INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 15, Issue 3, (2025) E-ISSN: 2222-6990

Effectiveness of Game Based Learning (GBL) in Flipped Classroom English as a Second Language Classroom (ESL) in Primary School

Sharmila Dharshenee Palaniappan, Intan Farahana Kamsin

Faculty of Education, Universiti Kebangsaan Malaysia (UKM), Bangi, Malaysia

Corresponding Authors Email: intanfarahanakamsin@ukm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v15-i3/24971 DOI:10.6007/IJARBSS/v15-i3/24971

Published Date: 11 March 2025

Abstract

This paper is proposed to enhance the learning in ESL classroom among Primary school students using the GBL method in the flipped classroom. The use of these methods aims to improve student's comprehension and encourage active participation during teaching and facilitation sessions, both in the classroom and at home. The stigma of students perceiving English as difficult to understand can be addressed through the use of the GBL method. Such hands-on methods are highly favored by students as they have the opportunity to explore various components of English on their own. According to the views of some teachers outside the country, hands-on learning involves the complete engagement of students, enhancing their ability to think critically. This study is important to demonstrate that student-oriented learning, as inspired by the Ministry of Education Malaysia (MOE), can be achieved. It can transform passive learning into active learning in line with the Fourth Industrial Revolution (IR 4.0). Social Constructivism Theory forms the basis for implementing the flipped classroom learning process. This study is crucial in enabling the Ministry of Education Malaysia to enhance the competencies of English language teachers in facing IR 4.0 learning in line with current educational needs based on professional development, teacher efficacy and organizational support.

Keywords: GBL, ESL, English, Flipped Classroom, Primary School

Introduction

In Malaysia, English is taught as a second language in accordance with the national education policy (Gill, 2005). It is a compulsory subject in primary and secondary schools, with students required to achieve proficiency to further their studies. However, learning English as a second language presents challenges for young learners, particularly in mastering pronunciation, vocabulary, and grammar (Brown, 1980). Traditional teaching methods often rely on rote memorization, leading to passive learning and a lack of engagement among students. To address these issues, educators are exploring innovative pedagogical strategies such as

Game-Based Learning (GBL) and the Flipped Classroom model to enhance English as a Second Language (ESL) instruction at the primary level.

GBL is an instructional approach that incorporates interactive and digital games to foster engagement, motivation, and active participation in learning. By using platforms such as Kahoot, Minecraft, Pear Deck and Battleship Games, teachers can create an immersive learning environment where students actively apply language concepts in a fun and interactive manner. Research has shown that GBL improves vocabulary retention, comprehension and problem-solving skills, making it an effective tool in ESL education. For instance, a study by Hung (2018) demonstrated that integrating GBL strategies in a flipped classroom setting significantly enhanced students' motivation and engagement in learning English as a foreign language. Similarly, Yeh et al. (2021) found that an augmented reality-enhanced GBL approach improved student's creative thinking and vocabulary acquisition in flipped English classrooms.

The Flipped Classroom model further enhances this approach by restructuring traditional classroom setting. In a flipped classroom, students are given learning materials, such as instructional videos and digital content, beforehand to be studied at home before engaging in interactive activities and discussions in class. This shift allows teachers to focus on facilitating active learning experiences rather than focusing delivering content during class. This approach could not only save their teaching time but also accommodate students with the overview of their lesson before entering the classroom. In addition to, integrating GBL within a flipped classroom model can optimize student engagement, encourage collaboration and provide a personalized learning experience. Recent studies have highlighted that, despite the availability of digital learning tools, Malaysian primary school teachers often face challenges in effectively implementing online learning strategies. For instance, a study by Zulkflee et al. (2022) identified various issues and challenges Malaysian primary school teachers encounter in incorporating blended learning approaches in ESL classrooms. Similarly, research by Mukhtar and Nasir (2023) emphasized the necessity for teachers to develop good communication skills to enhance student satisfaction in online learning environments. These findings suggest that while digital platforms are accessible, effective integration into teaching practices remains limited. This highlights the need to explore the effectiveness of GBL within a flipped classroom framework to enhance ESL learning outcomes.

With the advancement of the Fourth Industrial Revolution (IR 4.0), there is an increasing demand for digital literacy and innovative teaching methods in the Malaysian education system. The shift from traditional to technology-based learning aligns with 21st-century educational needs. In response to this, the Malaysian government introduced the Digital Education Policy (Dasar Pendigitalan Akademik, DEP) which aimed at fostering a digitally literate and competitive generation by enhancing knowledge, skills, and values among students, educators, and educational leaders (Ministry of Education Malaysia, 2024). One of its main goals is to ensure that all students achieve digital fluency and can compete on a global level. As part of this initiative, the government introduced the Digital Educational Learning Initiative Malaysia (DELIMa), which has gained international recognition, including the *Recognition of Excellence 2023* award (Borak Daily, 2023). However, the implementation of digital education has challenges such as unequal access to technology and inconsistent infrastructure, particularly in rural areas. Additionally, the digital literacy level among

educators and students remains a concern, affecting the effectiveness of digital initiatives (UKM, 2024).

