

The Effectiveness of Gamification In Teaching and Learning English as a Second Language

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Abstract

Employing digital or non-digital game elements in the learning environment to boost students' engagement and participation is very important to achieve specific and specified learning objectives. In a world where technology is touching nearly every element of life, gamification or game-based learning has supported learning skills, and provided opportunities for students to learn and practice soft skills through teamwork within games. One of the main challenges in the English language classroom is the lack of active participation from all students due to fear of making mistakes, shyness, and anxiety. They lack confidence and are afraid to speak the language which can impede the learning objective. Most of the time only the same group of students will contribute to the activities carried out in the classroom. This paper aimed to evaluate the effectiveness of gamification in enhancing students' learning interest, motivation, and engagement in learning English as a Second Language (ESL). An intervention was carried out among Form 4 students from 2 classes (in total of 40 students). Gamification applications such as Class Dojo and Genially were used in the English language lesson. The primary purpose of integrating game-based learning is to give students a different learning experience. It helps to make students motivated during the lesson, enhancing friendly competition among peers and promoting a fun way of learning. After the teaching sessions, students were given a questionnaire to find out their perception of how gamification influences their learning behavior during the ESL lesson. The feedback indicated that gamification has a positive effect on the students, and it can significantly increase their learning interest, motivation, and engagement levels, leading to improved learning outcomes in the English language. In addition, they felt that this new technique of learning was interesting, innovative, and enjoyable, hence enhancing their learning interest in the subject. This shows that gamification can be an effective way to stimulate ESL learners in increasing students' learning interest, motivation, and engagement in the classroom.

Keywords: Gamification; second language; game-based learning, teaching, learning

Introduction

As 21st-century learning skills continued to be an important aspect in the field of education, gamification provided an opportunity for teachers to create lessons with critical thinking, creativity, collaboration, and communication (Retherford, 2020). It includes the basic elements of games thus, it has multiple forms, however in the classroom it has certain rules; it involves the use of keeping scores, challenges, rewards, digital games, ranking, and levels (Angelova, 2017). Through games, students can be motivated, emotionally positive, and independent (Rahmani, 2020). Gamification is more digital than non-digital, but the most important principle of gamification is student involvement and participation (Maloney, 2019).

In gamification, students are fully involved and become actors in their learning. This is possible because, in the game, all students can play their part and contribute to the activity. The game is designed to illustrate the world in its principles

so that students can also learn how to make decisions and solve problems. Although language learning is not a game category, gamification is believed to effectively achieve language learning targets (Burlian et al., 2019).

Many students lack the necessary motivation and encouragement to study and enjoy the learning process especially when it comes to the English language. The problem is a lack of motivation in education especially in learning and teaching the English language (Altun & Yassin, 2022). Many students lose their motivation on the learning topic even if they had potential in the beginning, yet students tend to be distracted during classes. At the same time, teachers might try to adapt new methods to make the lesson inclusive and interesting to everyone and achieve the anticipated outcome. Nevertheless, this is not an easy job and not every teacher can do so.

Over the past few years, various changes have emerged in the methods of teaching a second language. These changes happened to create a fun and engaging learning environment (Ibharim et al., 2015). Students in this digital era who are increasingly exposed to various computer technologies and software, gadgets, and portable tools require gamified learning approaches that allow them to be actively involved in a learning environment that can provide fun, meaningful as well as enhance their language skills in line with the 21st-century learning environment. Hence, adding gamification can make the learning and teaching process satisfy the students' expectations.

Students tend to adapt better when it comes to game-based learning activities that enable them to learn their concepts. The significance of gamification is the increase in the attentiveness (i.e. learning interest) of the students which resulted in clear and better learning outcomes (Altun & Yassin, 2022).

In addition, a study by Chans and Castro (2021) reveals that gamification increased student motivation and engagement, improved attitudes, and improved student grades. It boosted students' confidence and created a motivated atmosphere where students were curious to learn and engage with each other during classes. At the same time, teachers found it easier to deliver their material. The study closely relates to the emotional aspect of the experience, where students felt more enjoyment and excitement towards the learning process which encouraged their effort in the course (Chans & Castro, 2021). Therefore, this study will look into the effectiveness of gamification in teaching and learning English as a second language by focusing on the student's learning interest, motivation, and engagement.

