

Improving and Strengthening Learning through
Gamification for Primary School EFL Learners

Améliorer et renforcer l'apprentissage par la gamification
en anglais langue étrangère chez les apprenants au
primaire

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Abstract

Recent research highlights the rising importance of English in a swiftly changing global environment. In Algeria, there is an increasing demand for innovative educational strategies that teach both English and French as foreign languages. This study aims at exploring the potential of gamification to enhance the teaching and learning of English as a Foreign Language (EFL) among Algerian primary school pupils. The primary focus is on sustaining learners’ motivation, engagement, and effective language acquisition despite ongoing limitations in digital infrastructure and reliance on traditional teaching methods. Using a qualitative research approach, our study is based on in-depth semi-structured interviews with EFL teachers in Oum El Bouaghi to understand their perspectives, classroom practices, and the integration of gamification and digital tools. The findings reveal that gamified activities—such as role-playing, quizzes, and interactive games—significantly enhance learners’ motivation and enthusiasm for English, often more than for French. However, the use of digital tools is limited by resource and time constraints. Teachers emphasise a strong need for high-quality, contextually suitable educational strategies and tools to support interactive, learner-centred teaching. The study recommends that the Algerian Ministry of National Education invest in digital infrastructure and continued teachers’ training, and suggests that future research should include quantitative methods to assess the long-term impact of gamification on English proficiency.

Keywords:

Gamification; English as a Foreign Language; Algerian primary school learners; Digital tools.

Resumé

Les recherches récentes soulignent l'importance croissante de l'anglais dans un environnement mondial en rapide évolution. En Algérie, il existe une forte demande de stratégies éducatives innovantes enseignant à la fois l'anglais et le français en tant que langues étrangères. Cette étude vise à explorer le potentiel de la gamification pour améliorer l'enseignement et l'apprentissage de l'anglais langue étrangère (ALE) chez les élèves du cycle primaire en Algérie. L'objectif principal est de maintenir la motivation, l'engagement et l'acquisition efficace de la langue chez les apprenants, malgré les limitations persistantes de l'infrastructure numérique et la dépendance aux méthodes d'enseignement traditionnelles. En adoptant une approche de recherche qualitative, notre étude repose sur des entretiens semi-directifs approfondis menés auprès d'enseignants d'anglais langue étrangère à Oum El Bouaghi afin de comprendre leurs perceptions, leurs pratiques en classe, ainsi que l'intégration de la gamification et des outils numériques. Les résultats révèlent que les activités reposant sur la gamification — telles que les jeux de rôle, les quiz et les jeux interactifs — améliorent considérablement la motivation et l'enthousiasme des apprenants pour l'anglais, souvent plus que pour le français. Cependant, l'utilisation des outils numériques est limitée par des contraintes de ressources et de temps. Les enseignants soulignent un besoin urgent de stratégies et d'outils éducatifs de haute qualité, adaptés au contexte, pour soutenir un enseignement interactif et centré sur l'apprenant. L'étude recommande que le ministère algérien de l'Éducation nationale investisse dans les infrastructures numériques et la formation continue des enseignants, et suggère que les recherches futures incluent des méthodes quantitatives pour évaluer l'impact à long terme de la gamification sur la maîtrise de l'anglais.

Mots-clés :

Gamification ; anglais langue étrangère ; apprenants algériens du primaire ; outils numériques.

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1. INTRODUCTION

This contribution examines the need for innovative programs to enhance teaching and learning among Algerian primary school learners. It also evaluates current strategies for implementing gamification, a method widely acknowledged for fostering young learners' motivation to learn (Deterding et al., 2011; Hamari et al., 2014). The study demonstrates that learning through gamification enhances cognitive stimulation—including perception, attention, memory, and

intelligence—enabling an interactive, dynamic, playful, and practical learning experience (Zainuddin et al., 2020).

