The Impacts of Gamification on Student Engagement and Learning outcomes in Literature in Education: A Literature Review

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Abstract
Gamification refers to the use of game-like components in classrooms to attain students' attention and provide an engaging learning environment. Previous studies have shown that there are apparent reports on the ineffectiveness of taught literature lessons, calling for the need to have more engaging and student-centered methods such as gamification to improve student engagement and learning outcomes in schools. This review is based on the need to investigate gamification as a teaching approach to teach literature in education (LiE) in a more effective and engaging manner, in order to inform educators and policymakers on best practices for enhancing the teaching of LiE. This paper aims to study the impact of gamification on student engagement and learning outcomes, particularly in the context of Literature in Education It analyzes 36 past studies which investigated the integration of gamification in LiE, specifically focusing on its impact on learning outcomes and student engagement where four phases were administered: identification, screening, eligibility and inclusion. The papers were carefully reviewed to ensure they contributed to a comprehensive and deeper understanding of the impact of gamification on student engagement and learning outcomes in LiE. The review of past studies contributed to a greater understanding of the impact of gamification and was needed to assess the effectiveness of using gamification in LiE. In addition, previous studies and data pertaining to challenges of LiE, students' and teachers' perceptions towards gamification as a teaching approach in LiE were included. The findings suggests gamification to be a promising and creative tactic to boost student engagement, involvement and improve learning outcomes.
Keywords: Gamification, Literature in Education, Learning Outcome, Malaysian Schools, Student Engagement

Introduction

English is recognized as a second language in Malaysia under the National Language Policy (Article 152, Federal Constitution). English is also one of the fastest spreading languages in history. Renganathan asserted in 2013 that English has the potential to improve the quality of life for the people, particularly in developing countries like Malaysia. Following its independence, which was achieved from Britain in 1957, Malaysia has gone through many big transformations across various sectors, especially with some significant revisions in educational policies.

As a part of the changes, English was made compulsory for all the Malaysian students as stated in the Course of Studies Regulations 1956II. Findings from a study conducted by Pillay in 2005 revealed that those from higher socioeconomic status groups tend to have better English proficiency since they practice the language at home and are more exposed to it. The findings also showed a significant differences between the English language proficiency between students in rural and urban schools. It was found that students from lower socioeconomic background were less exposed to English language. As a result, they faced various challenges in terms of understanding and using English language resulting in lower achievements in English exams.

In response to the issues of language proficiency being the obstacle for the achievements in the English language, the introduction of the literature component in the English curriculum in 2000 signifies a strategic move to improve language skills (Yahya 2017). Moreover, McKay (1982) claims that literature has exceptional ability to present language in real-time discourse, directly raising students' awareness and appreciation of language. In 2022, Sharna highlighted the critical role of literature in mitigating poor English language proficiency and achievement. The learning of literature was found to improve students' vocabulary growth as the students are exposed to various genres of text and read texts with a more complex language. This highlights the role of literature in facilitating students in the acquisition of a broader language through diverse literary works.

Within the Malaysian school system,several past studies in Malaysia have focused on the instruction and acquisition of literature components. Although literature has been included in the Malaysian English language curriculum for more than a decade, there are numerous critical challenges that come with the teaching and learning of literature in Malaysian schools.

In 2011, a study conducted by the Ministry of Education (MoE) revealed that only 50% of literature lessons were taught effectively to the students. In addition, a study conducted by Subban in 2006 claimed that traditional teaching methods may fall short in meeting the varied learning needs of students and fostering genuine interest in literature. In 2008, Nasharudin and Nadia have claimed that students lack of interest in learning literature might be due to the teachers' approaches used to teach literature. This findings highlight an urgent need to investigate approaches that are more student-centered and interactive to cater to the learning needs and goals of the 21st century students.

