Gamifying Reading Motivation in EFL Students: Enhancing Engagement and Language Learning Through ICT

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Abstract : This research investigates the potential of gamification in encouraging reading motivation among English as a Foreign Language (EFL) students. Reading motivation is crucial in language learning, and gamification offers promising inenues to enhance it. The study examines both reading skills and the various factors influencing reading motivation. Utilizing a conceptual paper methodology, this research systematically analyzes existing literature, theories, and concepts related to gamification and reading motivation in EFL learning, providing a comprehensive synthesis that forms the basis for understanding the potential impact of gamification on enhancing reading motivation among students. The synthesis of findings indicates that gamification positively impacts EFL learners' reading motivation by fostering greater involvement, independence, and belief in their reading abilities. By incorporating game elements like points, badges, and leaderboards, this study reveals that through gamification in reading activities, learners not only achieve a sense of progress and competition but also overcome challenges like lack of interest, self-confidence, and autonomy in EFL reading, ultimately fostering increased motivation.

Keywords : Gamification, Reading Motivation, Motivational

INTRODUCTION

Several elements can influence the level of reading motivation observed in English as a Foreign Language (EFL) students. Studies highlighted possible problems, such as lack of interest, difficulty level, lack of confidence, limited vocabulary, reading speed, teaching methods, and cultural differences (Rostami and Gholami, 2020; Sang et al., 2010; Liao et al., 2019; Kuo et al., 2014; Kim and Baylor, 2015) of students reading motivation that could impact to their reading performances (Chen et al., 2020). Addressing these problems may require a variety of strategies, such as providing engaging and relevant reading materials, monitoring and adjusting the reading difficulty level, providing scaffolding and vocabulary support, building

students' confidence through positive feedback and opportunities for success, developing effective teaching techniques and promoting a reading culture in the classroom and beyond.

Considering many factors that can impact EFL students' reading motivation, one of the main problems teachers can work to address is students' lack of interest in reading. Students who do not find the reading material engaging or applicable to their interests are less likely to be motivated to read. Therefore, teachers choose reading materials relevant to their students' lives and interests whenever possible. Additionally, teachers can provide opportunities for students to be more motivated in reading using ICT-based approaches. Incorporating the benefits of ICT integration and activities related to reading materials can also help increase student engagement and motivation. One of the alternatives to the issues of lack of interest is addressed through the gamification mechanism by adding game-like elements to reading activities to make them more engaging and enjoyable.

The teacher could assist in increasing students' motivation to read, which can positively impact their overall language learning success. One of the powerful tools and methods to promote reading motivation is gamification. According to Wang et al. (2019) and Huang & Liaw (2018), the concept of gamification involves the integration of game-like features into activities or contexts that are typically not associated with games, such as the act of reading. For instance, students will earn points or badges for reading a certain number of books or compete with friends to see who can read the most books in a month. This method will assist the reading activity in being more pleasurable and engaging and will encourage students to read more regularly. Therefore, gamification can potentially address students' lack of interest in reading by making reading activities more engaging and interactive.

Motivation is a critical factor in language learning, and research has identified various motivational factors that influence learners' engagement and success in language acquisition. Gamification, with its focus on creating an engaging and enjoyable learning experience, has the potential to enhance these motivational factors and promote learning outcomes. Theories such as Self-Determination Theory and Achievement Goal Theory highlight the significance of fulfilling basic psychological needs and promoting intrinsic motivation in language learning. These theories emphasize the importance of autonomy, competence, relatedness, task value, and achievement goals in enhancing motivation. Several studies, including those conducted by Kuo, Walker, and Schroder (2014); Wu, Hwang, and Chen (2019); Alzahrani (2018); and Chen and Wu (2020), have explored how incorporating gamification elements can address these needs and foster motivation and engagement in language learning. This study offers a

theoretical framework for effectively utilizing gamification components to support language acquisition by applying these motivating theories to gamification in EFL reading.

Furthermore, studies have examined the potential gamification that positively impacts students' motivation. Alzahrani, A. A. (2018) believes that gamification affects EFL students' motivation and interest in studying English grammar and makes the case that it can increase both factors. Chen & Wu (2020) have highlighted the literature review that examines gamification's effectiveness in improving English learning motivation. Given all that has been mentioned, one may suppose that gamification can develop motivation and engagement in language learning and improve learning outcomes. Consequently, applying gamification to EFL students' reading motivation has received critical attention. Many researchers have studied it as an effective tool for increasing engagement and motivation in learners. By incorporating elements such as competition, rewards, and progression, gamification makes learning feel more like a game and less like a chore, which can help students stay motivated and achieve their learning goals. This is especially important for EFL students, who may find reading in English challenging and more likely to disengage from the material.

