sentences aloud after they form them, reinforcing correct grammar and pronunciation.

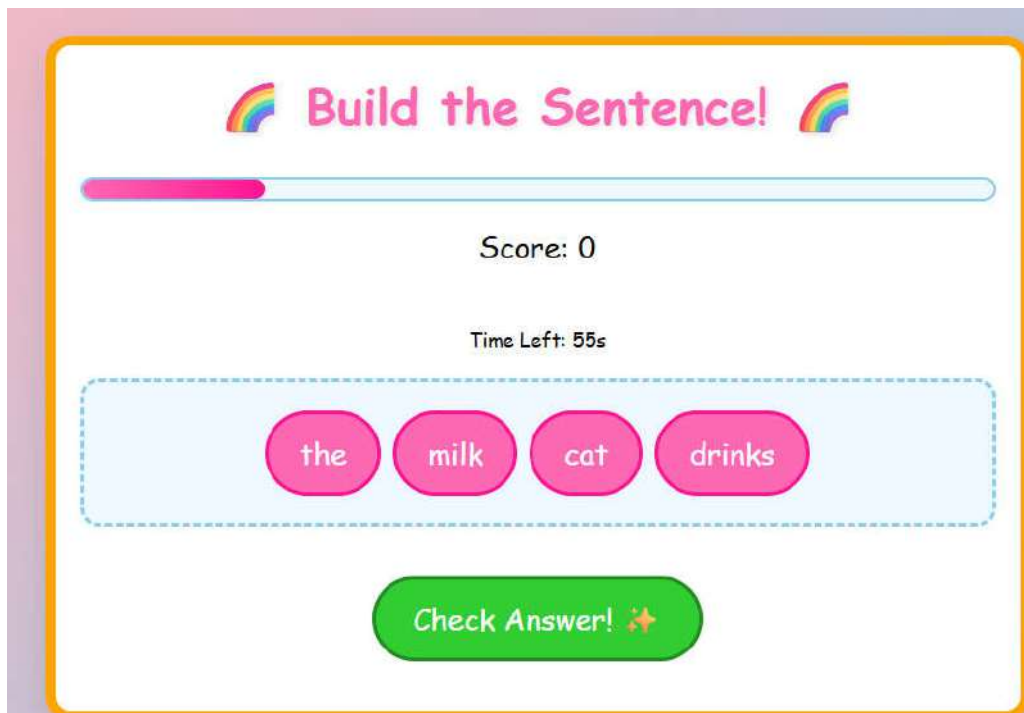


Figure 2.7
Word Magic

- **Memory**

Magic:

This game focuses on improving students' memory and concentration. Pupils must match pairs of images or words, which is an excellent exercise for reinforcing vocabulary, recall, and verbal communication.

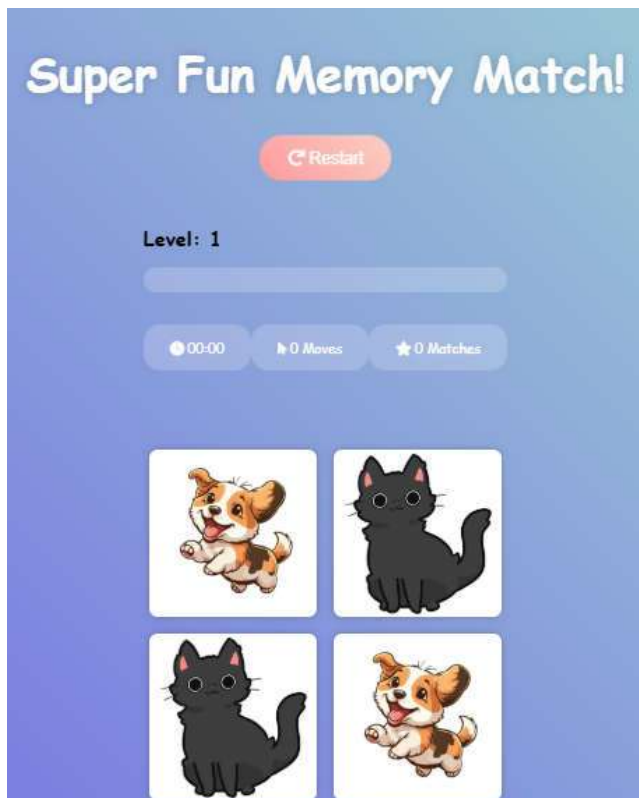


Figure 2.8 Memory Magic

- **Seasons :**

. In this game, pupils are shown images representing the four seasons. For each image, they must choose the correct word from a set of options that matches the scene.

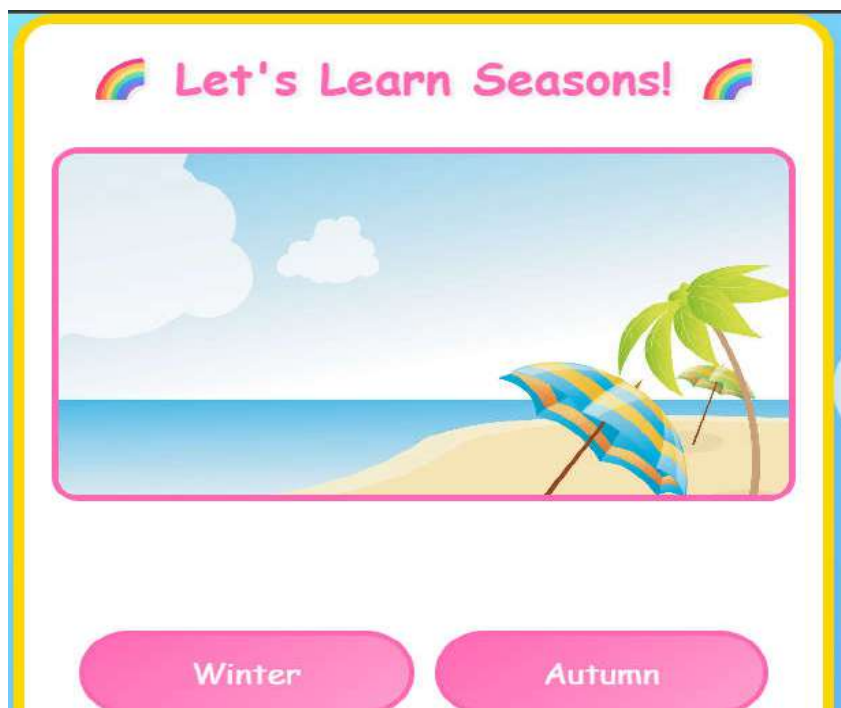


Figure 2.9 Season Party

- **Family**

fun:

This game combines vocabulary related to family members with practice of the present continuous tense. Pupils are presented with pictures showing different family members performing actions. They must choose the correct sentence that matches each image, such as “The mother is cooking” or “The brother is playing.” This activity helps learners reinforce both the names of family members and the correct use of the present continuous tense in context.



Figure 2.10 Family fun

- **Writing practice**

Games to practice writing at Learning Land guide students in constructing vocabulary and sentences through interactive and engaging activities relating to topics like seasons and members of the family. Students build sentences using word clues and images with instant feedback.



Figure 2.11 Writing practice

2.7.3.4.b) Songs Section

The Songs section of the platform complements the games by offering additional learning through music. Educational songs are tied to the topics covered in the games and the textbook, making them an effective tool for reinforcing key concepts in a fun and engaging way.

- **Songs for Numbers and Arithmetic:** After completing number-related games, pupils listen to songs about numbers, adding an auditory dimension to their learning.
- **Songs about Family Members:** Pupils can sing along to songs that reinforce the vocabulary and concepts they learned in the both games, strengthening their understanding through repetition and melody.