This idea arises from the educational challenges associated with teaching two foreign languages simultaneously in Algerian primary schools. In reality, the dominance of French as the primary foreign language can hinder the effective teaching and learning of a second language, such as English, unless innovative or transformative strategies are implemented to foster a supportive learning environment. Therefore, this research proposes developing an innovative device that employs logical reasoning to enhance teaching and learning in Algeria, addressing the challenges of a rapidly changing global environment. It aims to achieve two main objectives: first, to examine the successful integration of gamification into the teaching and learning process for Algerian primary school EFL learners to boost motivation and learning outcomes; and second, to identify and assess strategies that promote interactive, learner-centred English instruction within the primary school setting.

Building upon these objectives, the study addresses the following research questions:

1. How can innovative teaching and learning strategies, such as gamification, effectively engage and motivate primary school learners in Algeria?
2. What interactive instructional strategies are most effective in providing quality interactive learning experiences that meet the needs of young Algerian learners and inspire their interest in learning English?

2. Theoretical framework

2.1 Strengthening Learning through Gamification

Gamification, or ludification, involves integrating game elements into non-gaming contexts such as education (Deterding et al., 2011). This engaging approach has been shown to motivate learners and encourage active participation in educational activities (Hamari et al., 2014). Indeed, the playful aspect of learning, supported by research, promotes vocabulary retention and the memorisation of grammatical rules among school-aged children (Zainuddin et al., 2020). The idea is that lessons become more engaging, student motivation increases, and a sense of accomplishment is fostered through virtual rewards such as badges, interactive quizzes, word puzzles, and classroom challenges.

To understand how gamification impacts the development of primary school EFL learners' skills, this study draws on relevant theories and conceptual models that support the incorporation of gamification into educational settings, with a particular focus on their relevance to Algerian primary school learners.

In fact, Self-Determination Theory (SDT), developed by Deci and Ryan (1985), suggests that learners are intrinsically motivated when their needs for autonomy, competence, and relatedness are satisfied. Gamification, with its emphasis on choice, feedback, and social interaction, closely aligns with SDT by fostering learner autonomy and supporting competence through structured challenges and rewards (Ryan & Deci, 2000). Several studies have demonstrated that gamified learning environments can enhance intrinsic motivation and engagement among young learners (Mekler et al., 2017).

Moreover, constructivist Learning Theory highlights the active role of learners in constructing knowledge through interaction and exploration. Based on the works of Piaget (1972) and Vygotsky (1978), this theory asserts that

Gamification offers opportunities for experiential learning by engaging students in problem-solving and collaborative tasks, and by providing immediate feedback (Kapp, 2012). These components support the development of critical thinking and language skills as learners actively participate with content in meaningful contexts (Bruner, 1996).

The role of gamification can also be analysed through Flow Theory, introduced by Csikszentmihalyi (1990), which describes the state of deep engagement and enjoyment experienced when individuals are entirely absorbed in an activity. Gamified environments are designed to foster flow by balancing challenge and skill, providing clear goals, and offering immediate feedback (Hamari et al., 2016). Research indicates that when young learners experience flow during language learning tasks, their motivation and performance improve significantly (Kiili, 2005).

These theoretical approaches collectively strengthen the case for integrating gamification into primary school English teaching in Algeria. They offer a framework for creating learning environments that are engaging, interactive, and suited to the developmental needs of young learners.

In recent years, the rapid development of educational technology and the increasing significance of English as a global lingua franca have prompted educators and policymakers in Algeria to reconsider traditional approaches to teaching English in primary schools. The difficulty of teaching English as a Foreign Language (EFL) to young learners is compounded by the need to sustain learners' motivation and engagement while ensuring effective language acquisition. In this context, innovative pedagogical approaches such as gamification—incorporating game

elements into non-gaming educational environments—have gained traction as potential solutions to persistent challenges in language learning (Deterding et al., 2011; Hamari et al., 2014).

However, despite the recognised potential of gamification, Algerian primary school classrooms continue to face obstacles related to learner engagement, resource limitations, and the effectiveness of conventional instructional methods. Furthermore, introducing a second foreign language, French, from an early stage often complicates the acquisition of English, making it imperative to develop and implement strategies that foster a positive, motivating learning environment for young Algerian learners.