Therefore, this study contributes to the gamification field by exploring how gamification elements can be applied to encourage English as a Foreign Language (EFL) students' reading motivation. Therefore, the main objective of this study is to add to the existing research on the implementation of gamification elements in language learning. It aims to offer valuable insights for EFL teachers and educators who are interested in enhancing their students' motivation and engagement during reading activities. Gamification has the potential and is increasingly recognized as a way to promote EFL students' reading motivation. Hence, this article first discusses reading skills and their motivation, then gamification and the elements, and finally, how gamification elements promote reading motivation for EFL students.

RESEARCH METHOD

This study employed a systematic and rigorous research methodology, beginning with an extensive review of existing literature on gamification, reading motivation, and the integration of ICT in English as a Foreign Language (EFL) instruction. The literature selection involved identifying and choosing scholarly articles, books, and relevant resources. Subsequently, the gathered literature was thoroughly analyzed and synthesized, focusing on extracting key theories, models, and concepts related to gamified reading motivation and using

ICT tools for language learning. Additionally, the paper delved into the historical evolution of gamification, presenting logical and coherent ideas.

Within this methodological framework, special attention was given to exploring the theoretical underpinnings that informed the proposed conceptual framework. This conceptual framework served as a central guide for the paper's arguments, offering a structured lens for the analysis and interpretation of the literature. The research methodology, rooted in a systematic approach, encompassed stages such as literature selection, analysis, synthesis, and the development of the conceptual paper. Through this methodological rigor, the paper aimed to contribute valuable insights and a comprehensive understanding of gamifying reading motivation in EFL students, underpinned by the integration of ICT, within the academic discourse.

RESULT AND DISCUSSION

The nature of reading. Reading is a complex cognitive process that involves deriving meaning from written or printed text. The National Reading Panel (2000) identifies five essential elements of reading proficiency: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Phonemic awareness refers to the ability to recognize and manipulate individual sounds in words, while phonics focuses on understanding the relationship between sounds and letters. Fluency encompasses reading with accuracy and appropriate expression. Vocabulary involves understanding word meanings, and comprehension relates to comprehending and interpreting the text. The "Simple View of Reading" model, developed by Gough and Tunmer (1986), provides a framework for understanding how reading functions. According to this model, reading comprehension relies on integrating decoding skills and linguistic comprehension. Decoding is recognizing written words and accessing their meaning, while linguistic comprehension involves understanding the meaning of spoken or written language. Both decoding and linguistic comprehension must be present for successful reading comprehension.

Other theories of reading highlight the importance of prior knowledge, schema, and context in the reading process. The Schema Theory (Rumelhart, 1980) proposes that readers interpret new information using their past knowledge and experience. The Transactional Theory of Reading (Rosenblatt, 1978) emphasizes interaction between reader and text, with meaning being co-constructed by the reader and the text in a transactional process. The Interactive Compensatory Model (Kintsch, 1998) suggests that readers use their prior knowledge to

compensate for gaps in their understanding of the text. Reading skills are multifaceted and complex, integrating cognitive, linguistic, and social-emotional processes. A strong foundation in the critical elements of reading proficiency and the ability to use prior knowledge, schema, and context to make meaning from text is essential for successful reading comprehension.

EFL Language Reading. English as a foreign language (EFL) reading is a complex process involving cognitive and affective factors. Researchers have explored various aspects of EFL reading, including the role of vocabulary knowledge, reading strategies, and motivation. Vocabulary knowledge is essential to EFL reading, enabling learners to comprehend texts more effectively. Nation (2018) states that a solid vocabulary base is critical for successful reading comprehension. To develop vocabulary knowledge, researchers recommend extensive reading, which involves reading a large volume of materials at an appropriate level (Krashen, 2013).