Figure 2.12 ABC song

2.7.3.4.c) Website Structure and Learning Flow

The learning process is structured to move from direct instruction to interactive practice. Each game corresponds to specific lessons from the textbook, ensuring that pupils are engaging with the content in a meaningful and interactive way. The use of the Audio-Lingual Method during the games provides additional practice with listening, speaking, and repetition.

- **Pre-Lesson:** the researcher introduces the lesson Relied on visual aids and oral practice using the Audio-Lingual Method.
- **Game Interaction:** Pupils engage with the relevant game on **Learning Land**, applying the lesson's content through interactive play.
- **Follow-up with Songs:** Pupils listen to or sing along with songs related to the lesson, further reinforcing the key concepts through music.
- **Repetition and Practice:** Pupils practice language skills, such as speaking and listening, using the Audio-Lingual Method to internalize the material.

Progress Tracking: The platform provides real-time feedback and rewards, helping pupils track their progress and stay motivated.

2.7.3.4.d) Using the Audio-Lingual Method in Teaching

To improve student comprehension and retention of the material, the Audio-Lingual Method (ALM) was integrated into the teaching strategy. ALM emphasizes repetition, listening, and speaking practice, which is particularly effective for language learning and ensuring that students internalize vocabulary, sentence structures, and grammar patterns.

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- **Listening Activities:** As pupils engaged with the games, they were often asked to listen carefully to instructions, new vocabulary, or song lyrics. This auditory component helped reinforce the material by activating the students' listening skills.
- **Repetition:** The Audio-Lingual Method emphasizes repetitive drills to solidify knowledge. When students completed activities such as the *Reordering Words Game*, they were prompted to repeat sentences aloud after seeing the correct structure, reinforcing grammar and vocabulary through repetition.
- **Speaking Practice:** In addition to the games, pupils were encouraged to speak their answers or describe their activities aloud. For example, after identifying flags in the *Flags Game*, they were asked to verbally recall the names of the countries associated with the flags, using the correct vocabulary.
- **Drills and Corrections:** ALM also incorporates corrective feedback to help students improve their language skills. The teacher provided prompt corrections when pupils made mistakes, ensuring that they understood the correct usage and pronunciation of the material.

2.7.3.4.e) Benefits of Using the Audio-Lingual Method with Learning Land

By integrating the Audio-Lingual Method with the **Learning Land** platform, pupils benefit from a multi-sensory approach to learning that combines visual, auditory, and kinesthetic learning styles. The repetition and corrective feedback inherent in ALM enhance language acquisition and ensure that students understand the material at a deeper level.

The use of games and songs allows pupils to practice language skills in an enjoyable, low-pressure environment, while the teacher can provide support and correct errors during gameplay. This method encourages active participation and fosters a sense of

achievement as students progress through the games and songs, earning rewards and recognition for their efforts.

2.7.3.4.5. Teaching with the Learning Land Website

The objective of this study was to assess the effectiveness of the Learning Land platform in enhancing student engagement, motivation, and learning outcomes among 4th-level primary school pupils. The methodology employed a blended learning approach, combining traditional classroom teaching with the use of an interactive educational platform. This section outlines the teaching methods and strategies implemented during the study.

- **Pre-Session Preparation**

Before initiating any lessons, pupils were introduced to the **Learning Land** platform. This initial orientation focused on familiarizing students with the website's structure, games, and functionalities. The pupils were shown how to navigate the two primary sections of the platform: **Songs** and **Games**. They were also instructed on how to track their progress through visual indicators such as badges, points, and progress bars. This initial session helped set clear expectations for the activities and learning objectives of the platform.

- **Goal**

Setting:

For each lesson, specific learning goals were established. For instance, when focusing on geography, the goal might be: "By the end of the session, you will be able to identify at least five flags of different countries," or for language, "You will practice sentence structure and vocabulary related to family members."

- **. Introduction to the Lesson Topic**

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The lesson began with a brief introduction to the topic that would be explored through the games. For example, when focusing on seasonal changes, the teacher provided a short overview of the four seasons and their characteristics. This was followed by prompting questions to activate prior knowledge, such as, "What is your favorite season, and why?"

- **Interactive Presentation:**

This introductory segment was designed to provide context and establish connections between the subject matter and the activities pupils would engage with on the platform. Pupils were encouraged to share their thoughts or experiences related to the topic before moving on to the interactive part of the lesson.

- **Guided Practice on the Platform**

After the introduction, pupils were guided to the relevant games within the Learning Land platform. Each game was chosen to align with the learning objectives of the lesson.

For example:

- ✓ Card Games with Numbers This game was used to reinforce number recognition and arithmetic skills, with a time limit adding an element of excitement.
- ✓ Flags Game: To support geographical learning, pupils were directed to the Flags Game, where they identified flags from different countries and matched them with their names.

- **Monitoring**

Progress

During gameplay, the teacher monitored students' progress, providing assistance as needed. Pupils were encouraged to ask questions if they encountered challenges and were offered guidance to help them succeed in the games.

- **. Incorporating Songs for Reinforcement**

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The Songs section of the platform was integrated into the lessons to reinforce key concepts in an engaging way. Educational songs, such as those teaching the days of the week or basic vocabulary, were played to provide an additional layer of reinforcement. For example, after completing the Flags Game, pupils would sing a song related to world geography or seasons, which helped them retain the information in a fun and memorable format.

- **Group Participation:**

Pupils were encouraged to sing along, either individually or in groups, which helped strengthen their connection to the material while promoting active learning.

- **Feedback**

To assess learning outcomes, the Learning Land platform provided real-time feedback through scores, badges, and progress indicators. Pupils received immediate feedback after completing each game, allowing them to understand areas where they excelled or needed improvement.

- **Instant Feedback:**

For instance, when completing a quiz or activity, pupils were informed of their score and given hints or corrections if they made mistakes. This provided valuable insight into their learning progress, encouraging them to try again and improve.

- **Reflection**

At the end of each lesson, the teacher held a brief reflection session where pupils discussed what they had learned, what was challenging, and what they enjoyed. This helped consolidate learning and gave pupils the opportunity to voice their thoughts on the effectiveness of the platform.

- **. Motivation and Engagement Strategies**

To maintain motivation throughout the study, several strategies were employed:

- ✓ **Rewards System:** Pupils earned points, badges, and virtual rewards for successfully completing games and activities. These rewards were tracked on the platform and provided a visual representation of progress.
- ✓ **Leaderboards:** A classroom leaderboard displayed the top performers, encouraging friendly competition among pupils. This element helped foster a positive, motivating learning environment.

2.8 The Steps Adopted in Gamified Teaching Process

The researcher developed a teaching plan that focused on involving the motivation and active engagement of the students of a primary school's 4th level in the learning of English as a foreign language using a gamified learning website. The prime objective of the plan was to develop a fun and enjoyable learning process that facilitates the learning of primary language skills, including words and classroom communication.

Every session was centered on the systematic utilization of the gamified platform, encompassing elements of interactive exercises, points, and badges. These elements were implemented to keep the learners engaged, promote active participation, and reinforce new linguistic content. The researcher meticulously organized the structure of each session to achieve a balance of learning and fun so that the students stayed focused and motivated through the sessions.

Every session was preceded by a quick warm-up to trigger prior knowledge, then a use of the gamified website to present and practice English content. Pupils worked in groups on

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the website so as to do exercises in collaboration while they progressed through the activities at a comfortable and manageable pace. There were four different groups in the class, and they had their respective PCs, which the researcher had arranged. Every session always ended in a short reflection and feedback session where pupils could look at the progress they had made and think about the content they had covered.

