Gamification-Based Learning as The Future of Language Learning: An Overview

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ABSTRACT

Gamification or game-based learning is the current trend in education which is steadily increasing its popularity across several fields involving academic learning. Gamification is the incorporation of gaming elements into a learning environment in order to increase engagement and participation. It enhances learner’s participation, motivate actions, efficiently improve their academic performance as well as effectively facilitate language learning. Undoubtedly, participation is essential for an effective game-based language learning system. Language learning through games can take many forms, such as role-playing games to practice communication or board games to reinforce grammar. Furthermore, gamified learning software, for example, may boost student engagement, retention and academic performance. On the one hand, proponents of gamification claim that it improves learning. Gamification reinforces important educational skills like problem-solving, collaboration, and communication. Moreover, it is argued that the requirement for interaction in a gamified approach to education encourages students to participate actively in their education, resulting in increased student engagement in online forums, projects, and other learning activities. E-learning platforms seem to potentially enhance students’ motivation, and great efforts are needed to develop and implement an experience to make it completely motivating to participants. Gamification research is gaining traction and promises to aid in the resolution of many issues. Hence, this article could potentially offer ideas to educators to design technology-mediated learning environments. Based on a review of various prior works, this article explored the many reasons gamification should be incorporated into school curriculums for language learning, as well as the benefits for learners. It also critically focused on the application of gamification components to improve learning via online learning systems.

Keywords: English Language, Enhance Educational Skills, Game-Based Learning, Gamification, Student Engagement.

I. INTRODUCTION

In the current era, the social fabric is fundamentally shaped by communicative skills. If one wishes to participate in a certain culture, it is a must to acquire the language skills of that society (Jetzkowitz, 2018). Most interactions and activities that have occurred between people over the past few decades have been accelerated by globalization, with people working collaboratively across borders. For this purpose, English has become the lingua franca since the world has become more accessible on many fronts, whether it be for conducting business internationally or communicating with friends who live in other countries via the Internet. Due to the emergence of intrinsically global online social contact and expanding international workplace interactions, mastering English as a second language is necessary (Al-Dosakee & Ozdamli, 2021).

A fundamental aspect of today’s society is language education. Particularly, English is the most frequently used language on a global scale and is taught as second language in many schools around the world. On a global scale, it is a widely used language that is taught as a second language in many schools around the world. The grammar of the English language is an essential component in learning the language that inhibits learners’ desire to learn the language. Technical skills like, writing, listening, reading, and speaking must be conquered in order to comprehend the language. Learning a second language is neither simple nor enjoyable endeavour, and students frequently run into difficulties. In many instances, language is only studied to pass exams instead of for its communication purpose or cultural diversity. Students may
encounter obstacles, such as a lack of interest and desire, which makes them reluctant to practise, when they learn a language for its practical value rather than for its enjoyment.

Researchers are looking for new teaching methods to meet the changing needs of students and learners learning a new language because the development of technologies has also changed the profiles and needs of learners (Turan & Akdag-Cimen, 2019). To overcome this, experiential learning has become more effective than passive learning methods such as reading and listening. Meaningful teaching and learning, with a focus on linguistics and communicative ability, are important to growing students' English proficiency in English language schools. Thus, teaching to master a non-primary language can really be a difficult task. Incorporating digital technology in education has proven to be a better method because learners prefer a more relaxing learning environment.

Digital education has become a crucial aspect of education in the current era. Today's learners are technologically immersed and see technology as an essential tool for learning (Turan & Akdag-Cimen, 2019). It is evident that advanced technology has many favourable impacts on learning in many ways. One such advancement is the use of gamification in school education. The digital way of gamified learning, also known as gamification, sets to be the contemporary trends in education. To create excitement for language learning, many language activities and games are used in digitalised lessons. Today's students are growing up in a world where technology is ever-present. In fact, many researchers predict that the millennial generation will be the last to not have grown up with computers and other technological advances as standard.

The terms “game”, “gamification”, and “game-based learning” (GBL) are all vastly used and related to one another. Due to their similarity, individuals often use them interchangeably and are unable to distinguish between them. These three names, however, serve slightly distinct purposes and have slightly different purposes (Al-Dosakee & Ozdamli, 2021). As such, it’s no surprise that digital learning has also become a popular trend in today’s classrooms. As technology continues to become an increasingly important part of our everyday lives, it’s imperative that we recognize how digital learning can be utilized as a learning tool for students of all ages. With the use of smartphones, mobile technology advancements are rapidly extending the range of learning in non-formal education regions by enabling universal and instance-oriented access to privileged digital resources (Cheon et al., 2012).