Literature Review

Gamification

The purpose of gamification is to engage people, motivate action, promote learning, and solve problems (Kapp, 2012). Gamification can increase clarity for students as they adapt better to the process of learning. It also improves self-learning skills and prepares students for their careers (Altun & Yassin, 2022). In other words, gamification can be defined as a methodological strategy that uses game design elements in non-game contexts (Deterding et al., 2011). Other educational approaches use playful components but are different from gamification, such as game-based learning or serious games. All kinds of games (online and digital video games, table games, outdoor games, and others) or educational games are used to achieve a learning goal. Although the overwhelming majority of current examples of gamification are digital, the term should not be limited to digital technology (Deterding et al., 2011).

Gamification can be understood as an effort to apply the principles and components of the game into a non-game context, which in this case, is the teaching and learning process that usually takes place formally. This is intended to strengthen the practice and effectiveness of learning and relate it to real-life experiences (Burlian et al., 2019). Real-world illustrative creativity causes gamification to be known as one of the innovative approaches in the teaching and learning process (Hernández-Prados et al., 2021).

Initially, gamification was based on game mechanics that prioritized aesthetics and reasoning but did not eliminate the recreational aspect (Burlian et al., 2019). Practically, students do not need to use textbooks all the time. It is more important how students can be involved in exploring their potential to develop into trained competencies because they are engrossed in exploring their learning resources (Maloney, 2019).

Learning Interest

In education, students' learning interest refers to the inclination of the students towards a particular subject where students are easily able to connect without any barrier. When a student has an interest in something it becomes easy and even enjoyable to learn about that topic. A high interest in learning will affect the process of successful teaching and learning activities, especially in language subjects (Triarisanti, 2019). Therefore, it is important to know how gamification affects the students' learning interest in ESL.

Motivation

Motivation is one of the most important aspects of learning the English language. Motivation is regarded as an important component of making students want to do well in their English learning. One of the strategies to motivate students in the English classroom is to include a fun and exciting learning experience through gamification (Hayikaleng, Nair & Krishnasamy, 2016).

Engagement

An effective learning environment requires engagement. One crucial factor associated with students' poor language performance is their disengagement in classroom activities (Mekki, Ismail & Hamdan, 2022). An important effect of gamification is that the application engages the students in the learning material. Gamification includes the elements of points and a reward system that makes students want to do well in the activities carried out during the lesson. It enhances their focus and they will be more connected with the subject.

Integrating Gamification in the English Language Classroom

One significant challenge faced by English teachers is to keep their students engaged and interested in the learning activities. The majority of the students refuse to be involved in the activities due to shyness, fear of making mistakes, and low self-confidence. A study by Kamiluddin (2019) noted that numerous studies were carried out in the past, revealing that ESL students were more likely to achieve better improvement in learning the language when they were well-motivated, and their learning preferences were accommodated proportionally. Mufidah (2016) indicated that digital game-based learning, would reduce foreign language learning anxiety among students and promote better grammar achievement.

In this study, gamification is being used to enhance ESL learners' positive attitudes in the classroom toward learning English. The students need to have an interest in the subject and motivation to participate in the classroom. In addition, the lesson must be engaging enough for students to stay focused throughout the lesson which enhances their understanding of the subject matter. Teachers need to create a learning environment where students feel more comfortable and willing to participate in the learning tasks without much stress and anxiety.

Gamification has been used by teachers, including Malaysian English teachers has shown positive effects in enhancing the teachers' teaching pedagogies to increase students' motivation and interest in learning English (Qing & Halim, 2021). Gamification is an innovative approach to education that is continuously emerging. Since the pandemic, English teachers have been exposed to many digital applications that can be used in their teaching and learning. Some of the most popular tools that are widely used among teachers are *Kahoot*, *Quizizz*, *Quizlet*, and *Wordwall*.