2.9 Data Analysis Procedures

Based on the context of the researcher study, a mixed method was used in analysis of the data gathered. Involving the qualitative method, the observation conducted was analyzed. Meanwhile, a quantitative method was used in the descriptive and inferential of the numerical data. Data analysis in the research follows the Miles Huberman (1984) model.

2.9.1 Data Reduction

Throughout qualitative data collection, the researchers use numerous techniques repeatedly in a bid to collect copious and thick data, according to Miles Huberman (1984). Nonetheless, data collected in the field tend to be raw, not organized, and are always complicated. It is therefore necessary for the researchers to dismantle the data by condensing it, including summarizing, recognizing themes, developing categories, and recognizing orderly or patterned relations in order to infer meaning from the data. Data reduction refers to qualitative analysis where the elimination of data irrelevancies, refinement, concentration, and data organization come in, to enable conclusions to be drawn. The process ensures that only crucial and germane data are utilized in analyses and interpretation.

2.9.2. Data

Presentation

Data presentation follows data reduction in qualitative research work. Presentation of

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data refers to the method of depicting data in the forms of summaries, charts, and diagrams which show the differences in categories as well as the patterns. Data presentation is intended to make the information easily readable by the readers or the target audience. Readers are able to easily understand the concepts, differences, categories, and relations of different patterns or categories when the data is presented in a systematic order and in a graph format. This makes the findings of the research more understandable and readable (Miles, 1984).

2.9.3. Conclusion Drawing and Verification

The third step that incorporates interactivity is verification and decision-making. It is a critical step since it is about conclusions being made as a result of analyzed data and being verified using verification processes. Conclusions in qualitative research are considered preliminary until they are proven using valid and consistent data. It is flexible to the point where it can change in the presence of new emerging evidence or insight when analyzing the data. It is the outcome of the research problem or questions adequately. They not only need to come up with a solution to the problem presented but also new findings or insights to contribute to the study of science. These new findings may include numerous different types of contributions, ranging from the better description of a confusing object or phenomenon, formulation of new hypotheses, or formulation of a new theory using the research outcomes. Verification and decision-making are processes that ensure the findings are adequately established and contribute meaningfully to knowledge development in the field of research.

2.10 Validity and Reliability

According to Creswell (2012), validity and reliability are closely related yet distinct concepts. They often overlap but can also diverge, depending on the context of the study. Validity refers to how well an instrument measures what it is intended to measure, while

reliability focuses on the consistency and stability of those measurements. Reliable data is a prerequisite for achieving valid results—without consistency, the accuracy of the findings is undermined.

2.10.1 Validity

Fraenkel and Wallen (2005) describe a valid instrument as one that accurately measures its intended variables. They emphasize that establishing validity is a crucial step in the development or selection of research instruments. Isnawati (2011) categorizes validity into four types: content validity, face validity, construct validity, and criterion-related validity. For this study, particular focus was placed on content validity and face validity in validating the tools used to observe student interaction and engagement during the use of the gamified learning platform.

- **Content Validity**

Content validity ensures that the content of an instrument accurately reflects the knowledge or skills it aims to measure. This was particularly important in this research, which involved assessing early language acquisition skills such as vocabulary development and classroom communication. Observation checklists and performance indicators were developed based on standard learning outcomes and curriculum guidelines. The researcher prepared detailed observation criteria for both initial and final stages of the intervention to ensure comprehensive coverage of the learning objectives.

- **Face Validity**

Face validity, as defined by Ary (2010), refers to whether the instrument appears, on the surface, to measure what it is intended to. In this study, face validity was reinforced

through expert consultation. Feedback from supervisors and academic professionals familiar with classroom observation and language learning tools was used to ensure that the criteria used for evaluating student engagement and language use were appropriate, understandable, and relevant.

2.10.2 Reliability

Reliability involves the degree to which a research instrument yields consistent results over time and under similar conditions (Middleton, 2019). In this study, efforts were made to ensure that observations were conducted consistently and without bias. **Interrater reliability** was taken into account by having multiple observations reviewed using the same criteria to confirm consistency in how student behaviors and language use were recorded. Additionally, the researcher avoided incorporating any subjective factors—such as parental or teacher opinions—that could affect the objectivity of the data.

2.11 Ethical Considerations

In the context of research, ethics refers to the principles and standards that guide decisions related to data collection, analysis, and the dissemination of findings (Gedutis et al., 2022). These ethical foundations offer a framework for conducting research responsibly, ensuring that all procedures align with accepted academic and moral standards.

2.12 Permission to Conduct the Study

Before initiating the research, formal permission was requested and granted by both the head of the primary school and the English language teacher involved in the study. The researcher provided a clear explanation of the study's purpose, objectives, and methodology,

particularly emphasizing that the research centered on using a gamified educational website to support English language learning among 4th-level students.

Efforts were made to ensure that the study would not interfere with the school's routine or disrupt the students' regular learning activities. Additionally, the researcher engaged with the parents of participating students, explaining the goals and process of the study and assuring them that the research would be conducted ethically. Key concerns such as privacy, voluntary participation, and student well-being were clearly addressed during this stage.

2.13 Principles of Research Ethics

Throughout the data collection phase, the researcher adhered strictly to the core principles of research ethics, including beneficence and respect for human dignity (Polit & Hungler, 1999). The study was designed to ensure that no physical or emotional harm would come to the participants. The gamified website was implemented in a controlled and supportive environment, monitored carefully to promote safe and engaging learning.

In line with the principle of respect for human dignity, the rights of participants were fully respected. Clear, age-appropriate explanations about the research were given, and consent was secured from all necessary parties, including the English teacher, school administrator, and parents. Participation in the study was entirely voluntary, and students were free to opt out at any point without consequence.

To further uphold ethical integrity, strict confidentiality and anonymity were maintained. No personal names or identifiable information were included in the final report. This ensured that all participants' identities were protected, and their involvement remained private and secure.

2.14 Conclusion

This chapter outlined the key ethical measures taken throughout the research process—from obtaining formal permissions to safeguarding the participants' rights and ensuring the integrity of the data collection and analysis. It also provided an overview of the learning context, described the tools used to gather data, and detailed the steps taken to ensure the study's validity and reliability. These practices contributed to conducting the research in a responsible and ethically sound manner.

Chapter Three

Data Analysis ,and Interpretation

3.1 Introduction

Chapter Three provided a comprehensive overview of the research methodology used in this study. It outlined the research design, described the target population, explained the sampling strategy, and detailed the methods employed for data collection and analysis. Each step was carefully planned to ensure the reliability and validity of the findings.

This chapter moves on to present and interpret the data collected throughout the study. The main focus is to examine how the integration of gamified learning, through the *Learning Land* website, influenced the motivation and engagement of 4th-year primary school pupils during English lessons.

To ensure that the tools used for gathering data—such as classroom observation checklists and engagement scores from the website—accurately reflected student behavior and interaction, they were piloted, reviewed, and refined before the actual intervention. This was done to make sure the data would be both meaningful and relevant, providing a solid basis for understanding how gamification shaped the learning experience.

3.2 Data Analysis

The analysis is based on data collected during an eight-session intervention. Each session lasted 45 minutes, with 35 minutes allocated to gameplay and the final 10 minutes devoted to an end-of-lesson challenge or assessment. These assessments aimed to evaluate student participation and attention rather than test content knowledge.

