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# Gamification for Learning English as a Second Language in Sri Lanka

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## Abstract

Despite the global importance of English proficiency, Sri Lankan students often struggle with mastering the language, as reflected in the country's unsatisfactory ranking in the English Proficiency Index (EPI). The traditional classroom-based teaching methods in Sri Lanka have not effectively addressed these challenges, necessitating innovative approaches to language learning. Gamification, the integration of gaming elements into non-game environments, has shown promising outcomes in enhancing learning motivation and academic performance, particularly in developed nations. However, its application within the Sri Lankan educational context remains limited. This study examines the potential of gamification in learning English as a second language (LESL) in Sri Lanka and identifies factors favourable to its integration into the education system. Key factors include the growing technological infrastructure, high internet penetration, and positive attitudes towards technology among students and teachers. By applying gamification to the educational context, Sri Lanka can revolutionise its language acquisition strategies, bridging the proficiency gap and creating a more engaging and effective learning environment essential for success in today's globalised world.

**Keywords:** Gamification, Gamified Learning Platforms, Learning English as a Second Language, LESL Sri Lanka

## 1. Introduction

Advancements in technology have revolutionised societal norms and practices, reshaping human interactions with digital devices. The internet, online gaming, social media, and smartphones have played pivotal roles in this transformation. Across various sectors, technology integration has become essential, especially in education—a trend further accelerated by the COVID-19 pandemic. Developed nations like Finland, Singapore, and Israel symbolise the successful integration of technology in education. These countries have established dedicated educational platforms to support their respective education systems, such as Finland's Sanako digital platform, Israel's Jewish learning platform, and Singapore's Ed-tech concept. These platforms enhance language acquisition and enrich the educational landscape within their respective nations (EdTech, 2023; Jigzi, n.d.; Sanako, 2020).

Over the past decade, gamification has become a popular concept in education. Gamification is used for gaming elements, such as leaderboards, point systems, and badges, in non-gaming contexts to engage users and enhance their overall experiences (Deterding et al., 2011). It motivates individuals in various sectors by transforming routine tasks into engaging experiences, encouraging people to get involved and behave in desired ways. In the context of language learning, gamification has been recognised globally for its profound impact. Extensive research has been conducted to explore its potential against the non-gamified methods, and the results demonstrated that the gamified method surpassed the non-gamified one in enhancing concentration, learner proficiency, and overall learning experience (Heryadi & Muliamin, 2016; Shortt et al., 2021).

In today's globalised world, English has solidified its position as the predominant language, essential for functioning in the digital age where geographical boundaries are virtually eliminated. Countries like India, Singapore, South Africa, and many more have adopted English as a secondary language, reflecting its widespread use beyond its native-speaking nations (Gaffney, 2021). Despite the growing demand for English proficiency, students in non-native English-speaking countries often exhibit low motivation and competence in the language (Hasanah & Utami, 2019). Research suggests that it can be due to various factors, including ineffective teaching methods, fear of social embarrassment due to language errors, limited opportunities for practical application, and the burden of stress (Dehghanzadeh et al., 2019). Therefore, supporting students' natural motivation and readiness, both mentally and physically, is vital for achieving proficiency in a language that extends beyond their mother tongue.

Extensive research has been conducted on gamification in learning English as a second language (LESL), showing its popularity and significant impact on learning contexts. Studies have consistently highlighted its positive effects, including enhanced motivation, academic performance, engagement, and skill development among learners (Angelia et al., 2021; Dehghanzadeh et al., 2019). Capitalising on this trend, gamified language learning platforms have obtained remarkable success rates, catering to the growing demand for interactive language learning tools. English holds a pivotal role in Sri Lanka's administration, judiciary, education, and interpersonal communication (Jayasinghe, 2020; Ranasinghe, 2012). It is extensively integrated into the country's educational system, from primary to secondary levels, and remains the medium of instruction in many university degree programs. (Navaz & Majeed, 2021). Despite its importance, a notable proportion of Sri Lankan students exhibit a negative attitude towards learning English, contributing to the nation's unsatisfactory standing in the English Proficiency Index (EPI) (Education First, 2022; Halik & Umashankar, 2022). This emphasises the critical need for an innovative and efficient method for English language acquisition in Sri Lanka. Despite the evident benefits of gamified learning approaches, Sri Lanka's educational system sticks to traditional classroom-based teacher-centric teaching methods, resulting in less-than-optimal academic outcomes in English language proficiency (Performance, 2022, p. 14; Ranaweera, 2021). Therefore, this study seeks to explore the potential of gamification in English language learning and identify factors that support its integration into Sri Lanka's education system.