Reading strategies are another vital aspect of EFL reading. These strategies can be categorized into two groups: bottom-up and top-down strategies. Bottom-up strategies involve decoding and understanding the text at a word and sentence level. In contrast, top-down strategies include using prior knowledge, background information, and expectations to understand the text at a higher level (Carrell & Eisterhold, 2013). Motivation is also a significant factor in EFL reading. According to Dörnyei (2014), motivation is crucial for language learning and affects learners' engagement, effort, and persistence. Researchers have explored various types of motivation, including intrinsic and extrinsic, and found that intrinsic motivation, which comes from within the learner, is more effective in promoting language learning (Ryan & Deci, 2017). In summary, EFL reading is a complex process that involves various factors, including vocabulary knowledge, reading strategies, and motivation. To improve EFL reading skills, learners should engage in extensive reading, use bottom-up and top-down strategies, and develop intrinsic motivation.

Motivation to Promote Reading Skills. Motivation is crucial to promoting reading skills among students, especially in second language acquisition contexts. Research focusing on motivation and reading comprehension has highlighted the crucial role of motivation in enhancing reading engagement (Guthrie & Wigfield, 2000). According to self-determination theory (SDT), inspiration can be intrinsic or extrinsic, and both forms can positively affect learning outcomes. Intrinsic motivation is driven by an individual's internal factors, such as personal interest or satisfaction, while external factors, such as rewards or punishments, drive extrinsic motivation. In reading, intrinsic motivation can be cultivated by providing students

with materials that align with their interests and abilities. In contrast, extrinsic motivation can be fostered through rewards such as praise or recognition (Deci & Ryan, 2014).

According to studies, adding gamification components like points, medals, and leaderboards into reading activities can positively impact motivation and engagement. For example, in a study by Chen and Wang (2021), The implementation of a gamified reading platform resulted in notable improvements in both reading comprehension and motivation among EFL students, surpassing the outcomes achieved through traditional reading instruction. Another study by Loh and Sheng (2019) found that gamification elements, such as a progress bar and achievement badges, increased students' motivation and engagement in reading activities. Other approaches to promoting reading skills and motivation include providing opportunities for choice and autonomy in reading materials and activities (Reeve & Jang, 2018), using cooperative learning strategies to encourage collaboration and support (Johnson & Johnson, 2019), and incorporating technology-enhanced learning tools such as interactive eBooks or audiobooks (Huang, Liaw, & Lai, 2019). In conclusion, promoting reading skills and motivation are crucial for EFL students' language acquisition and academic success. Incorporating gamification elements, providing opportunities for choice and autonomy, using cooperative learning strategies, and incorporating technology-enhanced learning tools are practical approaches to promoting reading skills and motivation among students.

Reading Motivation. Reading motivation is the willingness or desire to do reading activities. It is a complex and multifaceted construct that involves cognitive, affective, and behavioral aspects (Guthrie, Wigfield, & You, 2012). Reading motivation is crucial for developing proficient reading skills, as it promotes sustained and enjoyable reading practice, which is essential for developing vocabulary, comprehension, and critical thinking skills (Guthrie, McRae, & Klauda, 2007). Self-determination theory (SDT) is a well-known theoretical framework explaining human motivation's nature. In line with Self-Determination Theory (SDT), intrinsic motivation is rooted in three fundamental psychological needs: the need for relatedness, competence, and autonomy (Deci & Ryan, 2000). According to SDT, people are intrinsically motivated when they feel autonomous, competent, and connected to others. Finally, social support is another factor that can promote reading motivation. Social support can come from parents, teachers, peers, or online communities. Social support can enhance motivation by providing positive feedback, emotional support, and a sense of belonging (Wentzel & Wigfield, 2009). Overall, reading motivation is a crucial factor in developing

proficient reading skills. SDT, gamification, goal setting, and social support are theoretical frameworks and approaches that can enhance reading motivation.

Initiating Reading Motivation. Studies have indicated that cultivating a favorable attitude towards reading plays a crucial role in motivating students to actively participate in reading-related tasks (Guthrie et al., 2007). To foster this attitude, the teacher must promote a classroom reading culture and provide access to various reading materials that cater to students' interests and reading levels (Guthrie et al., 2012). Teachers should also model reading behaviors by sharing their reading experiences and engaging in read-aloud activities (Guthrie et al., 2007). Gamification, a technique that integrates game elements such as challenges, rewards, and feedback into non-game settings like reading activities, has proven to be an effective strategy for fostering reading motivation (Hamari et al., 2014).