Quantitative data were sourced from the Learning Land platform, which tracked metrics such as task completion and time on task. Qualitative observations were also

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conducted in the classroom, focusing on indicators of motivation—such as excitement, eagerness, and voluntary participation—and engagement, including attentiveness, collaboration, and sustained focus.

• **Table 3.1 :Motivation and engagement across sessions :**

S	Instructional Approach	Affective Engagement	Behavioral Engagement	Collaborative Interaction	Verbal Participation	Use of Audio-Lingua Support	Researcher Observations
1	Traditional	Low – signs of boredom and passivity	Low – frequent off-task behavior	Minimal – pupils worked individually	Very limited – mostly silent	No	Learners demonstrated low motivation and minimal interaction
2	Gamified (Learning Land)	Moderate – increased interest and alertness	Improved – more on-task behavior	Emerging – occasional peer assistance	Moderate – hesitant but present	No	Positive behavioral shift; initial excitement evident.
3	Gamified + ALM Musical Warm-Up	High – joyful and enthusiastic responses	High – sustained attention and effort	Noticeably improved – group discussions initiated	Increased – enthusiastic singing and responses	yes	Song-based introduction enhanced classroom climate and readiness
4	Gamified	High – visibly motivated and engaged	High – continuous task involvement	Strong – collaborative problem-solving noted	High – regular voluntary contributions	no	All groups displayed high interaction and focus.
5	Gamified	High – consistent emotional investment	High – independent task management	Strong – group roles emerged	High – increased spontaneity	no	Self-regulation and peer collaboration became evident
6	Gamified	Very High – confidence and enthusiasm	Very High – excellent task commitment	Very Strong – seamless group coordination	Very High – active questioning and answers	no	Teacher became facilitator rather than

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		evident					controller.
7	Gamified	Very High – engaged and relaxed atmosphere	Very High – autonomous learning behavior	Excellent – full peer interdependence	Very High – even reticent pupils engaged	no	Learners functioned as active participants and knowledge constructors
8	Gamified+ ALM Musical Warm-Up	Very High – excitement and readiness to learn	Very High – persistent focus	Excellent – collaborative creativity observed	Very High – confident, fluent expression	yes	Musical element amplified motivation and positively influenced task initiation.

3.3 The Result Obtained From the Observation Data Analysis

The results obtained from the observation grid indicate a progressive and positive shift in learner engagement, behavior, and interaction throughout the eight sessions. During Session 1, which followed a traditional instructional format, the overall classroom atmosphere was subdued. Affective engagement was low, with pupils displaying signs of boredom and emotional detachment. Behavioral engagement was similarly weak, as many students appeared distracted and required frequent reminders to remain on task. Collaborative interaction was virtually absent, with learners working in isolation and showing little interest in peer exchange. Verbal participation was minimal, and the session demanded constant teacher intervention to maintain order and focus. From Session 2 onward, when the researcher assumed the role of the teacher and introduced the gamified platform Learning Land, a clear improvement was noted across all observed categories. Pupils became more emotionally responsive and behaviorally engaged, with signs of increased curiosity and task involvement. The need for teacher intervention decreased steadily as students began to self-regulate and

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engage more independently with the learning materials. By Session 3, the introduction of a brief musical warm-up at the beginning of the lesson further enhanced the classroom mood. Pupils appeared cheerful and enthusiastic, actively participating in both the musical activity and the subsequent gamified tasks. This approach fostered a smoother transition into the learning process. By Session 4, collaboration had become a significant component of classroom dynamics. Learners demonstrated effective group work, supported one another, and communicated more freely. This trend continued to develop in subsequent sessions, with Sessions 6 through 8 exhibiting the most pronounced transformation. During these final sessions, affective and behavioral engagement remained consistently high. Pupils were focused, self-directed, and highly motivated. Verbal participation was spontaneous and inclusive, with even previously reticent learners contributing actively. Collaboration was seamless, and teacher intervention was rarely required, as students managed their tasks with confidence and autonomy. The use of musical warm-ups in Sessions 3 and 8 proved especially effective in setting a positive tone and preparing learners for the lesson content. Overall, the observation results demonstrate that the integration of gamified learning, supported by rhythmic audio-lingual activities, contributed to a significant improvement in learner participation, focus, confidence, and classroom cohesion.

3.4 The Result Obtained from The Second Semester Final Exam

The analysis of the second semester final English exam results reveals a distribution of pupil performance across the 39 participants. Specifically, 18 pupils scored more than 5 out of 10, while the remaining 21 pupils scored 5 or below. This distribution indicates that just under half of the pupils achieved a passing grade (assuming 5 is the passing threshold), whereas a slight majority scored below this level. These results highlight the challenges faced by many pupils under traditional instructional methods and suggest room for improvement in academic achievement prior to the implementation of gamified learning interventions.

- **Table 3.2. Distribution of Pupils' Scores in the Second Semester Final English Exam**

Score Range (out of 10)	Number of Pupils
≤ 5	21
> 5	18

3.5 The Result Obtained from The Post-Tests

- **Improvement in post-test performance after exposure to gamified learning activities**