ClassDojo

ClassDojo refers to an online, gamification tool available for teachers. It is utilized to encourage and monitor students' engagement, participation, behavior, helpfulness, and teamwork (Brown, 2021). This application awards students with virtual points when they perform positive behavior during the class based on certain task achievements. Every student will be assigned one avatar that they can customize however they like. The tool allows teachers to create a fun learning environment, motivating the students through rewards and points. Teachers can even create their own tasks and criteria that they feel applicable. Collaborative activities can also be enhanced through ClassDojo by rewarding points for any group work assignments.

Genially

Genially is an online tool where teachers can create their own gamified activities and teaching materials. It is like creating a slide show but with interactive elements, allowing students to interact with the content and helping them to be more engaged in the topic. Rather than flipping through a slide show, students can explore it in more detail, so they are actively learning more excitingly as they progress through the materials. One interesting element that Genially offers is to creation of gamified interactive materials called 'Escape Games' where students need to solve certain quizzes, puzzles, or challenges before moving to the next slide. These games would promote teamwork and collaboration. Students are more comfortable in these gamification settings and are open to making mistakes, which leads them to want to try again (Boyd, 2022).

Research Method and Design

A methodology aids in the creation of a plan to carry out all necessary actions to obtain the data, enabling the researchers to achieve the desired results in this academic study. Additionally, it gives a view to the researchers of which method to use that would be the most applicable one (Indeed, 2021). For example, one of the most useful ways to reach reliable qualitative data and to support the topic is taking surveys through questionnaires. Questionnaire surveys are a technique for gathering statistical information about the attributes, attitudes, or actions of a population by a structured set of questions. Feedback from the questionnaires given to students is pertinent to this paper. For this reason, a questionnaire survey was carried out with specific questions that helped in proving the premise of the paper. The questionnaire was sent to students in a secondary school in Ipoh, Perak (Raja Chulan Secondary School or *Sekolah Menengah Kebangsaan Raja Chulan*). About 40 students responded to the 15 questions that were posed to them. The questions given are related to students' learning interests, motivation, and engagement in gamification applications such as *ClassDojo* and *Genially* that were used in the English language lesson.

Research Participants

The participants or population who participated in this research were 40 Form Four students from *Sekolah Menengah Kebangsaan Raja Chulan, Ipoh*; from two classes - Form Four Science and Form Four Reka Cipta. They were selected because of their involvement in using gamification applications such as *ClassDojo* and *Genially* in the English language lesson by their teacher.

Data Collection and Instrument

The data collection instrument that was used in this research was very practical and time-saving. For any research to be academic and not biased the way the data are collected makes a difference. For this paper, a questionnaire survey was made consisting of fifteen questions and distributed among students with hardcopy forms which is very useful while collecting data, and it was sent to the students in their respective classrooms.

Findings and Discussion

In this study, the effectiveness of gamification in teaching and learning ESL was analyzed along three dimensions: 1) learning interest, 2) motivation, and 3) engagement. Among the 40 students participating in this study, 22 are males and 18 females, with the age of 16 years old. For each of these dimensions, participants indicated their agreement or disagreement on a 4-point Likert scale ("strongly disagree", "disagree", "agree", "strongly agree") to several related descriptors. The results for each dimension are discussed in detail.

The response of students is summarized in Table 1. Based on the results, it appears that the majority of the students feel that gamification has positive impact on their learning interest, motivation, and engagement.

Table 1: Summarized result of the questionnaire

Questionnaire Items		Strongly disagree		Disagree		Agree		Strongly Agree	
		Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
Learning Interest									
L1	Gamification increases my interest in learning English	0	0	0	0	12	30	28	70
L2	I enjoy the English lesson with gamification	0	0	0	0	10	25	30	75
L3	I always look forward to my English class	0	0	0	0	10	25	30	75
L4	Gamification helps improve my learning performance	0	0	0	0	15	37.5	25	62.5
L5	Gamification increases my curiosity to explore the subject	0	0	0	0	10	25	30	75
Motivation									