These previous studies and challenges highlight an urgent need to investigate approaches that are more student-centered and interactive such as gamification, to improve student engagement and learning outcomes of LiE in Malaysian schools. This paper also seeks to

close the gaps stated previously by addressing two research questions: (1) How does the implementation of gamification in LiE impact students' engagement levels in Malaysian school setting?, and (2) What is the effect of gamification on the learning outcomes of Malaysian students in LiE?. The objective of this study, which is to study the impact of gamification on student engagement and learning outcomes, particularly in the context of Literature in Education was met by reviewing past and recent studies pertaining to the topic of this study.

Methodology

This literature review adopts a systematic approach to assess the impacts of gamifications on student engagement and learning outcomes. Through this approach, two important databases were employed. The Education Resources Information Centre (ERIC) and Google Scholar were used to gather the relevant data. Queries such as "The Impact of Gamification on Students' Engagement", "The Use of Gamification in Literature in Education", "Effectiveness of Gamification", "Gamification as a Teaching Approach to Teach Literature"and "Gamification and Students Learning Outcomes" were formulated for the search of relevant papers. The search queries were formulated that way in order to have a comprehensive understanding on the impact of gamification on both student engagement and learning outcomes. English articles were chosen, and the search was narrowed down to articles spanning from 2013 to 2023. However, some earlier research from 2006 to 2009 were considered to provide some insights into Malaysian prior education policies.

There were several selection criteria involved in the search of relevant papers. The selection criteria includes the paper's capacity in offering the needed insights on the use of gamification as an approach to teach literature, relevance to the research topic, papers spanning from 2016 to 2023 and some earlier research from 2006 to 2009 were considered to provide insights on Malaysia's prior education policies. A collection of seventy papers were found after a thorough screening procedure was put in place from the two major databases used for this study.

Then the abstracts, keywords, and content were thoroughly analysed. As a result, thirty six papers were ultimately chosen. These thirty six papers were accurate, relevant and contain the information needed. The systematic and organized method involved in choosing the papers for this study guarantees a solid basis for the literature review. This helps in addressing the specific requirements and objectives of the study.

Literature Review Findings

After examining the research questions, three areas of concern were identified pertaining to the investigation on the impact of gamification on both student engagement and learning outcomes. The literature findings effectively address the research questions by providing comprehensive insights pertaining to the topic of the research.

Impact of Gamification on Learning Outcomes in LIE

Gamification refers to the use of game mechanics in non-gaming contexts (Deterding 2011). Gamification can serve as a tool to attain students' attention and provide an engaging learning environment as it fosters a dynamic experience for students by offering a new and innovative way of teaching short tales, poetry and other literary pieces. Gamification is an innovative method that is able to make the literature learning experiences to be more engaging, interesting and interactive.

A recent study conducted by Izzatul and Affifah in (2023) found that combining e-books with video games can be a great strategy to enable the successful delivery of both educational and entertaining components in educational settings. The findings of this study highlight the positive impact of gamification on student engagement and learning outcomes. Based on the findings, the integration of gamification by combining e-books and video games proved to be a great way to engage students, enhance students' level of reading and their understanding of the texts. Another study conducted by Sin and Said in (2020) highlights the integration of gamification into teaching and learning process as a means to improve students' interest and provide students with a more enjoyable learning experience, particularly in the context of learning English which eventually contributes to better learning outcomes.

Teachers' perspectives gathered in a study conducted by Omar and Yunus in (2020) proves the role of gamification in improving students' learning outcomes and language achievement. The study was aimed at improving the language proficiency of students in six schools through a play-based and task-based strategy by focusing on English Language Teaching Center (ELTC) Outreach activities. Throughout the activity, a higher level of participation was observed among the students by the teachers and the students thoroughly enjoyed the gamified activities designed for literature learning. Post activity, the teachers expressed that gamified lessons proved to be better approach to engage students. The teachers have expressed that gamified lessons are more effective and engaging compared to the traditional teaching methods. The positive feedback by the teachers that involved in the study conducted by Omar and Yunus in (2020) serve as evidence that gamified literature lessons successfully established an enjoyable learning environment for the students, encouraging them to engage in learning activities.