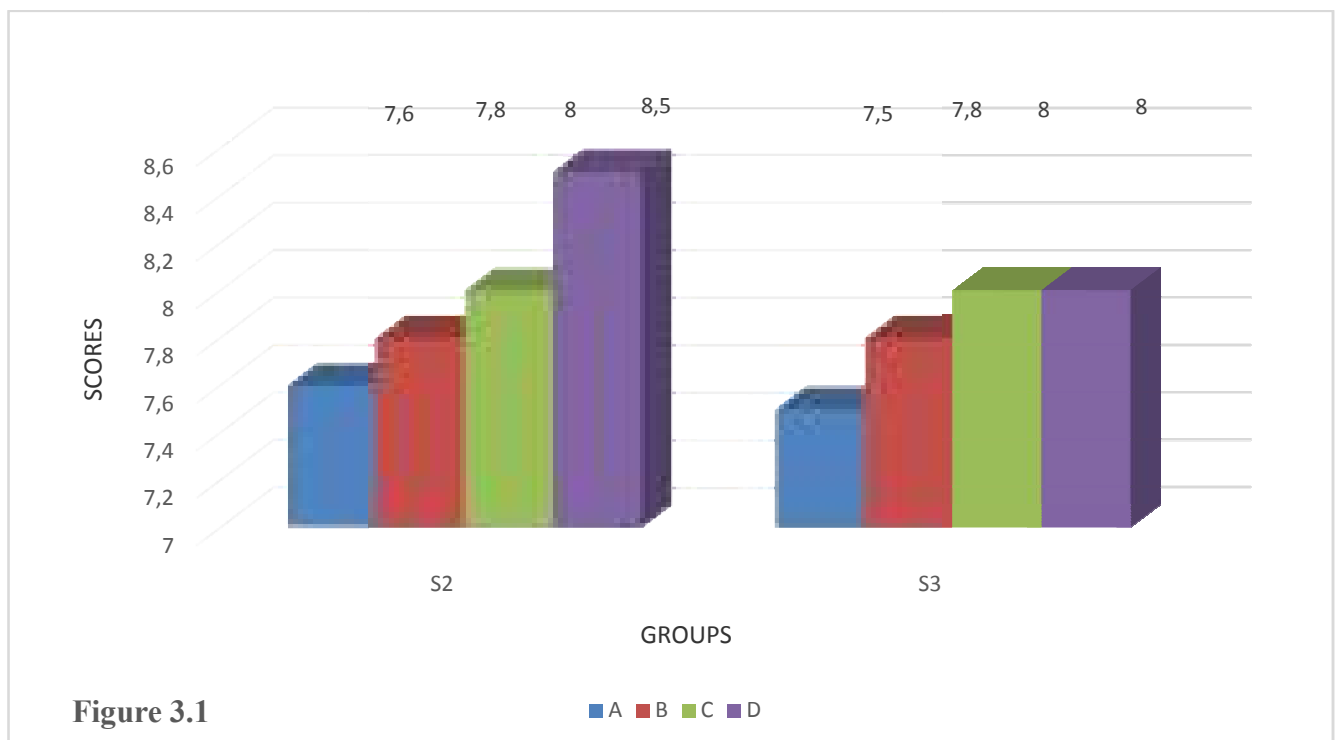


Figure 3.1

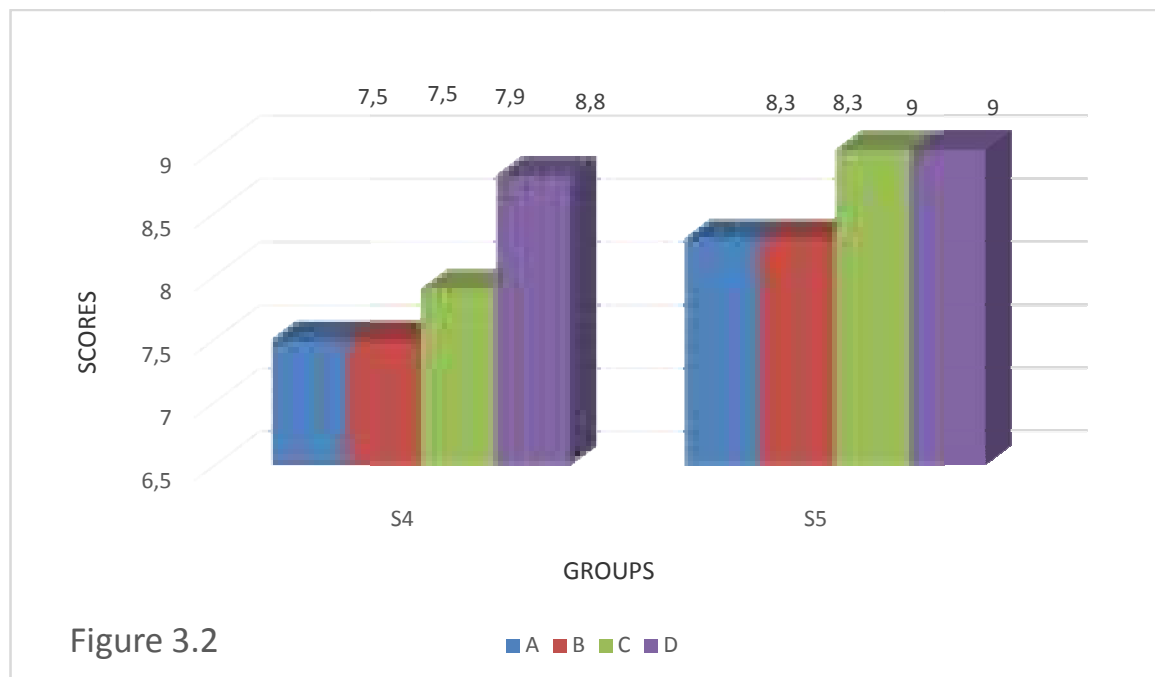
- **Figure 3.1 Post-Test Scores for Groups A–D in Sessions 2 and 3**

The post-test scores for Session 2 were 7.6, 7.8, 8, and 8.4 across Groups A, B, C, and D respectively. The mean score was 7.95, with minimal variation among the groups. This

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suggests that the gamified activities engaged learners effectively and evenly. The scores indicate a solid baseline of engagement at this stage, with all groups performing within a close range, pointing to consistent participation and response to the learning tasks.

In Session 3, scores ranged from 7.5 to 8, with Groups A, B, C, and D scoring 7.5, 7.8, 8, and 8 respectively. The mean slightly decreased to 7.83 compared to the previous session. Despite this minor dip, the results remain stable and reflect sustained engagement. The limited spread of scores indicates that learner involvement was maintained evenly across groups, with no significant drop in participation.

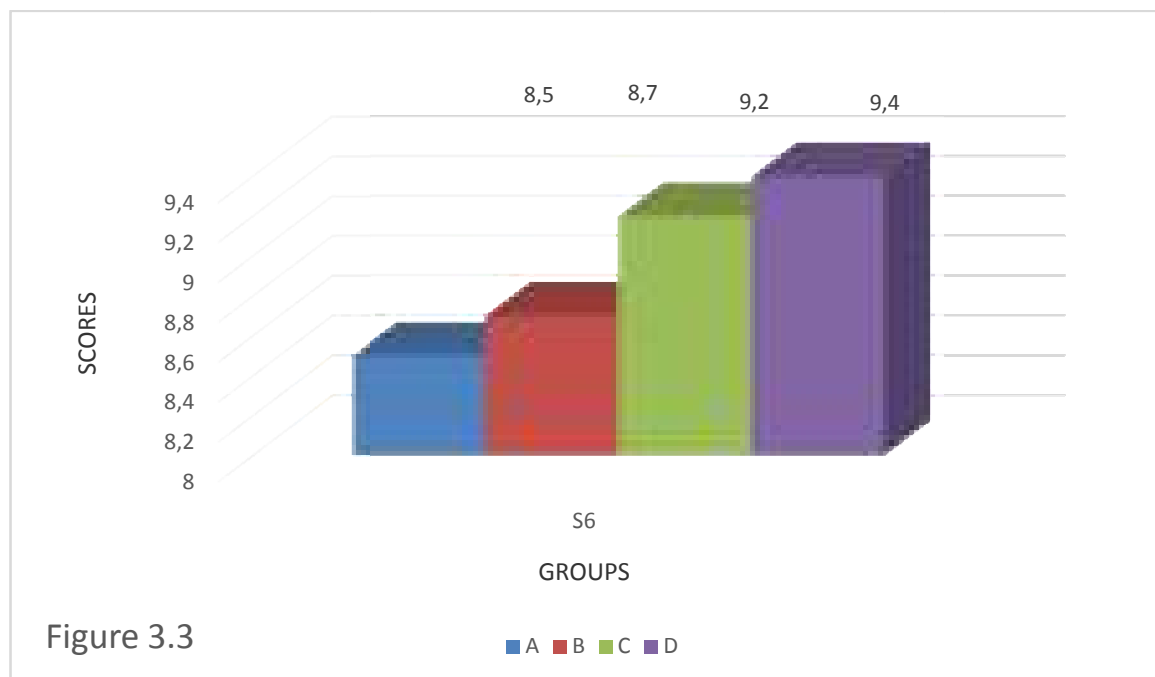


- **Figure 3.2 Post-Test Scores for Groups A–D in Sessions 4 and 5**

Session 4 showed a wider range in scores: 7.5 for Groups A and B, 7.9 for Group C, and 8.8 for Group D. The mean score was 7.93. The noticeable difference between Group D and the other groups suggests variability in engagement levels, possibly due to differences in group dynamics or task interaction. While some pupils may have experienced challenges,