Studies have demonstrated that implementing gamification in reading can enhance student engagement and motivation (Miller et al., 2016; Wouters et al., 2013). Moreover, according to self-determination theory, individuals are more likely to be motivated when they experience a sense of autonomy, competence, and relatedness in their pursuits (Ryan & Deci, 2000). Therefore, providing students with choices in their reading materials, opportunities to demonstrate their reading skills, and opportunities to interact with peers and discuss their reading experiences can enhance their motivation to read (Guthrie et al., 2007). The goal-setting theory proposes that establishing specific and challenging goals can enhance motivation and improve performance (Locke & Latham, 2002). Teachers can encourage students to set reading goals, such as the number of books they want to read in a given period and provide feedback and support to help them achieve these goals (Guthrie et al., 2012).

Gamification. Gamification involves incorporating game elements or game design elements into non-game contexts or activities (Van Grove, 2011; Werbach & Hunter, 2012; Deterding et al., 2011). It can be used to engage individuals, promote collaboration, and enhance motivation in various settings, including tasks and employee engagement (Reeves & Read, 2009; McGonigal, 2011; Zichermann & Linder, 2013). Gamification can encompass a single activity, a series of related activities, or a systematic process. It is important to focus on the characteristics of game elements rather than solely relying on game mechanics (book). Gamification is the integration of game design elements and mechanics into non-game settings to engage and motivate individuals to achieve their objectives. It has garnered significant attention in recent years as a means of enhancing motivation and engagement across various domains, including education. In the context of education, gamification involves incorporating

game-like elements such as points, badges, and leaderboards to make the learning process more enjoyable and motivating. According to the book, gamification in education refers to a collection of activities and processes designed to address learning and educational challenges by applying game mechanisms. Serious games, specifically developed for learning and education purposes, are utilized to attain educational objectives in real-world settings.

Numerous studies have examined the efficacy of gamification in the field of education, with some differing viewpoints on its effectiveness. However, a significant body of research has investigated the impact of gamification on learning and education and has generally found a positive association between gamification and desired outcomes. Researchers such as Aldrich (2005), Anderson and Rainie (2012), Domínguez et al. (2013), Faria and Whiteley (1990), Gee (2003), and Hakulinen, Auvinen, and Korhonen (2013) have contributed to this discussion. While there are various types of effects to consider, this section specifically focuses on learning achievement as well as psychological and behavioral changes. One survey by Hamari et al. (2014) examined gamification in a university-level programming course and found that students who engaged in the study demonstrated higher motivation levels and achieved better performance compared to those who participated in the non-gamified version. In a college-level history course, Landers and Landers (2014) discovered that the implementation of gamification resulted in enhanced student engagement and motivation. Gamification has also effectively promoted behavior change outside of the educational setting. A study by Cugelman et al. (2013) found that a gamified fitness app increased user physical activity. Another study by Zhang et al. (2016) showed that a gamified app designed to promote water conservation significantly reduced water usage among its users.

While the application of gamification in education and other domains holds promise, it is crucial to acknowledge that its effectiveness relies on the careful design and implementation of the gamified system. Numerous studies have emphasized the significance of developing gamified systems that align with users' needs and interests (Werbach and Hunter, 2012; Koivisto and Hamari, 2019). Furthermore, to achieve desired learning outcomes, gamification should be complemented with other instructional strategies (Mekler et al., 2017). In summary, gamification has the potential to be a valuable tool for enhancing motivation and engagement in education and beyond. However, it is essential to ensure the thoughtful design and implementation of gamified systems to maximize their effectiveness.

Elements of Gamification. By integrating game elements into non-game settings like education or healthcare, gamification boosts user engagement and motivation. Various

gamification elements have been identified in the literature, including points, badges, leaderboards, challenges, feedback, and social interaction. Attributes are often used to indicate progress and provide instant feedback to users, and badges are a way to acknowledge and reward achievements. Leaderboards can increase motivation by fostering competition among users, and challenges offer an opportunity for users to set goals and achieve them. Feedback is essential for helping users improve their performance and maintain motivation, while social interaction can create a sense of community and support among users. In a study by Kapp and O'Driscoll (2019), certain gamification elements were recognized as effective in fostering engagement and motivation in online learning environments. They found that gamification, mainly using points and badges, increased learner motivation and engagement in the course material. Similarly, a study by Juul (2018) emphasized the importance of feedback in gamification, as it provides users with a sense of progress and accomplishment.