Thus, research on the effectiveness of GBL within the Flipped Classroom model in primary ESL education is crucial. This approach aligns with the objectives of the DPD, providing an interactive and engaging method to enhance English language proficiency among students. By leveraging digital tools in a structured and innovative manner, this study aims to contribute to the ongoing efforts to modernize Malaysia's education system in line with IR 4.0 demands. The Malaysian Education Blueprint (PPPM 2013-2025) emphasizes the integration of information and communication technology (ICT) to enhance teaching and learning. However, the readiness of primary school teachers to adopt these methodologies remains a challenge. By investigating the effectiveness of GBL in a flipped classroom for primary ESL learners, this study aims to provide insights into the potential of interactive learning strategies in improving language acquisition and engagement.

Literature Review

Gamification

A game refers to a structured play with rules, goals, and challenges for the purpose of entertainment (Cheng et al., 2015). The term "gamification" first emerged in 2006 and gained increasing relevance since 2010 (Seaborn & Fels, 2015). Gamification in education is a strategy for increasing engagement by incorporating game elements into an educational environment (Dichev & Dicheva, 2017). GBL, often referred to as educational games, has been experiencing a significant surge of interest in recent years, particularly with the rapid growth of digital and online games. Many educators across various levels of schooling have begun to recognize the notable effectiveness of GBL as a method of engaging students in the learning process. In a comprehensive online survey involving 1206 elementary and secondary teachers by Hwang (2018), an impressive 74% of educators confirmed that they incorporate GBL into their teaching practices. When further questioned about the effectiveness of games as a motivating and engaging educational tool, 56% of the respondents reported that they found them somewhat effective, while an encouraging 16% rated them as very effective. Despite the evident efficiency of GBL, it is worth noting that only 28% of teachers actively utilize GBL strategies in their classrooms. When asked about the type of games they would be more inclined to integrate into their teaching methods, a substantial 53% of teachers expressed a preference for online, digital or video games over traditional methods. The remaining educators who have not yet adopted games in their classrooms may hold neutral perceptions or feel uncertain about the implementation of such tools, highlighting a potential area for further professional development and training (Hwang, 2018).

Flipped Classroom

The flipped classroom is an inverted model of traditional educational practices. In this model, students are required to engage with self-study materials like lecture videos, readings and various online resources, all from the comfort of their homes. This shift allows class time to be utilised to interactive, application-based learning activities, where students can collaborate, discuss, and apply what they have learned. The concept of the flipped classroom model first made its appearance in the early 1990s. However, it truly began to gain attraction in the early 2000s, coinciding with the growing accessibility and expansion of the Internet and online educational tools.

This progression toward a flipped classroom model was initiated by Professors Jonathan Bergman and Aaron Sams, who innovatively replaced traditional lectures with pre-recorded video materials for students who were absent. During the school year of 2008-2009, these professors expanded their approach by creating additional supplemental lessons, thereby making these video resources available for all students to utilize outside of the classroom setting. This novel video lecture concept was implemented within an actual classroom environment and the outcomes were remarkable, showcasing a significant increase in student achievement and understanding of the coursework. Since that initial experimentation, there has been ongoing debate and research surrounding the overall effectiveness of the flipped classroom model in various educational contexts.

Additionally, a study conducted by Suparman et al. (2023) sin a junior high school located in Indonesia revealed that there was a positive and significant impact of the flipped classroom approach on student learning outcomes. The findings indicated that students who participated in the flipped classroom model achieved substantially better learning results when compared to the control group of students who did not benefit from this innovative teaching method. This evidence suggests that the flipped classroom approach may offer a promising alternative to conventional teaching strategies, potentially leading to improved educational experiences for students (Bormann, 2014). The flipped classroom has become a well-received concept due to the demands of education to utilize digital technology for teaching and learning (Juhary, 2019). This approach allows educators to upload teaching videos, lecture notes or reading materials online, which students access before attending classes. Consequently, classroom time is dedicated to active and interactive dialogues, enhancing understanding of the pre-accessed materials. According to Tan et al. (2022) success stories of flipped classrooms in Malaysia, are evident in higher learning institutions such as Universiti Sains Malaysia (USM) and Universiti Kebangsaan Malaysia (UKM).

Flipped Classroom in English Classroom

Evidence from literature states that the teacher is the most crucial party in an educational reform, particularly in one that touches on what goes on in the classrooms (Mundy, 2008). However, their training and innovative skills is a necessary but not sufficient condition for effective learning. There are other prevailing conditions which pose a challenge to the teacher hence impeding learning. Given that language learning requires a lot of exposure as postulated by (Cummins, 2006) the teacher of English is left with the sole burden of helping learners develop competence in English within a 30- 60 minutes lesson. Fortunately, this insufficient time for teaching and learning can be overcome through the use of technology in the flipped classroom method. The flipped classroom method integrates hands-on learning out-of-class and optimize the classroom time for interactive group learning activities (Lo et.al., 2017).

The Fourth Industrial Revolution powered by the Internet of Things have an effect on every aspect of our lives including learning and teaching methods at school especially during the pandemic. The use of hands-on pedagogy is no longer a new chapter in the phase of language learning. According to Ashton, Hay & Brookes (2011), many studies have been conducted in this area revealed the positive insight of the implementation especially to improve and facilitate the language learning and teaching. In a traditional learning environment, teachers impart education in classrooms and give assignments for students as

homework. In contrast, flipped learning leverages information and communication technologies to prepare students for interactive sessions where they receive feedback and guidance. This approach has been shown to significantly enhance student's academic performance (Anusia & Muniisvaran, 2023).