## **2. Gamification in Learning English as a Second Language (LESL)**

### *2.1 Gamified Language Learning Platforms*

A learning platform is software that enables teachers to create and deliver courses online. It can also be used for education and training through e-learning or digital learning (Bachofner, 2022). Examples of various learning platforms include online course platforms, gamified learning platforms, and learning management systems. In recent times, gamified learning platforms have emerged as promising tools in education, particularly in the context of language acquisition. They can be categorised into two types based on the learning mode: web or mobile-based learning and geographical: national or international.

Considering the mode of learning, both web apps and mobile apps play pivotal roles in facilitating language acquisition. Popular platforms like Duolingo and Quiz Your English offer both web and mobile applications, providing learners with flexibility and accessibility across different devices (Cambridge, n.d.; Duolingo, 2024). Mobile-exclusive games such as Wordscapes also cater to learners seeking on-the-go language practice on Android and iOS platforms (Wordscapes, n.d.).

These platforms' development includes diverse technologies, with web applications leveraging languages like JavaScript, PHP, HTML, CSS, and MYSQL (Boyinbode, 2018), while mobile apps often target specific operating systems like Android or iOS. Moreover, the gamification trend further broadened the learning landscape, extending from web-based platforms to games made with specialised gaming technologies like Game Maker Studio and GML (Toasa et al., 2019). Notably, these platforms have gained notable successes, as evidenced by a study demonstrating a participant's achievement of a passing grade in Turkish after only 34 hours of study through a gamified learning platform (Shortt et al., 2021). These insights highlight the significance of technology in enhancing language learning experiences and catering to diverse learner preferences and needs.

On a national level, countries like Israel and Finland have embraced gamified learning platforms to enrich their educational landscapes. Ofek Learning Hub and the Jewish learning platform are two popular learning platforms in Israel which offer teachers and students valuable resources and professional development opportunities (Jigzi, n.d.; Ofek, n.d.). Similarly, Finland, renowned for its exemplary education system, employs an innovative platform called Sanako to facilitate foreign language learning (Sanako, 2020). Considering international platforms, Duolingo stands out due to its extensive range of language options and interactive lesson formats (Matt, 2021). Its diverse vocabulary and grammar exercises offer learners a flexible and engaging learning experience. As a result, individuals across the globe utilise this platform extensively to refine and advance their language skills.

By leveraging gamification and personalised features, these platforms enhance student engagement and empower educators to deliver dynamic and practical instruction. Through such initiatives, gamified learning platforms have a massive potential to enrich educational experiences and foster academic excellence.

## 2.2 Learning English as a Second Language (LESL)

Learning English as a Second Language (LESL) refers to learning English by individuals whose primary language is not English (Nordquist, 2019). English holds significant global importance in communication, business, and academia, leading many countries across continents, such as Asia, Africa, and Europe, to adopt it as a second language. For instance, countries like India, Singapore, and the Philippines in Asia and South Africa, Cameroon, and Namibia in Africa are notable examples (Gaffney, 2021). Similarly, numerous European countries, including the Netherlands, Austria, Denmark, Norway, and Sweden, rank high on the English Proficiency Index (EPI) (Education First, 2022). Despite English being spoken by approximately 1.5 billion people worldwide, less than 400 million use it as their first language, highlighting its widespread adoption as a secondary language (Ellis, n.d.). Learners engage with English through various channels, from formal education to individual language courses and self-study. Proficiency in different linguistic components, such as vocabulary, spelling, grammar, speaking, reading, listening, and writing, is typically attained through these efforts. In today's digitalised world, proficiency in English as a second language holds increasing importance for global communication, career progression, information access, and competitive advantage in fields like business, science, and technology.

## 2.3 Gamification and Learning English as a Second Language (LESL)

Many games have been developed to help people learn and practice English worldwide. Table 1 contains some popular English learning games on the web and mobile platforms.