3.Study procedure and methodological approach

This study employs a qualitative research design, using in-depth semi-structured interviews as the main method of data collection. The choice of this approach is motivated by the aim to gain detailed insights into the pedagogical practices, challenges, and beliefs of Algerian primary school EFL teachers regarding the integration of gamification in English language teaching (Cohen, Manion, & Morrison, 2018).

3.1 Semi-Structured Interviews

The research involved four EFL teachers from the wilaya of Oum El Bouaghi, each with between one and three years of teaching experience. The semi-structured interviews were conducted by phone, lasting between 90 minutes and two hours, and took place after obtaining informed consent and ensuring participant anonymity. The interview questions were developed through a two-stage process: initially, a pilot questionnaire was tested with three teachers to improve the focus

and clarity of the items; then, the finalised interview protocol covered four thematic areas:

1. Teachers' perceptions of introducing English in primary schools;
2. Targeted skills in current textbooks, challenges faced by pupils, and available supports;
3. Use of technology and gamification in the classroom, as well as the nature of interactive learning and assessment activities;
4. Perspectives on the implementation and value of digital educational tools for EFL.

This thematic framework allowed a detailed examination of both practical classroom realities and broader pedagogical viewpoints. The interview method (Kvale & Brinkmann, 2015) enabled rich, detailed accounts and allowed teachers to expand on their experiences and suggestions for enhancing EFL teaching through gamification.

3.2 Data analysis

The collected interview data and supporting document analysis (including textbooks and didactic guides for third, fourth, and fifth primary levels) were examined using thematic analysis (Braun & Clarke, 2006). This process involved systematically coding responses, identifying recurring patterns, and developing interpretive themes that illuminate teachers' attitudes towards introducing English and learners' motivation, the perceived impact and challenges of technology and gamified learning in the classroom, and contextual factors affecting the adoption of digital tools.

In fact, this analytical approach fostered a comprehensive understanding of

the factors influencing EFL instruction in Algerian primary schools and laid a solid foundation for subsequent interpretation and discussion of the results.

4. Findings

The interview began with a request to the respondents to provide a representation of how English is introduced in primary schools. The responses reveal a consensus among the participants. This language holds a prominent position in the education system due to the current global dominance of English. The teachers argue that the need to incorporate English also arises from the demands of changes in the modern world, which is largely driven by increasing technological development, where English is the main language of dissemination.

Regarding learners' attitudes towards learning English, the respondents confirm a preference for English over French, motivated by the variety of activities offered, often authentic, interactive, and stimulating, as illustrated by two respondents:

- (A): "Pupils genuinely enjoy English and look forward to the lessons, as the diverse range of activities engages their interest and enhances their enthusiasm for learning."
- (B): "It has been observed that English generates more interest among pupils compared to French. Their consistent engagement during English sessions clearly indicates an interest in learning this language."

In the current pedagogical context, characterised by the growth and diversification of digital tools designed to meet the demands of improved, high-quality education, and recognising the gap between the lack of technological resources in educational environments and the need to optimise the teaching and

learning process, the utilisation of digital tools becomes essential for ensuring effective teaching and learning.

Regarding the integration of digital tools in teaching English as a foreign language, three participants affirm that they regularly use them, citing the ease of learning they offer to pupils. One teacher (C) confirms that she does not use digital tools: "No, I don't use them, I tried to do so, but the attempt proved unsuccessful. It appears that their usefulness is limited, particularly due to the considerable time required for presenting a lesson using a projector, for example." She adds: "My lessons rely essentially on the use of flashcards, which contribute to a better assimilation of concepts among learners."

Regarding the advantages of digital tools in teaching and learning, the three teachers who use them specifically mention:

- the improvement of students' concentration, who show increased interest in learning through these tools;
- the effectiveness of learning, the rapid expansion of vocabulary, the interactive nature of learning, as well as the motivation and enthusiasm among pupils.