In Flipped Learning, which is integrated with various information and communication technologies, students are prepared to interact and receive feedback. Teachers also evaluate the progress of students, helping them understand subjects in a better way. Thus, ICT and Flipped Learning can significantly improve the academic performance of students.

Game Based Learning in Education

GBL is a way to use the process of play to engage students in learning. It can be done through playing typical game software on paper or through using serious game software on a computer. Game software is not only for games for entertainment, but also for games with investigation, experiences, or sports. Recently, digital and physical games have caught people's attention. Digital games are the video games that can be easily played on computer or ipad, including mobile fostering games. Digital games are created for teaching students to learn something. As a type of computer-based gaming, digital games are not dependent on computer games, but use computer technology to develop video games (Xiao & He, 2023).

Games are designed to provide a deeply immersive learning experience that encourages students to become motivated participants in various forms of collaboration, communication, writing, reading, and reflective thinking, all within a dynamic game environment. In these interactive digital spaces, games often necessitate the application of critical thinking skills, problem-solving techniques, and decision-making processes, ultimately guiding students to view the challenges presented within the game not just as obstacles, but rather as opportunities ripe for valuable learning experiences.

Games are designed with a comprehensive set of rules, behaviors, and expectations that guide how they are played. They include various outcomes such as victories and defeats, along with points awarded for achievements. These indispensable elements not only help individuals become familiar with the nuances of the game but also play a vital role in motivating students to cultivate perseverance and dedication. Moreover, all these features inherent in games can significantly enhance the creation of an immersive learning experience that captures the imagination. By drawing students into the process, games serve not just as a form of entertainment but as a powerful educational tool. Games can thus contribute positively to teaching in schools by actively engaging students in the learning process, fostering a dynamic and immersive environment that makes learning both enjoyable and effective.

Implementation of Game Based Learning in Flipped ESL Classroom

GBL can simulate learner engagement in learning and develop self-learning ability. However, before implementing the GBL in flipped classroom, it is necessary for teachers to evaluate some aspects (Nazara, 2019). GBL enhanced student's understanding and interest, stimulating curiosity in student's learning. In the domain of ESL instruction delivered through the game-based approach, students developed a positive attitude towards language learning (Parra González, 2021).

Therefore, GBL has become absolutely essential to encourage ESL students to actively engage in learning English effectively. However, it often proves to be quite difficult to design educational games that are appropriate and align perfectly with the curriculum content and the various levels of students. Hence, there is a substantial need to integrate well-developed educational games alongside various other types of games. Before the lesson begins, the teacher carefully selects a suitable educational game for the students and adds it to the lesson plan. In cases where students do not have devices readily available, the teacher will make arrangements for the students to play games ahead of time using the school computers. This way, the class can promptly start engaging with the learning material through the games. GBL is not just a method but it represents a learner-centered pedagogical approach that promotes learners to engage deeply in the process of learning from their experiences and facilitates them in constructing their own understanding and knowledge. Additionally, teachers can take into account each student's individual needs, providing guidance and support in their learning while utilizing the materials offered by the game effectively together (Hwang, 2018)

Challenges in Implementing GBL

The integration of GBL into flipped classrooms has gained significant attention in recent years, particularly in the context of teaching English as a Second Language (ESL) to primary school students. While this approach holds promise for enhancing engagement, motivation, and learning outcomes, its implementation has its own challenges.

One of the most significant challenges in implementing GBL in flipped classrooms is the reliance on technology. Many primary schools, particularly in under-resourced areas, lack the necessary infrastructure, such as reliable internet access, devices, and software. According to a study by Hwang et al. (2021), the digital divide remains a critical issue, with students from low-income families often unable to access the technology required for flipped learning and GBL. This disparity can exacerbate existing inequalities in ESL education. Moreover, primary school teachers may lack the technical skills to effectively integrate digital games into their teaching. As noted by Kalogiannakis et al. (2020), many educators feel unprepared to use GBL tools, leading to resistance or ineffective implementation. This is particularly problematic in ESL contexts, where teachers must also navigate language barriers and cultural differences.

Creating games that are both age-appropriate and culturally relevant for primary school ESL learners is a complex task. Younger students have shorter attention spans and require games that are visually engaging, simple to navigate, and aligned with their cognitive development. However, many existing educational games are designed for older students or native English speakers, making them unsuitable for ESL learners. A study by Chen et al. (2022) highlights the importance of cultural relevance in GBL. Games that incorporate culturally familiar contexts and characters are more likely to engage ESL students and facilitate language acquisition. However, designing such games requires significant time, resources, and expertise, which many schools and educators lack.

One of the core principles of GBL is that learning should be fun and engaging. However, striking the right balance between entertainment and educational value can be challenging. As Plass et al. (2020) point out, games that are too focused on fun may fail to achieve learning objectives, while those that are too educational may fail to engage students. This balance is particularly critical in ESL contexts, where students need to develop both

language skills and confidence in using English. In primary school settings, this challenge is compounded by the need to align games with curriculum standards and assessment requirements. Teachers must ensure that GBL activities contribute to measurable learning outcomes, such as vocabulary acquisition, grammar proficiency, and communication skills.