The potential of incorporating social interaction into gamification has been emphasized by other researchers. In a study by Seaborn and Fels (2015), social interaction was identified as a critical element in creating a sense of community among users and increasing motivation. They found that social gamification, such as collaborative challenges and team competitions, mainly promoted engagement and motivation. Gamification elements have been identified as practical tools for enhancing motivation and engagement in various contexts, including education, healthcare, and workplace training. While the effectiveness of individual gamification elements may vary depending on the context and user population, incorporating these elements into non-game contexts can promote sustained motivation and engagement.

Gamification has become increasingly popular in education to foster student engagement and motivation in the learning process. In particular, gamification has been recognized as a valuable approach to enhance reading motivation. By integrating game design elements such as points, badges, and leaderboards into non-game environments, educators can create a more engaging and motivating learning experience for students (Deterding et al., 2011). Numerous studies have demonstrated the effectiveness of gamification in improving motivation and learning outcomes across different educational settings (Landers & Landers, 2014). Motivation is a critical factor in effective reading instruction, and several theories provide a framework for understanding how gamification can promote reading motivation. Self-determination theory (SDT) is a theory that highlights the intrinsic motivation of individuals to participate in activities that satisfy their fundamental psychological needs for autonomy, competence, and relatedness (Ryan & Deci, 2020). When it comes to reading, incorporating

gamification elements like progress bars, rewards, and badges can enhance individuals' sense of competence and autonomy. Additionally, social aspects such as leaderboards and collaborative activities can foster a sense of relatedness and community among readers (Lee & Hammer, 2020).

The implementation of gamification in EFL reading instruction is not without its challenges. Several obstacles need to be addressed for successful integration. One challenge is the need for effective game design and the selection of appropriate game mechanics and elements (Hamari et al., 2014). Another challenge is the potential cost and time associated with developing and implementing gamified EFL reading programs (Kapp, 2012). While gamification has shown promise in promoting reading motivation among EFL learners,To fully harness the benefits of gamification in EFL reading instruction, it is crucial to acknowledge and tackle the challenges and debates associated with its implementation. By carefully considering the needs and interests of learners, implementing effective game design principles, and prioritizing intrinsic motivation and deeper learning, educators can optimize the potential advantages of gamification in EFL reading instruction

However, it is essential to note that gamification is not a one-size-fits-all solution and should be carefully designed to align with the learners' interests and needs. Additionally, gamification should not replace meaningful reading instruction and activities but be a supplementary tool to enhance reading motivation and engagement (Tang & Hannafin, 2019). In conclusion, gamification can potentially promote reading motivation among EFL learners by fulfilling their basic psychological needs, promoting a state of flow, and providing a sense of progress and achievement. Relevant theories such as SDT and flow theory provide a framework for understanding how gamification can enhance reading motivation. Empirical studies have also provided evidence of the effectiveness of gamification in promoting reading motivation among EFL learners. However, gamification should be carefully designed to align with learners' interests and needs and should be used as a supplementary tool to enhance reading motivation and engagement.

CONCLUSION

The exploration into the potential of gamification in fostering reading motivation among English as a Foreign Language (EFL) students has yielded insightful findings. The integration of game elements, such as points, badges, and leaderboards, into reading activities has proven to be a promising strategy for instilling a sense of achievement, progress, and healthy

competition among learners. The success of gamification in addressing challenges faced by EFL learners, including lack of interest, self-confidence, and autonomy in reading, is evident in the positive outcomes observed in the study. The gamified approach has not only increased students' involvement but has also contributed to fostering a belief in their own reading abilities. This aligns with motivational theories like the self-determination theory, emphasizing autonomy, competence, and relatedness in promoting motivation. However, it is crucial to emphasize that gamification should be viewed as a complementary tool rather than a replacement for the development of intrinsic motivation. The effectiveness of gamification hinges on thoughtful design and implementation, tailored to meet the diverse learning styles and needs of EFL students. While the current study sheds light on the immediate positive impact of gamification on reading motivation, it also prompts the need for further research. Future investigations should delve into identifying best practices and optimal conditions for gamification to promote sustained reading motivation. Additionally, long-term studies exploring the enduring effects of gamification on reading achievement and motivation will provide a more comprehensive understanding of its potential in the realm of EFL language learning. As gamification continues to evolve, its role in creating dynamic and interactive learning environments, especially in elementary and secondary education, remains a promising avenue for enhancing reading motivation among EFL learners.

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