Additionally, the findings of a study conducted by Motholib in (2023) suggest that gamification can be a motivational tool for students to achieve academically which directly contributes to a better attainment of learning outcome particularly writing abilities with potential application in literature lessons like writing poetry and short stories. This shows that gamification has a positive impact on writing skills and the integration of gamification makes the lessons that involve writing skills to be easier and more enjoyable for students to master writing skills. This was made evident through the findings of a study conducted by (Motholib et al in 2023). Although the study emphasized on Arabic writing, the researchers asserted that the integration of gamification in lessons that involve writing skills support the growth of writing abilities in social setting as the goals and interest of students are taken into account. Moreover, another study conducted showed that it is evident that gamification has positive impact on students learning experiences, particularly in literature classes. The use of gamification is also an innovative approach which is more in line with the preferences of 21st-century learners (Saad et al. 2002). The findings of a study that explored the impact of gamification on students' interest to engage with diverse literary texts conducted by Saad et al. in (2002) has found that gamification is a great way to encourage students to engage with diverse literary texts, particularly short stories from various genres and cultures. The finding of this study further suggested that students prefer taking part in gamified lessons and attain their learning goals through gamification in lessons.

Gamification was found to have positive impact on students' motivation level to learn (Sari 2020). The researcher conducted a study in 2020 to determine the impact of gamification, using local stories as a teaching medium. The findings revealed a positive impact of gamification on students' learning as it helped to improve the acquisition of vocabulary. As result, the students appeared to be more confident in voicing out their views and opinions.

According to Nurtanto et al. (2021), gamification emphasizes on experiential learning to create a more conducive, meaningful and enjoyable environment. The importance of a conducive environment could be seen through the findings of Sari's study in 2020 in which gamification proved to reduce boredom that resulted in more sustained focus and active engagement by the students throughout the lessons. As a result, the attainment of learning outcomes was enhanced.

According to Nurtanto et al (2021), gamification can serve as a great tool to eliminate boredom and the issues of disinterest to learn among the students.Acknowledged for its effectiveness, gamification influences students' subject matter knowledge and cultivates positive attitudes towards lifelong learning. Fundamentally, gamification functions as a transformative method, influencing student behavior through engaging them actively in many forms of gamified activities, competitions within the broader concept of game-based learning to achieve educational objectives (Nurtanto et al. 2021).

Although the existing studies on the use and effectiveness of gamification in education, particularly in literature, remain limited, there are a few proposed studies to be carried out by several researchers. This highlights how gamification can be an effective method leading to the positive learning outcomes particularly in literature in education. For instance, Sambanthan and Ismail (2022) suggest a good direction for future studies on gamification in literature education. The focus of the study is on exploring the potential use of gamification as a platform to enhance pupils' comprehension of the "Jungle Book Graphic Novel." Gamification can serve as a tool to encourage students to love reading literature in the classroom (Sambantan & Ismail 2022). The researcers have also highlighted the need for further research in this area. A more positive attainment of learning outcomes can take place as gamification in literature does not only engage students effectively but also creates an interactive, conducive and dynamic learning environment for the students, increasing students' love and interest towards literature.

Impact of Gamification on Student Engagement

Student engagement refers to the degree of interest, participation, involvement, attention and optimism of the students in a learning setting. It goes beyond mere completion of tasks, assignments and physical attendance in a classroom. Student engagement involves the interaction of students with the learning materials and teachers in a learning setting. In education, gamification has become more popular now than ever as it is able to get students involved and engaged in learning process (Borges et al. 2014). Recognizing the transformative impact of gamification, educators use game-like tools to captivate students' attention and motivation (Lee & Hammer 2011). According to Lee and Hammer (2011), gamification strategies should specifically target to impact emotional, cognitive and social domains of the students.