While GBL is a way to increase student motivation, its effectiveness depends on how well it is implemented. In flipped classrooms, students are expected to engage with instructional content independently before coming to class. However, primary school ESL learners may struggle with self-directed learning, particularly if the content is not engaging or accessible. A study by Sailer and Homner (2020) found that poorly designed games can lead to frustration and disengagement, particularly among younger students. For ESL learners, language barriers can further complicate this issue, as students may struggle to understand game instructions or feedback. This can lower down the effectiveness of both GBL and the flipped classroom model.

Effective implementation of GBL in flipped classrooms requires teachers to have a deep understanding of both pedagogical approaches. However, many primary school teachers lack training in GBL and flipped learning, particularly in ESL contexts. As Turgut and İrgin (2021) note, professional development programs often fail to address the specific needs of ESL teachers, leaving them ill-equipped to integrate GBL into their classrooms. Moreover, teachers may face time constraints and heavy workloads, making it difficult to design and implement GBL activities. This is particularly true in primary schools, where teachers are often responsible for multiple subjects and large class sizes.

Assessing student learning in GBL environments can be challenging, particularly in flipped classrooms. Traditional assessment methods, such as tests and quizzes, may not capture the full range of skills and knowledge developed through gameplay. Additionally, providing timely and meaningful feedback is critical for ESL learners, who need guidance to improve their language skills. A study by Shute and Ke (2022) highlights the potential of adaptive games that provide real-time feedback based on student performance. However, developing such games requires advanced technology and expertise, which may not be available in primary school settings.

Parental involvement is a key factor in the success of flipped classrooms, particularly for younger students. However, parents of ESL learners may lack the language skills or technological literacy to support their children's learning at home. This can create additional challenges for implementing GBL in flipped classrooms, as students may struggle to complete pre-class activities or access game-based content outside of school. A study by Li and Wong (2021) emphasizes the importance of providing parents with resources and training to support their children's learning.

Strategies to Overcome Challenges

The issues that have been discussed above can be hindered effectively by enforcing few methods. First, technological barriers, such as limited access to devices and internet connectivity, can be mitigated by leveraging initiatives like Malaysia's digital education policies. The Malaysian government has made significant efforts to bridge the digital divide through programs such as the Digital Education Policy and the Malaysia Digital Economy

Blueprint, which aim to provide equitable access to technology and internet services for all students (Ministry of Education Malaysia, 2019). These initiatives align with recommendations by Hwang et al. (2021), where they emphasize the importance of investing in digital infrastructure and forming partnerships with technology companies or non-profits.

Additionally, teacher training is crucial to ensure educators can confidently use digital tools. Malaysia's Professional Development Programs for Teachers focus on enhancing digital literacy, which supports the integration of GBL into classrooms, as highlighted by Kalogiannakis et al. (2020). Designing age-appropriate and culturally relevant games is another critical step. Chen et al. (2022) emphasize the importance of incorporating familiar cultural contexts and characters to engage ESL learners. Collaboration between educators, game designers, and ESL experts, along with the use of open educational resources (OERs), can help create tailored games that align with students' cognitive and linguistic abilities.

Balancing fun and learning while maintaining student engagement is another key challenge. Plass et al. (2020) recommend designing games with clear learning objectives that align with the ESL curriculum. Combining commercial games with custom activities can ensure gameplay supports language acquisition, while adaptive learning technologies can tailor content to individual student needs. To enhance motivation, Sailer and Homner (2020) suggest using intuitive designs with clear instructions, visual cues, and multilingual support. Gamification techniques, such as rewards and progress tracking, can further motivate students. Pre-class activities should be interactive, using game-based videos or quizzes to prepare students for in-class learning. Teachers also need ongoing professional development to effectively integrate GBL into their teaching. Turgut and İrgin (2021) highlight the importance of training programs that focus on both technical skills and pedagogical strategies, as well as creating communities of practice for sharing resources and experiences.

Finally, improving assessment methods and fostering parental involvement are crucial for the success of GBL in flipped classrooms. Traditional assessments may not capture the full range of learning outcomes achieved through GBL. Shute and Ke (2022) recommend using adaptive games with real-time feedback and formative assessments, such as observations and digital analytics, to evaluate student progress. Providing timely and constructive feedback is particularly important for ESL learners to improve their language skills. Parental involvement is also essential, especially for younger students. Li and Wong (2021) suggest offering workshops, translated materials, and online tutorials to help parents support their children's learning. Regular communication between teachers and parents can ensure students receive the necessary support at home. By addressing these challenges through targeted strategies, educators can create an inclusive and engaging learning environment that transforms ESL education for primary school students.