The academic study of gamification is still in its early stages, and much work needs to be done before the idea and its possibilities can be completely explored. Hence, in this paper, the pertinent literature on gamification in language learning is assessed and perused to better comprehend both the present situation and potential futures for the subject of gamified learning. This article also explored why gamification should be incorporated into school curriculums for language learning, and the benefits for learners based on the review of prior work and focused on the application of gamification components to improve learning on current online learning systems. These observations ought to aid practitioners in considering whether and how gamification features might be appropriate for their platforms, as well as researchers in identifying areas that call for more research. This initiative also seeks to raise awareness of the gamification elements' potential to motivate and increase people's interest in online learning and adapt to the fact that online education will be the future learning modality.

II. LITERATURE REVIEW

A. A Clear Understanding on Gamification

Gamification is a concept used in many different fields- from education to business- to motivate people to achieve desired goals. The concept has been around for decades, but the term only gained prominence in recent decades. The term “gamification” originally appeared in 2008, but it wasn't commonly used until 2010 (Huotari & Hamari, 2016). As the children's software and educational game sectors grew, gamification in education began to gain traction, as early as in the ’80s (Smith, 2014). The idea of utilising game mechanics in non-game situations to accomplish various goals while boosting user engagement and motivation gave rise to the gamification field, which began to take off in late 2010 (Chitroda, 2022). The concept of rewarding people for positive behaviour is not a novel one where business loyalty schemes like frequent flyer programmes, as well as badges and ranks, have long been employed in the military as rewards (Nelson, 2012).

Gamification has recently gained popularity in online learning and plays a tremendous role in education, especially after the Covid-19 pandemic. It has been utilised for a few decades to teach a variety of language acquisition topics through both digital and non-digital games. Game-based learning, often known as educational or serious games, can be distinguished in the context of education (Hansch, 2015). In the education scope, it is a form of social engineering that teachers can use to direct their own action plans. Games are fun and offer easily digestible lessons for language learning. In many developing countries, gamification is a relatively new practice that focuses on integrating game elements into non-game
environments to engage students, adding fun to routine tasks, and producing positive effects on motivation and cognition. A systematic review done in 2020 revealed that, in a non-gamified learning environment, using game elements can increase learners' interest and motivation to learn a new language. (Dehghanzadeh et al., 2020).

Games have become an excellent way to teach mental skills such as concentration and time management. People who play games regularly develop better problem-solving abilities and can even improve their performance in real-life challenges (Hansch, 2015). It's easy to get into a rhythm when playing games and feels less stressful than other forms of learning. This makes it much more effective at teaching mental skillsets. Language acquisition has been demonstrated to benefit from pedagogical strategies like the communicative method, which emphasises interaction, but incorporating game-based strategies has been found to increase learner motivation and engagement (Flores, 2015). Additionally, most games are universal and can be participated in by anyone regardless of age, nationality, or gender. It is easily accessible that anyone can benefit from using games for language learning, had they been given a chance.

B. Gamification and Edutainment

The concept of gamification has long been used in education as there are many ways that it can be used to improve learning. The term edutainment, according to Buckingham and Scanlon (2000), is a blended form of instruction that emphasises visual content, stories, or gamification components in a more relaxed, less didactic manner. Edutainment has many potential applications in an educational environment, from primary school through post-secondary institutions. It can help teachers improve current lesson plans as well as modify future assignments based on student interests or performance metrics. Edutainment aims to draw and retain learners' attention by engaging their feelings through a screen display of brightly coloured animations. The primary goal of edutainment is to capture students' attention using technological tools in the classroom (Buckingham & Scanlon, 2000).

Badges, leader boards, points and levels and progress tracking are the main components of gamification in edutainment. Badges are often described as a “validated indicator of an accomplishment, skill, quality or interest that can be earned in a variety of learning environment” (Grant, 2013). Leaderboards are commonly used to increase engagement in many games and game platforms (Jia et al., 2017). They are important game elements because they allow players to see their achievements (O’Donovan, 2012). In a gamified environment, points are also widely used. Points are regarded as an essential component of any gamified setting (Kiyancicek, 2022). Furthermore, Carr-Chillman (2015) emphasises that having points as a game element in a learning environment encourages learners' active participation. Furthermore, each gamified instruction includes progress tracking (Scepanovic et al., 2015). It can be used as a feedback tool in educational settings because learners and teachers can track each learner's and the entire group's progress.