According to Nurul Mahfuzah et al. In (2018), the integration of game-like elements into non-gaming contexts have certainly gained popularity in educational settings, particularly in the recent years. Researchers suggest that gamification, with its promise of enhanced performance, increased productivity, and higher levels of user engagement, has a great deal of potential to improve learning outcomes (Simões et al. 2013). Examining the details, researchers highlight how the adaptability of gamification may be tailored to accommodate diverse learning styles, offering a versatile tool to improve academic results (Arockiyasamy et al. 2016; McGrath & Bayerlein, 2013).

Tan and Hew (2016) introduce the concept of meaningful gamification, integrating established game mechanisms such as leaderboards, badges, and points. This study has provided relevant and useful insights on the use of gamification to enhance students' engagement in learning. Concurrently, gamification elements like reward system, competitive elements, charts and badges was found to be effective in increasing students motivation level, highlighting the positive impact of gamification on the whole educational process (Dominguez et al. 2013). The researcher provided valuable insights on the social and emotional dimensions of the students through his study in 2013. Concurrently, Li et al. (2012) also emphasized how the addition of game features can change boring course tasks into enjoyable experiences. This is in line with the findings Tan and Hew's study in 2016 in which the researchers observed a higher level of engagement and participation of the participants from the experimental group. This highlights the effectiveness of gamification in promoting motivation among students in educational settings. The participants from the experimental group outperformed the participants from control group after learning taking part in all the gamified lessons and strategy.

A study by Wang (2015) presented the results of a literature review on the effect of using Kahoot! for students' performances and classroom dynamics. This study that examined gamification platforms which use web-based students' response system indicated that students perceived these platforms to be highly interactive and enjoyable, attributing it to increased determination and engagement in class activities. The findings of this study highlights the potential positive impact of platforms like Kahoot! And Quizziz on student engagement and learning outcomes.

 As the literature evolves, the significant positive impact of gamification on student engagement is more evident. Based on the finding of studies conducted by Coetzee et al. In 2014 and Denny in 2013, it was found that there was an increase in the engagement and involvement level of students in posting posts in gamified forums compared to non-gamified forums. This clearly shows that students prefer engaging in gamified activities, highlighting the positive impact of gamification on student engagement.

Teachers and Student Perspectives on Gamification in Literature
The perception of both teachers and students regarding the incorporation of gamification in education is very important to assess the effectiveness of the incorporation of gamification in literature lessons. Understanding how educators view gamification techniques and tools for improving student learning in enhancing the learning experience can make the assessment easier. According to Thi (2022), educators generally hold favourable views regarding the educational benefits of incorporating gamification, particularly in the realm of teaching English grammar. The result showed that teachers, on the whole, exhibited favorable attitudes toward the utilization of gamification in their teaching practices. However, the study suggests a gap among a group of educators, about 30% of the educators did not integrate any form of gamification in their lessons. This group of educators prefer the traditional chalk and board method to teach in classrooms.

The findings of a study by Yellas and Bouzenoun in (2022), suggest that learners tend to be more engaged and motivated when teachers incorporate some game elements into the lessons, creating a continuous progression that propels students towards the next learning step. Teachers also expressed that gamification strategy is important to ensure the sustained attention of the students and to encourage students to engage in class effectively. A study conducted by Nadiawati in (2018) that incorporated the gamification features of Duolingo's

in lessons obtained positive results, highlighting the potential of gamification strategy to enhance the overall learning experiences of the students.

Students' perceptions, as highlighted by Yuliasma (2022), gamification is not only acceptable but also helps to increase interest in studying the English language. The data presented indicate that gamification changes the classroom atmosphere from being teacher-centered to a more student-centered environment where all students actively participate in class activities. Although the majority of students agreed that gamified lessons are way more interesting and keeps them engaged throughout the lessons, a subset of students have voiced out their concerns on the level of chaos and noisy environment that occur due to the gamified lessons which require students to take part actively.