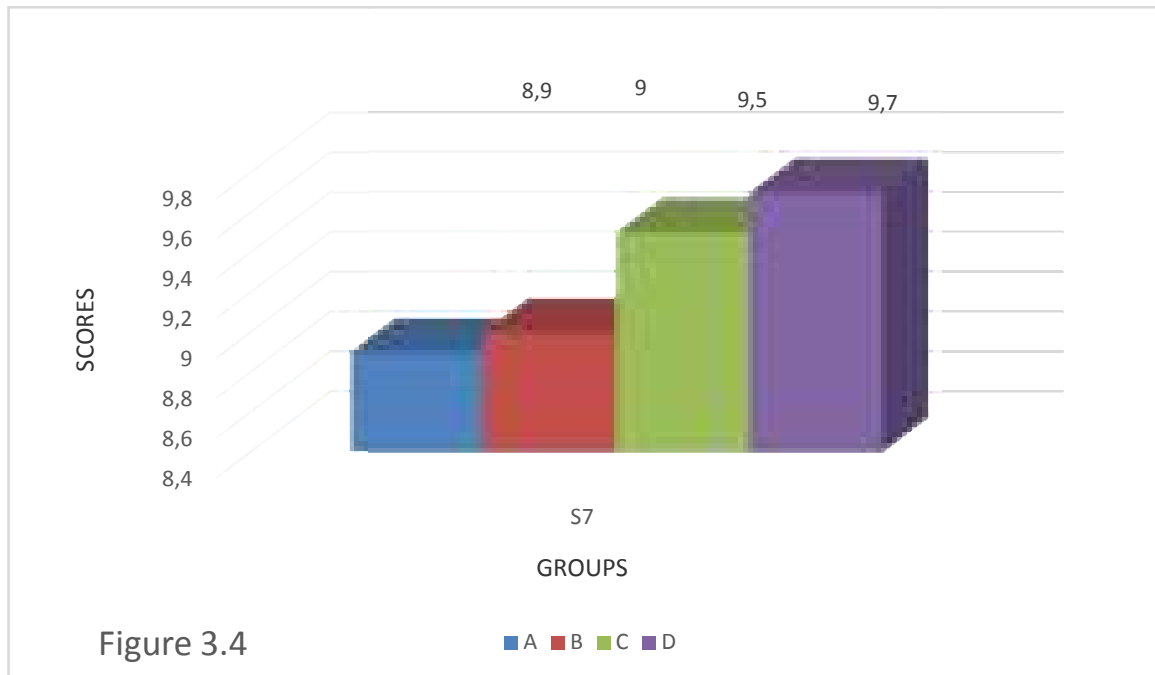
others demonstrated increased involvement, highlighting the need to consider group-specific factors when interpreting the results.

Scores increased in Session 5, with Groups A and B scoring 8.3, and Groups C and D scoring 9. The mean rose to 8.65, indicating an overall improvement in engagement compared to earlier sessions. The smaller range of scores points to a more balanced participation, suggesting that pupils had adapted well to the gamified environment and were responding positively to the instructional methods used.



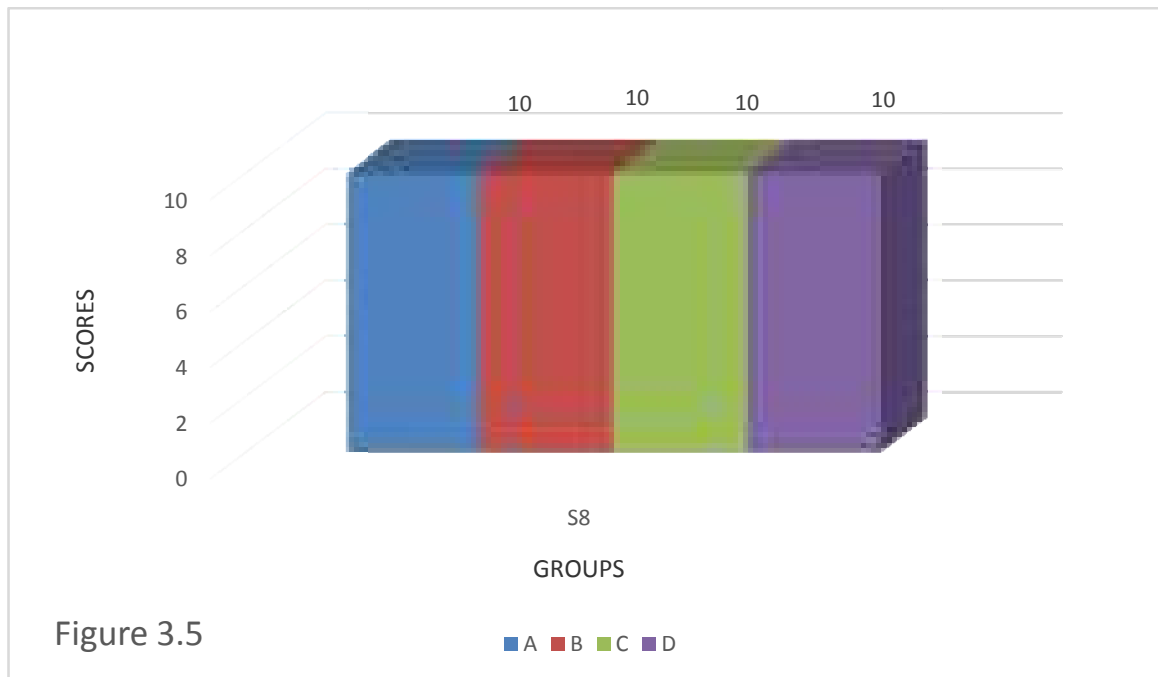
- **Figure 3.3 Post-Test Scores for Groups A–D in Session 6**

In Session 6, scores ranged from 8.5 to 9.4, with Group D attaining the highest score of 9.4. The mean was 8.95. The upward trend in scores demonstrates continued progress in engagement levels. The tighter score distribution implies increased consistency across groups, which may reflect growing familiarity with the gamified tasks and greater motivation to engage with the learning material.



• **Figure 3.4 Post-Test Scores for Groups A–D in Session 7**

Session 7 scores further improved, with Groups A and B scoring 8.9 and 9 respectively, and Groups C and D scoring 9.5 and 9.7. The mean increased to 9.28. The reduced variability and higher average confirm sustained and enhanced engagement. This pattern indicates that pupils were increasingly invested in the learning process, potentially benefiting from accumulated experience and the reinforcing effects of the gamified activities.



- **Figure 3.5 Post-Test Scores for Groups A–D in Session 8**

In the final session, all groups scored a perfect 10. This uniform result reflects full engagement and mastery of the material across the entire cohort. The perfect scores suggest that the cumulative effect of gamified learning activities successfully supported learner motivation and achievement, resulting in optimal performance.

- **Summary of The Post -Test Data**

The data collected from the *Learning Land* platform offers a detailed quantitative perspective on pupil engagement during the gamified learning intervention. Engagement was evaluated on a 10-point scale for each group based on task completion, time on task, and active participation. The results demonstrate a gradual yet consistent increase in engagement across the sessions, suggesting growing learner familiarity, confidence, and motivation toward gamified content.

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In Session 2 which marked the pupils' initial exposure to the platform, engagement scores ranged from **7.6** (Group A) to **8.4** (Group D). These relatively strong starting scores suggest that the novelty of interactive digital games was well received, generating initial excitement compared to prior traditional methods.

In Session 3 scores remained stable or slightly decreased for some groups: Group A scored **7.5**, Group B **7.8**, Group C and D both scored **8.0**. This game involved timed responses and numerical matching, which may have required increased cognitive effort. The slight drop could reflect early adjustment to time constraints and increased task complexity.

Session 4 revealed a modest improvement in overall engagement, especially for Group D, which reached **8.8**. Group C followed with **7.9**, while Groups A and B remained steady at **7.5**. The results suggest that while certain pupils adapted more quickly to the linguistic demands of the task, others maintained consistent but moderate levels of involvement.