It has been observed that the primary goal of using the gamification concept in the language education process is to increase students' motivation, engagement, and integration with the learning materials, instructions, and exercises, which are perceived as a less interesting task by some learners, particularly school students. Gamification is argued to be a more enjoyable, engaging, motivating, and successful way to learn a new language as a second language. This can be done through games, applications or other systems that create a challenge for the users (Hansch, 2015). Exposure to digital games and their surrounding environment has been shown to improve target language acquisition to the point where gamers, on average, have more target language vocabulary than non-gamers (Govender & Arnedo-Moreno, 2021).

Schools have utilised gamification to teach subjects and improve student grades. For instance, mathematic teachers will use game components like points, levels, rankings, and challenges to improve student achievement. The study of economics, geography, physics, and other academic disciplines can all be made more engaging using games. Additionally, administrators at schools adopt gamification to motivate students to attend class regularly and improve their grades. There are many potential applications for gamification in school education. A few examples include motivating students to complete assigned homework, improving classroom behaviour, and increasing student achievement. One example of a successful gamification program in school is the digital learning platform, Kahoot! is a web-based platform that allows participants to compete against each other in various challenges designed to promote learning. The platform generates leaderboard rankings for each student, and teachers can use Kahoot! to monitor student progress and provide feedback (Kiyancicek, 2022).

Language learning through games can take many various forms, such as board games to practise grammar like ‘Apples to Apples’ or role-playing games to practise communication such as ‘Werewolf’ (Govender & Arnedo-Moreno, 2021). Busu is a type of language learning platform. This application is proved to be useful in learning English (Dehghanzadeh et al., 2019). Another type of game-based platform is Second Life, where students practise target language by debating in (Govender & Arnedo-Moreno, 2021). In a systematic literature review it was found that gamification improved both the learning results and the
learning experiences for students (Dehghanzadeh et al., 2019). Students are motivated to perform well and earn good grades on their tasks in this way.

In summary, gamification adds gaming elements or game structure to existing learning activities, whereas game-based learning creates learning activities that are inherently playable. Most studies and applications on educational gamification are based on the idea that gamification in education primarily refers to the integration of a suitable number of game elements into the course materials. According to the evidence, gamification in the context of learning involves much more than simply adding game aspects to already-existing learning content (Dichev, 2017). The incorporation of technology in language classrooms has become unavoidable in order to assist students in maintaining their academic motivation. In other words, teachers have been encouraged to use interactive strategies and methods to promote language learning (Nafis, 2020).

This realisation has led teachers to advocate using technology in language learning. As a result, it has given rise to terms such as gamification (Baptista & Oliveira, 2019), edutainment and Mobile Assisted Language Learning (MALL), which is defined as language learning that involves the application of mobile devices and technology (Sutrisna et al., 2018). Another platform called Word Searches can be used to practice vocabulary, spelling, reading and language comprehension whilst Hidden Picture Puzzles can be used to practice vocabulary, visual recognition, logic, and problem-solving. Games like online Hangman can be used to practice vocabulary, spelling and language comprehension are engaging ways for students to learn a language in addition to that, memory games can be used to practice vocabulary, visual recognition, and language comprehension while Scavenger Hunts can be used to practice vocabulary, visual recognition, problem-solving, and communication (Bakla et al., 2015).

According to Michos (2017), gamification assists teachers in changing the mood in the language classroom. It also raises the learners' happiness level. It also creates a goal-oriented context in the classroom, encouraging students to actively take part in the lesson. Undoubtedly, it makes learning enjoyable for both the teachers and the students. Zarzycka-Piskorz (2016) emphasises the potential of gamified education to influence intrinsic motivation and claims that playing a game together in the classroom goes beyond traditional learning and directly increases motivation to learn a language. Apps like Duolingo, Babbel and other gamification platforms have introduced a whole new element of fun into language-learning programs (Shortt et al., 2021).

Gamification strategies are used in many languages learning games to increase retention of information longer than reading or listening alone. Giving points for completion or accurate responses at the end of each lesson is the most typical approach. This motivates pupils to remain concentrated on their work and rewards them for accomplishments. Students do not feel the pressure of competing with one another because it can be done anonymously. This promotes motivation, memory, and task-oriented behaviour in the classroom. Additionally, teachers and trainers are aware of students who are performing well and can reward them with extra work or bonuses. It can also help learners develop new skills, like critical thinking and problem-solving (Kiyancicek, 2022).