Conceptual Framework

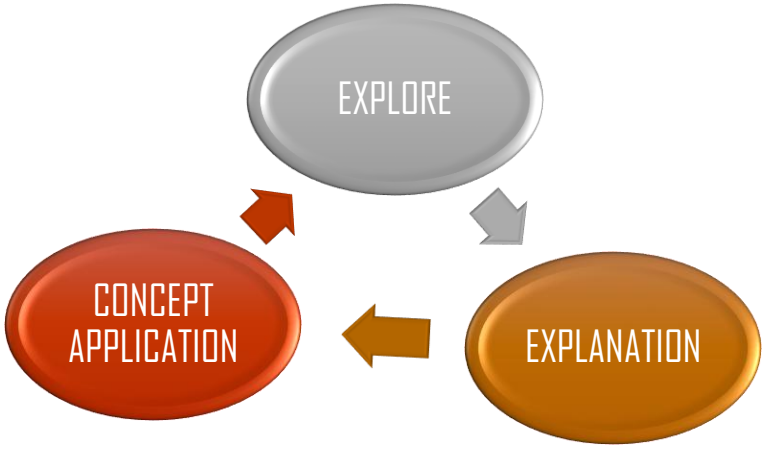

Fig. 1: Student's learning cycle using GBL in Flipped Classroom

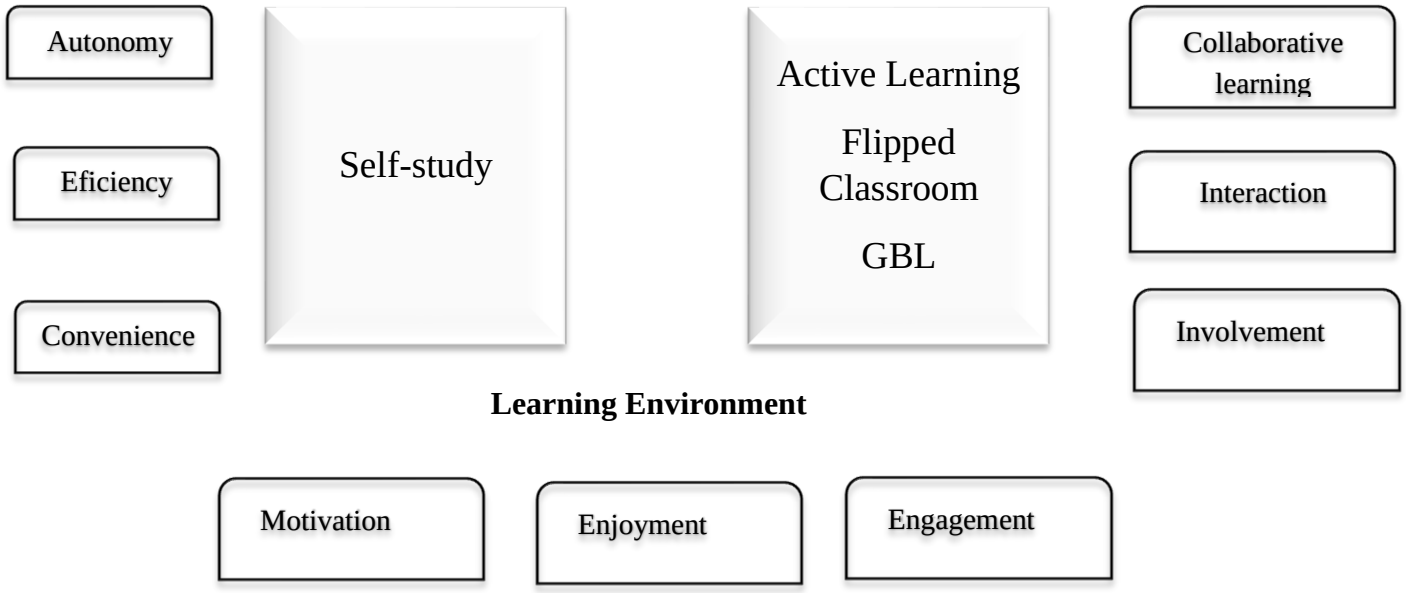

Fig. 2: Analysis of Competence Acquisition in A Flipped Classroom Approach

Fiq.1 shows student's learning cycle using GBL in flipped classroom. The integration of GBL within the flipped classroom model aligns with well-established educational theories such as Constructivist Learning Theory and Cognitive Load Theory.

Constructivist Learning Theory emphasizes that learning is most effective when students actively construct knowledge through meaningful experiences. Traditional ESL classrooms often rely on passive learning, where students memorize vocabulary and grammar rules without engaging in real-world application. The flipped classroom model, combined with GBL, offers a transformative shift. Pre-class activities involve interactive digital games, videos, and reading assignments that provide students with foundational knowledge before classroom instruction. This prepares them for more meaningful in-class activities, such as role-playing, storytelling and collaborative language practices. A study by Su and Cheng (2019) found that primary school students who engaged in GBL activities in a flipped ESL classroom demonstrated higher retention rates and better problem-solving skills than those in

traditional lecture-based settings. Their findings support the idea that when students explore concepts in an engaging digital environment, they are better equipped to apply language skills in practical scenarios.

Cognitive Load Theory, which focuses on managing working memory to optimize learning, is another key framework that explains the effectiveness of GBL in a flipped classroom. Language learning, especially for young ESL learners, can be overwhelming when too much information is presented at once. The flipped model mitigates cognitive overload by distributing learning tasks across different phases. The pre-class phase provides structured exposure to new vocabulary and sentence structures, while in-class activities reinforce this knowledge through interactive games. Research by Hwang, Lai, and Wang (2015) found that students who engaged in a scaffolded, game-based flipped classroom performed significantly better on comprehension assessments compared to those in conventional classrooms. Their study demonstrated that digital GBL effectively reduces cognitive overload by providing incremental challenges and immediate feedback, allowing students to internalize language concepts more efficiently.