M1	I feel motivated to share my answers when using gamification	0	0	1	2.5	15	37.5	24	60
M2	Gamification encourages me to participate actively in class	0	0	1	2.5	19	47.5	20	50
M3	Gamification makes me want to improve my English language proficiency	0	0	0	0	19	47.5	21	52.5
M4	Gamification makes me feel more optimistic towards the subject	0	0	3	7.5	18	45	19	47.5
M5	Gamification makes me want to finish my homework on time	0	0	0	0	21	52.5	19	47.5
Engagement									
E1	I feel the lesson time passes quickly when using gamification in the classroom	0	0	0	0	10	25	30	75
E2	The reward and point system keeps me engaged throughout the lesson	0	0	0	0	12	30	28	70
E3	I connect well with my peers and teacher during the activities conducted	0	0	1	2.5	16	40	23	57.5
E4	I give absolute focus during the lesson when using gamification	0	0	0	0	21	52.5	19	47.5
E5	Using gamification enhances my desire to do well in the activities	0	0	0	0	15	37.5	25	62.5

Table 1 shows the results of students' feedback towards the three dimensions being studied for this research which is learning interest, motivation and engagement. The table summarizing the results of a questionnaire on learning interest, particularly focusing on the impact of gamification in learning English. The majority of respondents "agree" or "strongly agree" that gamification increases interest, enjoyment, and performance in learning English. From the data above, it can be concluded that gamification has a positive impact towards all the students' behaviour elements due to the percentage of "strongly agree" and "agree" higher than the percentage of "disagree" and "strongly disagree".

From the above results, for the element of students' learning interest, 62.5% to 75% of the respondents answered "strongly agree" to question item L1 – L5, while 25% to 37.5% answered "agree" for the same questions. This shows that all the respondents felt that gamified learning activity sparks their interest in the subject. They also agreed gamification makes the lesson more enjoyable, enhances their curiosity and improves their learning.

Furthermore, the results on students' motivation indicated that 47.5% to 60% of respondents "strongly agree" that gamification motivates them to participate in class and makes them want to do well in the subject. Majority respondents also agreed (37.5% to 52.5%) that gamification makes them feel more optimistic towards the subject and motivates them to improve their proficiency in the language. Only four respondents (2.5% to 7.5%) "disagree" with the descriptors given (M1, M2 & M4).

In respect of the students' engagement, the results revealed that 47.5% to 75% of students "strongly agree", while 25% to 52.5% "agree" that using gamification in the English language classroom improves students' engagement and sustains their focus throughout the lesson. They also felt that gamification connects them with peers and teachers in the classroom. Only one respondent (2.5%) said otherwise for descriptor E3.

Therefore, the results revealed that the implementation of gamification has substantial influence on students' positive attitude towards English language lesson in the aspects of students' learning interest, motivation and engagement.

Conclusion

The purpose of this research is to show the intervention of other gamification applications for education to be used in the English classroom environment. The tools chosen are *Class Dojo* and *Genially*, which aims to stimulate students' interest, motivation and engagement within the subject. Even if these applications are not widely used among Malaysian teachers, this study is essential in giving researchers a platform to evaluate how well these two teaching methods work for all students when it comes to teaching and learning ESL.

The results indicated that using gamification in the classroom can be an effective way in teaching and learning especially in the subject of English due to its' positive outcome to stimulate learners in increasing their learning interest, motivation and engagement. However, it should be noted that these findings are based on the implementation of only two gamification tools in the ESL classroom. Furthermore, this research is only focusing on 40 Form Four students from one secondary school in Ipoh, Perak, thus future studies can be made to involve a larger target group from other schools with different

background in order to compare the effectiveness of gamification in teaching and learning ESL.

It is recommended that further research is needed to discover other gamification tools that can help in improving the learning process of students. Other studies should also investigate the new mechanics and new applications associated with emerging gamification technologies such as artificial intelligence (AI) that can help improve students' learning behaviour specifically in the field of language learning.