Table 1: Popular English Learning Games

Name	Language Skill	Description
Duolingo	Vocabulary, Sentence Construction, Reading, Listening, Speaking	<ul style="list-style-type: none"> <li>Available on web and mobile platforms</li> <li>Supports 43 languages</li> <li>Contains quizzes, stories, skill practice tests</li> <li>Gaming elements: Experience points, Leaderboards, Streak, Hearts, Gems</li> </ul>
Wordscapes	Vocabulary, Spelling	<ul style="list-style-type: none"> <li>Available on mobile platform</li> <li>Puzzle game</li> <li>Gaming elements: Coins, Levels, Hints</li> </ul>

My Word Coach	Vocabulary, Spelling	<ul style="list-style-type: none"> <li>• Puzzle game</li> <li>• Gaming elements: Difficulty levels, Daily word challenges</li> </ul>
Quiz Your English	Vocabulary, Grammar	<ul style="list-style-type: none"> <li>• Available on mobile platform</li> <li>• Gaming elements: Points, Goals, Race against the clock</li> </ul>

#### 2.4 Impact of Gamification on Learning English as a Second Language (LESL)

Numerous studies have examined gamification's impact on Learning English as a Second Language (LESL), demonstrating many favourable outcomes across various aspects of language acquisition. These studies consistently highlight enhancements in motivation, academic performance, engagement, and skill development among learners in gamified learning environments (Angelia et al., 2021; Tshering et al., 2018).

A study utilising gamified learning applications to enhance children's English proficiency demonstrated notable improvements in students' language skills (Toasa et al., 2019). Employing an application developed with Game Maker Studio 2 utilising GML, researchers measured the effectiveness of this approach through pre-tests and post-tests. Results revealed significant development in English proficiency among participants. Similarly, another investigation focused on Bhutanese children's English language acquisition through gameplay, indicating notable academic performance improvements when utilising gamified applications (Tshering et al., 2018). Researchers used pre- and post-tests to observe significant development in students' academic results.

In non-native English countries, students exhibit limited motivation to learn the language. Consequently, most of the research in gamification aims to bolster student motivation alongside language skill development. Findings from various studies pointed out the significant positive impact of gamification-based learning on learners' motivation and interest in English acquisition (Angelia et al., 2021; Boyinbode, 2018). Many participants have agreed to the effectiveness of incorporating gaming elements such as leaderboards, levels, points, and badges, increasing motivation to learn. Moreover, research has shown that the motivational benefits offered by gamified applications are not constrained by factors such as age or educational level (Angelia et al., 2021).

Furthermore, gamification has prompted a significant change in the context of LESL (Learning English as a Second Language), moving from a teacher-focused approach to one centred on students. These combined results underscore the considerable effectiveness of gamification in LESL, highlighting its ability to encourage active learner engagement, enhance academic achievement, and transform traditional teaching methods.

### 3. Gamification & LESL In Sri Lanka

#### 3.1 Education System in Sri Lanka

The Sri Lankan education system, predominantly upheld by government-run institutions, offers free education across its vast network of schools (Education in Sri Lanka, 2019). These institutions, alongside a smaller number of private and international schools, serve diverse student populations. While government and semi-government schools adhere to a localised syllabus, international schools adopt internationally recognised curricula such as Cambridge and Edexcel (Education in Sri Lanka, 2019).

Sri Lanka's education largely follows teacher-centric, classroom-based methodologies with minimal technology integration. Despite widespread technological changes worldwide and many countries adapting to new educational concepts, Sri Lanka has been slow to adapt, sticking to old-fashioned approaches that have yet to keep pace with the modern world. This reluctance to change has yet to produce satisfactory results, as seen in students' disappointing performance in Ordinary Level English language exams (Performance, 2022, p. 14).

While Sri Lanka values its free education system, growing concerns exist about its ability to provide consistently high-quality learning experiences nationwide. Therefore, it is crucial to use technology to improve the education system and keep up with global advancements.

### *3.2 Factors Favourable to Adapting Gamification in SL*

In recent years, Sri Lanka has witnessed a growth in internet usage and technological infrastructure, with approximately two-thirds of the population having internet access by 2023 and a significant presence on social media platforms (Kemp, 2023). Recent data from Ookla further highlights remarkable improvements in internet speeds, reflecting the country's commitment to digital connectivity. The widespread adoption of smartphones has further bolstered internet usage, with over 36 million active cellular connections in a population of 22 million (Kemp, 2023). This nationwide coverage, coupled with high-speed mobile internet networks like 4G and 5G, underscores Sri Lanka's readiness for technological integration in education. Additionally, the dominance of information technology professions in the job market and government initiatives to ensure ICT education accessibility, including comprehensive training sessions for local school teachers in collaboration with the University of Moratuwa, further solidify the country's technological literacy and infrastructure for embracing emerging concepts (Perera, 2022, *ICT Education in Sri Lanka*, 2017). Statistical data from the Department of Examinations in Sri Lanka reveals that over 92% of students successfully pass the Information and Communication Technology (ICT) Ordinary Level examination, with more than 77% attaining a grade of C or above (Performance, 2022, p. 14). These figures underscore the proficiency of Sri Lankan students and educators in essential technological literacy, affirming their readiness to grasp and apply emerging technological concepts.