Meanwhile fig.2 shows the analysis of competence acquisition in a flipped classroom approach. It emphasizes the integration of GBL within a flipped classroom model, focusing on key elements such as autonomy, efficiency, convenience, motivation, enjoyment and engagement. These elements are critical for creating an effective learning environment, particularly in ESL classrooms. GBL aligns seamlessly with these principles by providing students with interactive, self-paced, and immersive learning opportunities. A 2023 study by Zhang and Lin titled The Role of Autonomy in Game-Based Language Learning found that GBL significantly enhances learner autonomy by allowing students to control their learning pace and make decisions within the game environment. This autonomy fosters intrinsic motivation, which is crucial for sustained engagement in language learning. The study also highlighted that students who experienced higher levels of autonomy were more likely to take ownership of their learning process, leading to improved language proficiency over time.

Additionally, a 2022 study by Chen, Wang and Li titled Digital Game-Based Learning in ESL, Efficiency and Engagement demonstrated that GBL improves learning efficiency by providing immediate feedback and adaptive challenges. A 2022 study by Lee and Park titled Motivational Effects of Game-Based Learning in ESL Classrooms found that GBL significantly increases student motivation by making learning enjoyable and rewarding. The study reported that students were more willing to participate in language activities when they were presented in a game format, as games provide a sense of achievement and progress through rewards, levels, and challenges. The study found that students using GBL in a flipped classroom setting showed faster progress in language acquisition compared to traditional methods. This efficiency is particularly beneficial in ESL classrooms, where students often need to balance language learning with other academic or personal commitments.

Similarly, a 2023 study by Garcia and Martinez titled Engagement and Enjoyment in Game-Based ESL Learning demonstrated that GBL creates a low-stress environment where students are more willing to take risks and experiment with language. The study found that students using GBL reported higher levels of enjoyment and engagement. This leads to improved language proficiency. It aligns with Krashen's Affective Filter Hypothesis, which

suggests that low anxiety and high motivation are essential for effective language acquisition. By reducing stress and increasing enjoyment, GBL helps lower the affective filter, making students more receptive to language input.

Furthermore, a 2023 study by Kumar and Singh titled Collaborative Learning in Game-Based ESL Classrooms highlighted that GBL promotes active learning and collaboration. The study found that multiplayer games encouraged students to communicate and solve problems together, aligning with Vygotsky's Social Constructivism and the principles of CLT. Collaborative learning in GBL environments not only enhances language skills but also builds social and interpersonal competencies, which are essential for real-world communication.

As such, GBL is a valuable tool for modern ESL education, particularly when integrated with a flipped classroom approach. By combining the strengths of GBL with the principles of CLT and Cognitive Theory, educators can create a dynamic and effective learning environment that meets the diverse needs of ESL students.

Table 1
Past Studies on GBL in ESL classroom

Title	Authors	Year	Flipped Classroom	GBL	ESL	Education Level	Methodology	Country
A Review of Non traditional Teaching Methods: Flipped Classroom, Gamification, Case Study, Self-Learning, and Social Media	Safapour, E., Kermanshachi, S., & Taneja, P.	2019	Yes	Yes	Yes	School	Qualitative & Quantitative	USA
Game-based learning pedagogy: a review of the literature	Bado, N.	2019	Yes	Yes	Yes	NA	Review	USA
Using flipped classroom model to improve speaking performance of Omani EFL learners	Abdullah, M. Y., Hussin, S., & Ismail, K.	2020	Yes	Yes	Yes	College	Quantitative	Oman
Flipped learning, pedagogy and digital technology: Establishing consistent practice to optimise lesson time	Sargent, J., Sargent, J., & Casey, A.	2020	Yes	Yes	Yes	School	Quantitative	UK
Flipped classroom in English language teaching: a systematic review	Turan, Z., & Akdag-Cimen, B.	2020	Yes	Yes	Yes	Primary	Quantitative	Turkey

A systematic review of the use of gamification in flipped learning	Ekici, M.	2021	Yes	Yes	Yes	NA	Qualitative & Quantitative	NA
Gamification and Flipped Learning And Their Influence On Aspects Related To The Teaching-Learning Process	Parra-González, M. E., López-Belmonte, J., Segura-Robles, A., & Moreno-Guerrero, A. J.	2021	Yes	Yes	Yes	College	Quantitative	Spain
Gamification of in-class activities in flipped classroom lectures	Sailer, M., & Sailer, M.	2021	Yes	Yes	Yes	Primary	Quantitative	UK
The effects of Kahoot! on young learners' irregular verb mastery in an ESL context	Idris, M. I.	2022	Yes	Yes	Yes	Primary	Quantitative	Malaysia
Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review	Timotheou, S., Miliou, O., & Ioannou, A.	2022	Yes	Yes	Yes	Primary	Qualitative & Quantitative	Spain
Would gamification affect high and low achievers differently? A study on the moderating effects of academic achievement level?	Kam, A. H. T., & Umar, I. N.	2022	Yes	Yes	Yes	College	Qualitative	NA
The Use of Gamification in Enhancing Students Engagement and Performance in ESL Speaking Lessons	Yong Xin Jie, Ainur Zaharah binti Zakaria, & Hanita binti Hassan	2023	Yes	Yes	Yes	Secondary	Experimental	Malaysia
Exploring a Gamified Learning Tool in the ESL Classroom	Crystal Callista Anak Yunus, Tan Kim Hua	2023	Yes	Yes	Yes	Secondary	Case Study	Malaysia
The Effect of Gamification on Learners' English-Speaking Skills Performance: A Case of Five	Eric Ndayishimiye, Jean de Dieu Amini Ngabonziza, Spéciose Ndimurugero	2023	Yes	Yes	Yes	Primary	Experimental	Rwanda