Gamification allows students to have a unique learning experience as students get to choose gaming elements that can help them achieve their specific learning goals (Pektas & Kepceoglu 2019). The researchers also claimed that gamification strategy can help learners to increase motivation and engagement. The incorporation of gamification strategy in lessons is preferred by the learners and they are satisfied with gamified lessons (Yellas & Bouzenoun 2022). This is align with the finding of a study by Yildrim in 2017. This highlights the importance and need of incorporating the elements of gamification in English lessons to ensure an effective teaching and learning process takes place.

Conclusion

In conclusion, gamification was found to have positive impact on both learning outcomes and student engagement, particularly enhancing students' performance in LiE. A significant improvement in vocabulary growth, students' motivation level, reading and writing skills were observed and found in the findings of various studies as stated in this paper. Integrating game elements in literature lessons can provide a conducive and engaging environment for the learners to learn from. This claim is supported by the favourable views expressed by the teachers and students on the positive impact of gamification on learning outcomes and students engagement in classroom. Based on the findings, gamification has also impacted on students' overall interest towards literature positively. The finding of studies also suggest that gamification encourage the learners to appreciate literary texts and develop deeper understanding of the texts which eventually lead to a better learning outcomes and student engagement.

Based on the review of literature, it can be concluded gamification is popular and widely accepted among the learners as it is perceived as fun and interactive. Although some learners have raised concerns on the level chaos and noise caused by this student-centred approach, the overall view is that gamification can serve as a creative tool that can lead to a potential shift towards a more engaging and effective literature teaching and learning experiences. For a future research, specific gamification aspects and strategies can be focused and studied by researchers to contribute to a comprehensive understanding on the impact of gamification on learning outcomes and students engagement.

References

Antin, J. & Churchill, E. F. (2011). Badges in social media: A social psychological perspective. *In CHI 2011 Gamification Workshop Proceedings, Vancouver, BC, Canada* 7(2): 15-23*.*

Coetzee D., Fox, A., Hearst, M. A., & Hartmann, B. (2014). Should your MOOC forum use a reputation system? Working paper in proceedings of CSCW 2014. Organised by MOOC. 15-19 February.

Darmi, R. & Albion, P. (2013). English language in the Malaysian education system: Its existence and implications. Working paper in Proceedings of the 3rd Malaysian Postgraduate Conference. Organized by University of Southern Queensland. 4-5 July.

Darus, S. (2009). The current situation and issues of the teaching of English in Malaysia.*International Symposium of the Graduate School of Language Education and Information Sciences*,hlm. 20-23.

Denny, P. (2013). The effect of virtual achievements on student engagement. Working paper in proceedings of the SIGCHI Conference on Human Factors in Computing Systems. 27 April.

Deterding, S., Sicart, M., Nacke, L., O'Hara, K., & Dixon, D. (2011). Gamification: Using game-design elements in non-gaming contexts. Abstract, CHI'11 extended abstracts on human factors in computing systems. Organized by Association for Computing Machinery. 7 May.

Hamari, J., Koivisto, J. & Sarsa, H. (2014). Does gamification work?-a literature review of empirical studies on gamification. Working paper in Hawaii International Conference on System Sciences. Organized by IEEE Xplore. 6-9 January.

Li, W., Grossman, T., & Fitzmaurice, G. (2012). GamiCAD: A gamified tutorial system for first timeAutoCAD users. Abstract, proceedings of the 25th Annual ACM Symposium on User Interface Software and Technology. 7 October.

McKay, S. 1982. Literature in the ESL classroom. *Tesol Quarterly* 16(4): 529-536.

Mohamad, S. N. M., Sazali, N. S. S. & Salleh, M. A. M. (2018). Gamification approach in education to increase learning engagement. *International Journal of Humanities, Arts and Social Sciences* 4(1): 22-31.

Mohd Rosli, I. H. & Fadhlullah, A. (2023). Read and play: improving adolescents' reading skills through video games. Working paper in International Conference of Research on Language Education (2023). Organized by Universiti Teknologi MARA, Melaka. 13-14 March.