Chandrasekara (2021) conducted a study to assess the potential of using gamification as a new media platform for primary education in Sri Lanka. Its findings revealed strong support from teachers regarding integrating video games into teaching practices. Additionally, feedback from undergraduates of the University of Colombo School of Computing (UCSC) in Sri Lanka highlighted the potential effectiveness of a game-based learning approach for English language acquisition (Fazeena et al., 2013). Another investigation used a development-based approach to explore using gamified mobile applications to enhance mathematics learning in classrooms (Halloluwa et al., 2016). The results indicate a favourable impact of gamification, with teachers identifying various challenges addressed effectively by this innovative approach. Key benefits include improvements in student concentration, interaction, collaborative work, and a sense of responsibility. Furthermore, students exhibit enhanced comfort levels in group activities and teacher interactions. This novel method successfully transitions the traditional teacher-centric learning environment towards a student-centric one, empowering students to take charge of their learning through technology (Halloluwa et al., 2016).

With these favourable factors, the integration of gamification into the Sri Lankan education system presents promising opportunities, as evidenced by various studies. However, only a few studies have been conducted to apply gamification to the education system of Sri Lanka. Sri Lanka possesses the necessary technological infrastructure, literacy, and a positive attitude among students and teachers towards gamified educational approaches. These findings collectively indicate Sri Lanka's advantageous position to leverage gamification for educational advancement.

### *3.3 Why Sri Lanka Needs Gamification for LESL*

The rise of international and private industries in Sri Lanka highlights the critical need for English proficiency. As a service-oriented nation, Sri Lanka prioritises English fluency to meet the communication requirements of multinational corporations. This proficiency is essential for both domestic interactions and engaging with the global community through verbal communication or digital interfaces (Ranasinghe, 2012). Despite its domestic and global significance, English poses a persistent obstacle for many Sri Lankan students, as evidenced by the country's unfavourable ranking in the English Proficiency Index (EPI) (Education First, 2022). With Sri Lanka ranking 67th out of 113 countries, it is imperative to bolster English proficiency and motivation among its population. Recent data from the Department of Examinations reveals a modest improvement in English pass rates

among Ordinary Level students. However, a considerable proportion still struggle to attain satisfactory English skills, with only 42.63% achieving a grade of C or higher (Performance, 2022, p. 14).

This poses a significant challenge for Sri Lanka, indicating a pressing need to critically examine and revamp existing English language learning and teaching methodologies. Sri Lanka's conventional education system needs to be revised compared to more advanced nations that leverage interactive classrooms and technology-driven approaches to enhance learning outcomes and student motivation. With negative attitudes toward English learning existing among both urban and rural students in Sri Lanka, it is evident that a transformative approach is required to enhance English literacy and students' motivation for learning English.

While gamification has shown promising outcomes in developed countries and is beginning to gain traction in Sri Lanka, research on its application in second-language English learning within the Sri Lankan educational context remains limited. Despite separate investigations into Learning English as a Second Language (LESL) and gamification in Sri Lanka, there has yet to be an exploration of their combined use in education. However, examining existing research within the Sri Lankan educational framework reveals the significant impact of gamification in subjects like mathematics. Drawing insights from successful implementations of gamification in LESL in developed nations, Sri Lanka stands to benefit from adopting similar approaches to enhance English language learning. By integrating gamification techniques into the education system, Sri Lanka has the potential to revolutionise English language acquisition, narrowing the proficiency gap and fostering a more engaging and effective learning environment.

#### 4. Conclusion

While technological advancements have reshaped the education landscape, gamification has emerged as a promising approach for enhancing learning English as a second language (LESL), as evidenced by its success stories worldwide. Despite this, Sri Lanka remains bound to traditional teacher-centric classroom-based methods, failing to achieve significant progress in English language proficiency. Nevertheless, the country possesses key factors necessary to support gamification-based learning, including robust technological infrastructure, literacy, and positive attitudes among students and teachers towards gamified educational approaches. Gamification presents an interactive and dynamic solution to address existing challenges in motivation, engagement, and proficiency in English language learning. However, the lack of comprehensive studies within the Sri Lankan context presents a significant obstacle to its integration into the education system. By drawing insights from successful global implementations and promising local initiatives, it becomes clear that gamification can foster a more student-centric, interactive, and effective learning environment, ultimately closing the proficiency gap and empowering students to excel in English language skills.

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