Schools	Ngirabakunzi							
Exploring a Gamified Learning Tool in the ESL Classroom: The Case of Quizizz	Crystal Callista Anak Yunus, Tan Kim Hua	2023	Yes	Yes	Yes	Secondary	Case Study	Malaysia
The Benefits of Flipped Classroom Model for EFL Learners	Gustian, K., Aridah, A., & Rusmawaty, D.	2023	Yes	Yes	Yes	Primary	Quantitative	Indonesia
A Discovery on Malaysian ESL Teachers Adherence to Policy Mandates	Anwar Farhan et al.	2024	No	Yes	Yes	Secondary	Qualitative Interviews	Malaysia

The research on flipped classrooms and GBL has gained significant attention in recent years, with studies spanning from 2018 to 2024. The increasing focus on these innovative teaching approaches, particularly in the last few years. This shift highlights a global interest in exploring how flipped classrooms and gamification can enhance engagement and improve learning outcomes. The studies are conducted in diverse countries, including Oman, Turkey, USA, Malaysia, Spain, UK, and Indonesia, reflecting the broad international appeal and application of these methods. This geographical diversity suggests that educators worldwide are interested in the potential of these approaches to enhance learning, and they are adapting these techniques to suit the unique educational needs of their regions.

In terms of educational levels, the research spans across primary, secondary, and college students, with a particular concentration on secondary and primary education. This emphasis on younger students aligns with the increasing recognition that early education needs more engaging and interactive teaching methods. The studies primarily target ESL learners, highlighting the widespread application of flipped classrooms and gamification in language learning, especially in contexts where motivation and engagement are critical for success. This focus on ESL is further reinforced by the frequent exploration of speaking performance, student engagement, and motivation.

The research methodologies employed are varied, with a mixture of qualitative, quantitative and mixed-methods approaches. Such diversity in methodology reflects a comprehensive effort to capture the various effects of flipped classrooms and gamification, whether through controlled experimental studies or case studies that provide in-depth insights into real-world classroom environments. Many of the studies also employ experimental designs, particularly those investigating the effects of gamification on student engagement and performance. The use of these methodologies shows that researchers are seeking to measure not just theoretical concepts, but tangible outcomes that can guide educational practice.

A significant finding across the studies is the growing interest in combining flipped classrooms and gamification as complementary teaching strategies. Researchers, such as Sailer & Sailer (2021) and Parra González et al. (2021), explore how gamified elements like points, leaderboards, and competition can be integrated into flipped classroom settings to enhance student engagement, motivation and overall learning performance. This trend

suggests that educators are keen to blend these two innovative pedagogical approaches to maximize their impact. Studies that focus on specific gamification platforms, like Kahoot and Quizizz, highlight the practical tools being used in classrooms and offer insight into how these platforms are shaping the learning experience.

However, several studies, such as Ekici (2021), acknowledge a lack of theoretical grounding and methodological rigor in some of the existing research on gamification. This gap points to the need for further theoretical exploration into why these methods work and how they align with established learning theories. Researchers often point out that while gamification can increase motivation, there is insufficient empirical evidence to support its widespread effectiveness in all educational contexts. This calls for future research to develop a stronger theoretical framework and more rigorous methodologies that can address these gaps and provide clearer insights into how gamification and flipped classrooms truly impact learning outcomes.

Additionally, the studies reveal that the choice of gamification platform plays a crucial role in the success of these approaches. As noted by Ekici (2021), platforms like Moodle, Kahoot, and Quizizz are among the most popular, but there is little consensus on which platform yields the best results. A deeper exploration of the platforms and their specific features such as ease of use, accessibility and the type of feedback they provide could provide valuable insights into why some tools are more effective than others in different educational settings.

Furthermore, the research in this area is not without limitations. While many studies examine the effectiveness of flipped classrooms and gamification, they often do so without considering cultural differences or regional challenges that may affect their implementation. For example, in Malaysia and Turkey, the educational systems, technological infrastructure, and student behaviors might influence how these teaching methods are adopted. Exploring country-specific factors could help identify barriers or opportunities for more successful implementation, thereby improving the applicability of these methods in various contexts.

In conclusion, the research on flipped classrooms and gamification reflects a growing interest in innovative pedagogical strategies aimed at enhancing student engagement, motivation, and performance. While the studies span a variety of countries, educational levels, and methodologies, current empirical research on gamification lacks theoretical foundations and methodological rigor. This paper adds Theory based investigation of gamification of in-class activities in a flipped classroom within an experimental field study. The integration of GBL into ESL classrooms not only enhances language proficiency but also fosters a positive and enjoyable learning environment. Thus, future research should focus on refining the theoretical frameworks behind these approaches, addressing methodological challenges, and investigating the specific platforms and tools that most effectively support flipped classrooms and gamified learning

References

Anusia, K., & Muniisvaran, K. (2023). Flipped Classroom Approaches in Language Teaching and Learning in Malaysia – A Meta-analytic Review. International Journal of Academic Research in Progressive Education and Development, 12(3), 350–366.