In Session 5 a noticeable increase occurred across all groups. Group A scored **8.3**, Group B **8.3**, and Groups C and D reached **9.0**. The format encouraged more expressive and personalized language use, likely contributing to increased motivation and a deeper level of engagement.

By Session 6 engagement had significantly strengthened. Scores rose to **8.5** (Group A), **8.7** (Group B), **9.2** (Group C), and **9.4** (Group D). Pupils demonstrated improved collaboration and task management with minimal teacher intervention, indicating enhanced autonomy and familiarity with gamified formats.

Session 7 maintained this upward trajectory. Group A achieved **8.9**, Group B **9.0**, Group C **9.5**, and Group D **9.7**. The task's visual memory component may have further

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supported learner participation and enjoyment, leading to higher engagement levels across all groups.

Finally, in Session 8 all groups reached the maximum score of **10**, indicating full engagement. By this point, pupils had fully internalized the game mechanics and were able to engage independently and confidently with the digital tasks.

Across all sessions, Group D consistently achieved the highest scores, potentially due to stronger intra-group collaboration or individual learner motivation. Nevertheless, all four groups showed meaningful progress. The transition from mid-range scores (7.5–8.4) in the initial sessions to high or perfect scores (9.0–10) in the final sessions underscores the effectiveness of gamified strategies in enhancing sustained engagement over time

3.6 Discussion

The data collected from the Learning Land platform supports the classroom observation findings and reveals a consistent improvement in pupil engagement. The shift from passive, low-interaction behavior during the traditional session to highly interactive and motivated participation in gamified sessions was not only visible but measurable.

Furthermore, the platform scores illustrate a steady increase in students' enthusiasm, collaboration, and willingness to take part in digital learning activities. Initially, students showed curiosity and cautious excitement. Even in the first gamified session, scores were relatively high, showing that the platform immediately caught their attention. Over time, as students became familiar with the games and more confident in their abilities, their engagement deepened.

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Moreover, the variety of games offered through Learning Land—ranging from visual puzzles like the Flag Match to cognitively challenging tasks like Word Reordering and writing-based tasks—appealed to different learner types and addressed various learning styles. Students were no longer just listening and repeating; they were solving, exploring, competing, and creating, which played a crucial role in maintaining motivation.

In addition, the collaborative aspect of the games seemed to have a particularly strong effect. By working in groups, students learned to share ideas, delegate roles, and support one another. This dynamic was especially noticeable from Session 5 onwards, where spontaneous leadership and peer mentoring began to emerge, particularly within the higher-performing groups.

The implementation of songs in Session 3 and Session 8, inspired by the Audio-Lingual Method, added another dimension. These musical activities helped reduce anxiety and created a cheerful classroom climate that encouraged participation. In Session 8, this strategy likely contributed to the perfect scores seen across all groups, as students entered the gamified session already feeling positive and engaged.

Another important factor was the progression design of the platform. Each game built upon the previous one, offering increasing complexity and new challenges. This scaffolding helped learners feel a sense of achievement and forward movement, which is vital for sustaining motivation over time.

Consequently, the consistently high scores in later sessions suggest that the gamified environment fostered not just initial interest but sustained engagement. Unlike the traditional session, where motivation seemed to drop quickly, gamified tasks helped create a learning

atmosphere where students felt emotionally safe, cognitively stimulated, and socially connected.

In addition to these qualitative observations, a quantitative comparison between the final English exam results and the post-test scores further highlights the impact of the gamified approach. Among the 39 pupils who took the final exam under traditional teaching conditions, only 18 pupils scored more than 5 out of 10, while the remaining 21 pupils scored 5 or below. In contrast, the post-test results, conducted after the gamified learning intervention, showed that all pupils scored at least 7 out of 10. This shift indicates a clear improvement in the distribution of scores following the gamified sessions. Although the post-test was completed collaboratively, which may have influenced the results, the increase in minimum scores suggests that the gamified learning approach contributed to higher and more consistent achievement levels across the class.

3.7. Interpretation

The patterns observed in the platform engagement scores reinforce the theoretical foundations of this study. Most notably, they reflect the principles of Self-Determination Theory (Deci & Ryan, 1985). The Learning Land platform supported pupils' intrinsic motivation by meeting three core psychological needs:

- **Autonomy:** Learners could make decisions within games, pace their progress, and solve problems in their own way.
- **Competence:** The real-time feedback and achievable challenges made students feel successful and capable.

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- **Relatedness:** The group-based nature of the tasks encouraged bonding, cooperation, and a sense of community.

This is further supported by Constructivist Learning Theory (Vygotsky, 1978), which stresses the importance of active learning through social interaction. The gamified tasks not only required students to use language and content knowledge but also to engage in meaningful communication with their peers. This made learning a socially interactive process, not just an individual one.

The positive role of music—as observed in Sessions 3 and 8—echoes Medina’s (2002) findings on music and language learning. Music helped lower students' affective filters and prepared them emotionally for the gamified sessions that followed. It contributed to a relaxed, welcoming atmosphere that encouraged even shy students to participate.

Lastly, the consistent upward trend in engagement aligns with gamification research, particularly the findings of Sailer et al. (2017). Their work shows that well-designed game elements (e.g., rewards, levels, feedback) can increase psychological engagement and lead to better learning outcomes. In this study, these design elements helped transform passive learners into active participants, with measurable improvements in attention, motivation, and interaction..

3.8-Limitations

While this study provided meaningful insights into how gamification can enhance students’ motivation and engagement, there were a few limitations that are worth noting.

To begin with, One of the main limitations of this study lies in its quasi-experimental design, which involved only a post-test due to time constraints and institutional restrictions.

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The school director did not permit the researcher to select specific classes or divide pupils into separate control and experimental groups. As a result, all participants engaged solely in the gamified learning condition, which limits the ability to draw causal conclusions about the platform's effectiveness. In addition, each session was limited to just 45 minutes, which posed further challenges. Although the researcher was able to include both a game and a brief follow-up activity in each session, the restricted timeframe often curtailed the depth of engagement. Many pupils expressed enthusiasm and a desire to continue playing or explore additional features, but the rigid daily classroom schedule did not allow for extended interaction with the platform. These constraints collectively limited the scope and potential impact of the intervention.

Another limitation was the scope of the content. Due to time constraints and the need to maintain manageable classroom logistics, the researcher were only able to cover two learning sequences rather than the full range of topics included in the English curriculum. Ideally, we would have incorporated all the sequences for a more comprehensive gamified experience, but given the circumstances, we had to focus on the most essential topics.

The study was also limited to just one grade level—Grade 4. While the results were encouraging, they only reflect the experiences of this specific age group. It would have been beneficial to include other primary levels, such as Grades 3 and 5, to get a broader picture of how gamification affects students at different stages of development.

Lastly, the available time to design custom games was quite limited. The researcher primarily relied on existing games from the Learning Land platform, which, while useful, did not always align perfectly with every learning objective. Creating tailor-made games would have added a stronger connection to the curriculum, but unfortunately, that just was not feasible within the limited time the investigators had.

3.9-Research Implications

Although the study faced certain limitations, its findings offer meaningful insights for teachers, curriculum developers, and school administrators.

One of the key takeaways is the clear benefit of using gamified teaching methods to boost student motivation and engagement, especially for young learners acquiring a new language. The results highlight how well-integrated digital tools can reshape traditional teaching approaches, making learning more dynamic and centered around student participation.

Additionally, the study points to the need for more flexible lesson planning and scheduling in primary education. Allowing a bit more time or designing sessions with gamification in mind could significantly enhance the learning experience and maximize the positive outcomes.