With recent implementations moving to digital platforms, research has discovered a wide range of benefits in addition to improvements in learning performance. These advantages include increased motivation to learn through meaningful learning experiences and creating an autotelic-conducive environment (Govender & Arnedo-Moreno, 2021). Ali et al. (2020) investigated to prove if language games can motivate adult learners to learn grammar. The study's findings indicate that language games are motivating for young learners and that games should be made mandatory for students in primary and secondary schools. It also recommends that teachers be trained on methods to incorporate games into the classroom setting.

C. Effectiveness of Gamification-Based Language Learning

Education is a process that continues way beyond an institution. People who want to continue learning have even more opportunities to do so now through emerging technologies. However, one major challenge facing learners of all ages is ways to make educational content more interesting and engaging. Gamification is becoming a popular solution for this issue because it uses game elements in non-game contexts to make them more enjoyable. Gamification makes boring activities like learning grammar or vocabulary much more fun by incorporating tactics from video games, such as points, leaderboards, challenges, rewards, and badges. Much research proved that trivial games are helpful in learning languages. For instance, a recent study offered some design principles for future gamified systems, concluded the advantages of gamification in education, and plotted out the progression of game element research across time. The paper also discussed gamification's evolution and application in education and its effects on education (Ofosu-Ampong, 2020).

An online language game is a motivating tool for improving language and grammar learning. Learners benefit from having a positive attitude toward learning because they achieve better results (Hashim et al., 2019). Games have revolutionized the way people interact with the world. Technology has also made
hobbies and education much more accessible. New technologies, apps, and programs are constantly being developed to make learning easier, more engaging, and more accessible. Learning new languages has never been easier or more accessible. There’s no one perfect game that will work for every language learning environment. Instead, teachers and language instructors can tailor their game selection to the skills they are trying to teach, the ages and skill levels of the students, the time available, the culture of the classroom and the technology that is available (Nah et al., 2013).

Gamification has used a variety of components to boost user engagement. A recent study focused on finding game design principles that have been used to gamify education as well as the influence on learner outcomes given the potential of gamification of education (Nah et al., 2014). An experiment was carried out by Brewer et al. (2013) to determine how gamification affected students. The authors added a scoring system and a prize system to the experimental tasks to combat the issue of lack of motivation. The outcome showed that the gamified systems boosted the task completion rate from 73% to 97%. Gamification as a result increased students’ motivation to complete tasks. According to Gibson et al. (2013), a badge is a potent tool for organising competitions and indicating objective completion, success, and status when combined with points and leaderboards. Additionally, the study suggested that rewards encourage students to work harder and spend more time learning to improve their performance.

In a recent systematic literature review that aimed to understand patterns in MALL to learn the English language through mobile or gamified applications, it was proposed that gamified learning applications may be designed for primary-grade students to make language learning more enjoyable, entertaining, attractive, and engaging them in order to achieve high learning outcomes effectively (Ishaq et al., 2021). According to Raymer (2011), there are several strategies that can be used to improve learner engagement, including frequent feedback, assessing progress, granting character improvements, rewarding effort, and using peers as a source of encouragement. Participants benefit more from online language games, which are also a technology-based learning tool. Many students can improve their grammar with the help of online language games because they promote 21st-century learning. According to Hashim et al (2019), the achievement of students unexpectedly increased, in terms of vocabulary acquisition through gamified learning.

D. Designing and Implementing Gamification-Based Language Learning in Schools

Students today are digital natives who grew up with the internet and smartphones. This digital fluency has led to a culture of screen time, where digital activities are their primary pastime outside of school. As a result, Millennials and GenZers now have less proficiency in non-digital subjects like reading, writing, and arithmetic. Gamification is growing in popularity as educational revenues see the potential for this technology. However, there are various issues on how gamified learning is implemented in language learning sessions and the components that support students' meaningful English learning (Yaccob et al., 2022). Hence, it’s important that gamification is incorporated into school curriculums for language learning. When used correctly, gamification can increase learner engagement and retention while also reducing dropout rates among students.

Given the difficulties in learning a language, game-based methods have successfully overcome several obstacles. Some designed games allow educators to focus on language to enhance vocabulary, communication or writing. Additionally, it detects students with a similar level of language proficiency and allows them to pair up so that they can support each other. Most professional gamifications may offer online classroom culture that values collaboration, patience and progress over perfection. Interactive options like ‘nudging’ keys help to prompt students to act, such as logging into the language learning platform, posting on a discussion board, or completing an assignment (Yaccob et al., 2022).