References

- Altun, & Kamaran Yassin. (2022). The impact of using gamification in teaching and learning English. *International Journal of Social Sciences & Educational Studies*, 9(2), 291–297.
- Angelova, N. (2017). Gamification in education. *Academia*, 6.
- Boyd. (2022). A Tech Tool to Engage World Language Students. Edutopia. Retrieved May 30, 2023, from <https://www.edutopia.org/article/genially-app-world-language-students/>
- Brown, A. W. (2021). ClassDojo and the Effects of Gamification on Student Engagement Within the Third-Grade Art Classroom: An Action Research Study. (Doctoral dissertation). Retrieved from <https://scholarcommons.sc.edu/etd/6642>
- Burlian, T. D., Sharmila, P., Alavesa, P., & Arhippainen, L. (2019). Revitalizing Viena Karelian dialect and culture with gamification. *Proceedings of the 3rd International GamiFIN Conference, Levi, Finland*, 277–288.
- Chans, Guillermo., Castro, M. (2021). Gamification as a strategy to increase motivation and engagement in higher education chemistry students. *Computers*, 24.
- Deterding, Dixon, Khaled, & Nacke. (2011). From Game Design Elements to Gamefulness: Defining “Gamification.” *MindTrek '11: Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments*, 9–15.
- Hayikaleng, Madhawa Nair, & Krishnasamy, N. (2016). Thai students' motivation on english reading comprehension. *International Journal of Education and Research*, 4(6), 477–486.
- Hernández-Prados, Á., Belmonte, L., & Manzanares-Ruiz, J. C. (2021). How to run your own online business: A gamification experience in ESL. *Education Sciences*, 11(11), 697-711.
- Ibharim, L. F. M., Yatim, M. H. M., & Masran, M. N. (2015). Menerokai kemahiran abad ke-21 kanak-kanak dalam proses reka bentuk permainan penceritaan digital. *Journal of Science, Mathematics and Technology*, 2(1), 82–96.
- Indeed. (2021). What is research methodology and why is it important? *Indeed Career Guide*, 9 Dec. 2021.
- Kamiluddin, U. (2019). Motivation and learning style: do they correlate with language proficiency? *ELT Echo: The Journal of English Language Teaching in Foreign Language Context*. 4.1. 10.24235/eltecho.v4i1.4218.
- Kapp, K. M. (2012). *The gamification of learning and instruction: case-based methods and strategies for training and education*. Pfeiffer: An Imprint of John Wiley & Sons.
- Mahmoud Mekki, Mahmoud Ismail, & Mohammed Hamdan. (2022). Student Engagement in English Language Classes: An Evaluative Study. *Sohag University International Journal of Educational Research*, 6(6), 15–52. Retrieved May 29, 2023, from https://suijer.journals.ekb.eg/article_253735.html
- Maloney, S. (2019). Gamification in English language teaching: more than child's play. *English for Asia*. Retrieved from <https://hongkongtesol.com/blog/gamification-english-language-teaching-more-childs-play>
- Mufidah, N. (2016). *The Effect of Gamification on English Language Anxiety and Grammar Achievement*. [Master's thesis, Widya Mandala Catholic University Surabaya]. Widya Mandala Catholic University Surabaya.
- Qing, & Abdul Halim. (2021). Teacher's Application Of Gamification In Teaching English Online In Malaysian Secondary Schools. *International Journal of Education and Pedagogy (IJEAP)*. 3(4), 120-130. Retrieved May 29, 2023, from <http://myjms.mohe.gov.my/index.php/ijeap>
- Rahmani, E. F. (2020). The benefits of gamification in the English learning context. *Indonesian Journal of English Education*, 7(1), 32–47.
- Retherford (2020). *The Effects of Gamification on English Language Learners' Motivation and Vocabulary Growth* (Publication No. 27993175) [Master's Thesis, Graduate College of Southeast Missouri State University]. Published by ProQuest LLC.
- Triarisanti, R., & Purnawarman, P. (2019). The influence of interest and motivation on college student's language and art appreciation learning outcomes. *International Journal of Education*, 11(2), 130-135. Doi: 10.17509/ije.v1.14745.