Mutholib, A., Munjiah, M. R. & Agny Anggara, S. (2023). The use of gamification in teaching writing skills to junior high students. *Ta'lim al-'Arabiyyah: Jurnal Pendidikan Bahasa Arab dan Kebahasaaraban* 7(1): 73-87.

Ministry of Education. (2013). Malaysia Education Blueprint 2013–2025 (Preschool to post-secondary education). Ministry of Education Malaysia, Putrajaya.

Nadiawati, N. (2018). Gamification Of Duolingo In Rising Childrens' Second Language Learning Motivation. *Sunan Ampel State Islamic University, Surabaya:* 21-61.

Nurtanto, M., Kholifah, N., Ahdhianto, E., Samsudin, A. & Isnantyo, F. D. (2021). A review of gamification impact on student behavioral and learning outcomes. *International Journal of Information Management* 15(21): 23-33.

Omar, N. B., & Yunus, M. B. M. (2020). Literature Made Easy: Exploring the Use of Games in Learning a Short Story. *ESL Practitioner: The Journal of the English Language Teaching Centre* 1(8):17-23.

Pektaş, M., & Kepceoğlu, İ. (2019). What do prospective teachers think about educational gamification?. *Science Education International* 30(1):65-72.

Rashid, R. A., Vethamani, M. E. & Rahman, S. B. A. (2010). Approaches Employed by Teachers in Teaching Literature to Less Proficient Students in Form 1 and Form 2. *English Language Teaching* 3(4): 87-99.

Saad, S., Amat, R., Hassan, N. A. S. A., Mansor, N. S. & Ibrahim, S. (2022). Preserving Indigenous Semai Folktales as A Process of Educating 21st Century Learners Through Gamification. *Malaysian Journal of Social Sciences and Humanities (MJSSH)* 7(9): 5-13.

Sari, K. B. (2020). The Effect of Gamification Based on Balinese Local Stories As a Teaching Media Toward Fifth Grade Elementary School Students' Speaking Competence. PhD. Dissertation, Universitas Pendidikan Ganesha, Indonesia.

Sambanthan, P. T. & Ismail, H. H. (2022). The Potential of Gamified Learning to Improve Comprehension of Jungle Book Graphic Novel: A Concept Paper. *International Journal of Academic Research in Progressive Education and Development* 11(3): 834–845.

Sin, O. K. & Said, M. N. H. M. (2020). Accessing Effect of Gamification for Primary Pupils' English Learning Performance. *Innovative Teaching and Learning Journal 4*(2): 73-76.

Subban, P. (2006). Differentiated Instruction: A Research Basis. *International Education Journal* 7(2): 935-947.

Tan, M. & Hew, K. F. (2016). Incorporating meaningful gamification in a blended learning research methods class: Examining student learning, engagement, and affective outcomes. *Australasian Journal of Educational Technology* 32(5): 20-29.

Thi Van Pham, A., & Minh Pham, C. (2022). Teachers' Perceptions towards Using Gamification in Teaching Grammar for Non-English Majored Students. Abstract, Proceedings of the 2022 13th International Conference on E-Education, E-Business, E-Management, and E-Learning. Organized by Association for Computing Machinery. 19 April.

Ukat, J. A. & Ismail, H. H. (2022). Teaching literature in Malaysian English classrooms: A review on its challenges and opportunities. *International Journal of Academic Research in Business and Social Sciences 12*(11): 1991-2004.

Yellas, M. & Bouzenoun, A. (2022). Teachers' and Students' Perception towards Using Gamification in Teaching English Language. PhD. Dissertation, University of Mohamed Seddik BenYahia, Algeria.

Yildirim, I. (2017). The effects of gamification-based teaching practices on student achievement and students' attitudes toward lessons. *The Internet and Higher Education* 33(1): 86-92.

Yuliasma, F. (2022). Students' Perceptions Toward Gamification Applied In English Language Education. PhD. Dissertation, Universitas Islam Riau, Indonesia.