Game-based learning platforms can also be implemented through scaffolding exercises that gradually increase in complexity so that students can practice new skills and build confidence. Furthermore, gamification designs through project-based lessons are also valuable in reviewing previous lessons. These assignments encourage students to revisit old lessons and apply what they've learned to real-world scenarios. Additionally, teachers too can easily assess if their students are applying what they have learned in class. It also encourages students to remain engaged during the lesson since they would have a personal stake in completing the assignment. In addition, there's evidence that gamification makes lessons more memorable for students since it creates an engaging learning environment that increases students' concentration levels (Hew, 2015).

Another way that teachers use games in the classroom is by making learning concepts easier and more fun. For example, English as a Second Language (ESL) classes often use word games or 'text chat' assignments during which students practice speaking English aloud. Gamified tests mirror state exams by including questions about past lessons and asking about areas of interest within each topic area. Teachers then tailor each question depending on the student's progress thus making exams more fun for both students and teachers alike (Yaccob et al., 2022). Teachers must ensure that the gamification experience's design does not negatively impact students' participation due to social, cultural, or physical factors. To incorporate gaming features into such gamified e-learning systems, educators in some situations may decide to design
their own gaming components. The goal of the educational strategy known as "gamification of learning" is to encourage pupils to learn by incorporating elements of gaming designs into classroom settings.

The potential of gamification in a learning setting must be fully realised and it must be effectively integrated, which calls for thorough instructional design based on specific goals (Hansch, 2015). Given that student performance depends on motivation, encouraging students' motivation may be one of the most crucial things educators can do to enhance learning (Dichev, 2020). The major objective of gamification in education, which is still relatively new, is to increase student engagement. It has primarily been used in the fields of higher education and training, across a wide range of subjects (Caponetto et al., 2014). According to Dichev (2020), "gamification of learning can be defined as the use of game design elements in learning environment to increase learner engagement."

Gamification gives learners the opportunity to grow and feel successful by allowing them to set and understand their goals, motivate them to advance through the subject, redefine failure, and deliver real-time and realistic feedback (Dichev, 2020). Online language games is the potential to improve ESL learners' grammar. Because of the effectiveness of its integration into teaching and learning activities within pedagogical contexts, gamification is regarded as a valid didactic method with the potential to be used in combination with several technologies and other learning methods and approaches. However, the concept still struggles with a lack of empirical data on its effectiveness and best practices for design and implementation in addition to the term's different interpretations (Seaborn & Fels, 2014), especially in developing countries.

III. CONCLUSION

Gamification is a technique that uses game design elements to motivate and encourage learners to participate in specific learning activities. Gamification has the potential to improve motivation, engagement, and learning outcomes for language learners of all ages and skill levels. To reap these benefits, language instructors should incorporate game elements, such as competition and rewards, into their classrooms and curriculums. There are many great games that can be used for language learning and can be tailored accordingly for the desired outcome. Finally, although it is not a novel idea, game-based learning has attracted a decent bit of attention in recent years. Whatever approach is taken, it is undeniable that engagement is the key to a game-based language learning system's effectiveness.

The use of gamification in education is currently widespread and shows great promise. Teachers utilize it to enhance English proficiency levels among their students. As a known fact, it can promote a sense of achievement that makes language learning feel more rewarding. As the learning process becomes more engaging and enjoyable, it is beneficial for learners who are new to language study. Moreover, it essentially reduces the feeling of being overwhelmed that many learners experience when they are just starting out. Despite motivating reluctant learners to take action by setting concrete achievable goals. Nonetheless, although many studies have been conducted about gamification in relation to language teaching and learning, there is no comprehensive overview of using gamification to teach and learn new languages. Gamification is still at a relatively early stage of maturation as an academic field. As a future directive, mobile language learning should be explored owing to the accessibility and omnipresence of smartphones, as well as recent advancements in mobile applications and gamification in training and education. Furthermore, it is essential to recommend that there be a focus on how gamification can help with new language education in primary schools and how it can help with new language education for learners with special needs. The idea of game-based learning has attracted both praise and criticism, it is difficult to determine whether gamification is effective or if there are any more negative implications associated with using it in educational settings. To fully investigate the idea and its possibilities, further research must be carried out in the near future.

CONFLICT OF INTEREST

The author affirms that there are no conflicts of interest.

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