When discussing gamification and interactive learning, the four primary school English teachers state that they provide interactive activities such as quizzes, role-playing, word games, and flashcards. They add that the benefit of these activities is that they enhance language retention and motivate learners, making them more engaged.

When asked about using an educational digital tool (e.g., an application) in the classroom, their response was "no." To assess their potential interest in

introducing this educational tool for teaching and learning English as a foreign language, teachers were invited to specify their preferences for integrating such tools into their teaching methods. The four participants expressed a strong interest in a high-quality application, for example, capable of meeting learners' needs. The focus on the application's quality is likely to encourage teachers to reconsider traditional teaching methods, which are often routine and lack meaningful interaction and motivation, as confirmed by teacher (D), who states: "I would have liked to come across an educational application that could meet the needs of learners and serve as support to further motivate learners to learn English by being highly engaged." Another participant (A) reports that "learners really like simplified courses, supported by interactive activities that enhance their desire to learn, such as role-playing, digital games, and interactive videos featuring colours, sounds, animations, and creativity." According to the teachers, this kind of digital tool would facilitate effective lesson organisation and improve the quality of learning.

5. Discussion

The findings of this study highlight a significant pedagogical shift in the Algerian primary education sector, where English is increasingly regarded not just as a subject but as a pathway to global engagement in technological and scientific domains. The consensus among participants about the prestige of English supports the study's initial premise: that the rapidly changing global environment requires moving away from traditional, rote-learning approaches.

The preference for English over French among learners, as reported by the interviewed teachers, suggests that the interactive nature of EFL instruction—even in its early stages—effectively engages learners through the "Flow" and "Intrinsic

Motivation” described by Csikszentmihalyi (1990), Ryan and Deci (2000). Although French has traditionally dominated the Algerian linguistic landscape, the authenticity and stimulation provided by English activities indicate that young learners are more motivated when game-like elements such as role-playing, flashcards, and quizzes are incorporated. This supports the theoretical claim that gamification fosters a supportive learning environment capable of overcoming the cognitive challenges associated with learning two foreign languages simultaneously.

A significant tension emerged over integrating digital tools. Three teachers acknowledged the benefits of technology in enhancing concentration and vocabulary retention, but Teacher C’s testimony highlights a practical barrier: time and infrastructure. The unsuccessful attempt to use projectors underscores a vital gap between pedagogical objectives and classroom realities. For gamification to be truly transformative, it must be delivered through tools that are not only innovative but also efficient and user-friendly. While reliance on analogue gamification (flashcards) currently acts as a bridge, the teachers’ shared keen interest in a high-quality educational app confirms a readiness for a digital shift that minimises routine tasks and maximises meaningful interaction.

The research data indicate that simplified courses supported by colours, sounds, and animations are the most preferred interventions for young Algerian learners. By combining logical reasoning with these sensory-rich digital elements, the proposed innovative device could meet the three psychological needs outlined in Self-Determination Theory: Autonomy (through interactive choices), Competence (through virtual rewards and levels), and Relatedness (through

collaborative classroom challenges).

6. Conclusion

This study aimed to investigate the potential of gamification in enhancing English language teaching and learning in Algerian primary schools. The qualitative analysis of teachers' experiences confirms that young learners have a natural enthusiasm for English—often more than for French—but current teaching methods are frequently hindered by a lack of resources and traditional approaches. Gamification has proven to be an effective way to motivate students, transforming abstract linguistic concepts into interactive experiences that promote engagement and a sense of achievement. Strategies such as digital games, role-playing, and multimedia activities are identified as particularly successful in meeting learners' developmental needs. The main contribution of this research is a strong call for dedicated, context-sensitive digital gamified educational tools to support English learning and to address the challenges of teaching two foreign languages simultaneously.

To ensure the successful implementation of these findings, it is advised that the Algerian Ministry of National Education invest in digital infrastructure and teacher training centred on gamification strategies. Although the study is limited by its small sample size in Oum El Bouaghi, it offers a foundational qualitative framework. Future research should undertake a quantitative evaluation of learner outcomes using the proposed educational app to assess the long-term effect of gamification on English proficiency in Algeria.

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