On a larger scale, the research supports the use of inclusive teaching practices that cater to varied learning styles. Gamified instruction seems particularly effective for students who might not respond well to conventional, lecture-style teaching—making it a powerful strategy for meeting the needs of diverse learners.

3.10 Suggetion and Recommendations

3.10.1 For Teachers:

- Incorporate gamified activities within a weekly English class, predominantly for vocabulary, writing, and oral practice.
- Utilize observation tools for measuring student participation and adjusting game.
- Designate flexible time slots where students are able to pursue game tasks uninterrupted.

3.10.2 For Schools:

- Install basic digital tools (tablets or PCs) in the classroom, as well as access to educational gamified sites.
- Provide professional development workshops for educators on how gamification can be used effectively.
- Consider implementing gamified instructional tools for educational purposes across various grade levels.

3.10.3 For Future Researchers:

- Carry out longitudinal studies to monitor the long-term effects of gamification on language learning as well as classroom behavior.
- Utilize a bigger, more heterogeneous sample by including several grade levels and schools.
- Create gamified content tailored for each set of the curriculum for evaluating higher-level integration.
- Include student voice through interviews, journals, or student self-assessment tools as a complement to observational evidence.

3.11 Conclusion

the data collected throughout this study presents a compelling case for the positive role of gamified learning in boosting motivation and engagement among primary school pupils. From the early stages of the intervention, there was a noticeable shift in learners' attitudes and behaviors. Tasks that were once met with hesitation or disinterest during traditional instruction became opportunities for active participation and collaboration.

The engagement scores retrieved from the Learning Land platform clearly show a progressive increase in student involvement, with each session building on the momentum of

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the previous one. By the final sessions, pupils not only understood the structure of the games but also appeared to look forward to them, displaying confidence, energy, and a greater willingness to participate. Group work dynamics improved significantly, with students naturally encouraging one another and sharing responsibilities during gameplay.

The integration of songs in specific sessions, though brief, had a noticeable effect on classroom mood. These musical warm-ups helped pupils transition into learning tasks more smoothly, especially those who were initially reserved or less vocal. The use of varied methods within the gamified structure helped maintain interest and supported different learning styles.

Altogether, the findings from this chapter suggest that gamified learning, when thoughtfully designed and implemented, can offer a highly effective alternative to more traditional, passive approaches. It not only enhances academic engagement but also creates a more inclusive and supportive environment for all learners. These outcomes highlight the potential of digital tools like Learning Land in creating classrooms that are more dynamic, interactive, and student-centred.

General Conclusion

The motive for this research was to investigate the impact of gamified learning on the motivation and engagement of primary school pupils learning English as a foreign language. It also aimed to evaluate the effectiveness of gamified strategies in enhancing pupils' participation, autonomy, and overall language learning experience. Each game designed within the Learning Land platform served a specific pedagogical purpose. For instance, the card games with numbers aimed at quick recall and numeracy, the flags game broadened cultural and vocabulary knowledge, while the word reordering and occupations games strengthened sentence construction and thematic vocabulary. Memory Magic and writing challenges were included to reinforce pupils' memory, writing, and comprehension skills.

The study was guided by two main objectives: first, to examine the effect of gamification on students' intrinsic and extrinsic motivation, and second, to assess the impact of gamified learning experiences on classroom engagement. Accordingly, two research questions were formulated. The first focused on how gamified learning influences the overall motivation of primary school pupils during the learning process, and the second examined how different gamification elements sustain engagement among pupils.

A quasi-experimental design using a post-test only format was adopted. The experiment took place at Zaoui Younes Primary School, involving 39 pupils over eight sessions. The first session followed a traditional method to establish a baseline, while subsequent sessions incorporated the Learning Land platform. Pupils worked collaboratively in groups using computers, engaging in a variety of interactive digital games designed to reinforce English language learning. Data collection was based on classroom observation and tracking pupils' interactions and progress through the Learning Land website.

Throughout the sessions, the researcher observed several important trends. Pupils consistently demonstrated high levels of engagement in the activities and applied significant

effort and energy to each lesson. Teamwork progressively improved, with pupils collaborating effectively and offering mutual support during tasks. They exhibited strong curiosity and actively sought to complete the games and challenges. A noticeable rise in intrinsic motivation was documented, as many pupils voluntarily repeated tasks, signaling both enjoyment and commitment. Confidence in using English also developed steadily, with pupils increasingly incorporating English terms naturally and correctly during group activities.

The first hypothesis, which posited that gamified learning would have a significant positive effect on overall pupil motivation by enhancing interest, enjoyment, and participation, was confirmed. Pupils displayed heightened motivation—both intrinsic and extrinsic—through their enthusiasm, persistence, and active involvement. The second hypothesis, which proposed that different gamification elements would play a crucial role in sustaining engagement by maintaining attention and encouraging active participation, was also validated. Features such as visual elements, instant feedback, challenges, and rewards were especially effective in keeping pupils focused and motivated throughout the sessions.

Overall, the findings affirm that gamified learning is a powerful supplement to traditional language teaching, significantly boosting both motivation and engagement. The integration of digital games fostered a collaborative, interactive classroom environment where pupils developed greater autonomy, teamwork, and language confidence. Although the study was limited by its short duration and available resources, it highlights the promising potential of gamified learning to create more dynamic, engaging, and learner-centered classrooms. Further research is recommended to explore longer-term implementations and assess gamification's broader impact across diverse educational contexts.

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ألملخص :

يركز هذا البحث على استخدام التعلم المُميز بالألعاب كأداة تعليمية لتعزيز دافعية وتفاعل تلاميذ السنة الرابعة ابتدائي في تعلم اللغة الإنجليزية. تم تصميم منصة تعليمية رقمية تحت اسم "أرض التعلم" تحتوي على أنشطة تعليمية مسلية، مثل الألعاب التفاعلية والأغاني، وجرى تطبيقها على عينة من التلاميذ لم يسبق لهم التعلم عبر أدوات رقمية أو منهجيات حديثة. استخدم الباحث المنهج التجريبي لجمع البيانات، وخلص إلى أن التعلم المُميز بالألعاب له تأثير إيجابي على مستوى التفاعل والدافعية لدى التلاميذ.

الكلمات المفتاحية

التعلم بالألعاب، الدافعية، التفاعل، التعليم الابتدائي، اللغة الإنجليزية، المنصات الرقمية.

Summary

This research focuses on using gamified learning as an educational tool to enhance motivation and engagement among 4th-year primary school pupils in learning English. A digital platform called *Learning Land* was developed, incorporating entertaining educational activities such as interactive games and songs. It was implemented with pupils who had no prior experience with digital tools or innovative teaching methods. The researcher employed an experimental method to collect data and concluded that gamified learning had a positive impact on pupils' levels of engagement and motivation.

Key words :

Gamified learning, motivation, engagement, primary education, English language, website .

Résumé

Cette recherche porte sur l'utilisation de l'apprentissage ludifié comme outil pédagogique pour améliorer la motivation et l'engagement des élèves de quatrième année primaire dans l'apprentissage de l'anglais. Une plateforme numérique nommée *Learning Land* a été conçue, intégrant des activités éducatives divertissantes telles que des jeux interactifs et des chansons. Elle a été appliquée à un échantillon d'élèves n'ayant aucune expérience préalable avec les outils numériques ou les méthodes pédagogiques innovantes. Le chercheur a utilisé une méthode expérimentale pour collecter les données et a conclu que l'apprentissage ludifié avait un impact positif sur l'engagement et la motivation des élèves.

Mots clés :

Apprentissage ludifié, motivation, engagement, enseignement primaire, langue anglaise, site-web.