Ashton, S., & Brookes, D. (2011). Here's a Story: Using Student-Created Digital Storytelling in Language Learning. TESOL in Context, 21(1), 23–36.

Aşıksoy, G. (2018). The effects of the gamified flipped classroom environment (GFCE) on students' motivation, learning achievements and perception in a physics course. Journal of Educational Technology & Society, 21(4), 22-36.

Bado, N. (2019). Game-based learning pedagogy: A review of the literature. International Journal of Game-Based Learning, 9(2), 45-62.

Borak Daily. (2023). Dasar Pendidikan Digital bukti komitmen KPM sediakan sumber pendidikan berkualiti. Retrieved from https://borakdaily.com/dasar-pendidikan-digital-bukti-komitmen-kpm-sediakan-sumber-pendidikan-berkualiti/on 18 February 2025.

Jarod, B. (2014). Affordances of flipped learning and its effects on student engagement and achievement.Graduate Research Papers. 137.

Brown, A. L. (1980). Metacognitive Development and Reading. In R. J. Spiro, B. B. Bruce, & W. F. Brewer (Eds.), Theoretical Issues in Reading Comprehension (pp. 453-481). Hillsdale, NJ: Lawrence Erlbaum.

Chen, Z., Lee, S., & Chen, Y. (2022). Cultural Relevance in Game-Based Learning for ESL Students. Journal of Educational Technology & Society, 25(3), 45-58.

Chen, Y., Wang, H., & Li, X. (2022). Digital game-based learning in ESL: Efficiency and engagement. Journal of Educational Technology & Society, 25(3), 45-58.

Cheng, M.-T., Chen, J.-H., Chu, S.-J., & Chen, S.-Y. (2015). The use of serious games in science education: A review of selected empirical research from 2002 to 2013. Journal of Computers in Education, 2(3), 353–375.

Cummins, J. (2006,). The relationship between ASL proficiency and English academic development: A review of the research. Paper Presented at the Workshop Challenges, Opportunities, and Choices in Education Minority Group Students, Hamar University College, Norway.

Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain: A critical review. International Journal of Educational Technology in Higher Education, 14(1), 9.

Ding, L., Er, E., & Orey, M. (2018). An exploratory study of student engagement in gamified online discussions. Computers & Education, 120, 213-226.

Ekici, M. (2021). A systematic review of the use of gamification in flipped learning. Educational Information Technology, 26(6), 3327–3346.

Garcia, L., & Martinez, R. (2023). Engagement and enjoyment in game-based ESL learning. Language Learning & Technology, 27(2), 89-104.

Gentner, D. (2006). Why verbs are hard to learn. In K. Hirsh-Pasek, & R. Golinkoff, (Eds.) Action meets word: How children learn verbs (pp. 544-564). Oxford University Press

Gill, S. K. (2005). Language Policy in Malaysia: Reversing Direction. Language Policy, 4, 241-260.

Gustian, K., Aridah, A., & Rusmawaty, D. (2023). The Benefits of Flipped Classroom Model for Efl Learners. Journal on Education, 5(4), 13918-13935.

Hung, H. T. (2018). Gamifying the flipped classroom using game-based learning materials. ELT Journal, 72(3), 296–308

Hwang, G., Chien, S., & Chen, C. (2021). Bridging the Digital Divide in Game-Based Learning: Challenges and Solutions.Computers & Education, 160, 104025.

Idris, M. I. (2022). The effects of Kahoot! on young learners' irregular verb mastery in an ESL context. Journal of Language Teaching and Research, 13(4), 786-796.

Johnson, A. M., Jacovina, M. E., Russell, D. E., & Soto, C. M. (2016). Challenges and solutions when using technologies in the classroom.

Juhary, J. (2019). The flipped classroom: Engaging the student in active learning. Journal of Teaching and Learning in Higher Education, 11(2), 45–56.

Kam, A. H. T., & Umar, I. N. (2022). Would gamification affect high and low achievers differently? A study on the moderating effects of academic achievement level. Journal of Educational Psychology, 114(2), 255-271.

Kumar, S., & Singh, P. (2023). Collaborative learning in game-based ESL classrooms. Computers & Education, 180, 104-118.

Knox, J. (2018). The use of games in language learning. Teaching English with Technology, 18(1), 77–92.

Lee, J., & Park, S. (2022). Motivational effects of game-based learning in ESL classrooms. Journal of Language Teaching and Research, 13(4), 567-579.

Li, X., & Wong, B. (2021). Parental Involvement in Flipped Classrooms: A Case Study of ESL Learners.International Journal of Bilingual Education and Bilingualism, 24(5), 678-692.

Lo, C. K., & Hew, K. F. (2017). A Critical Review of Flipped Classroom Challenges in K-12 Education: Possible Solutions and Recommendations for Future Research. Research and Practice in Technology Enhanced Learning, 12(1), 4.

Ministry of Education Malaysia. (2013). Pelan Pembangunan Pendidikan (PPPM) 2013-2025. Kementerian Pendidikan Malaysia: Putrajaya.

Ministry of Education Malaysia. (2018). Dokumen Standard Kurikulum dan Pentaksiran Tahun 3. Bahagian Pembangunan Kurikulum: Putrajaya.

Ministry of Education Malaysia. (2019). Dasar Pendidikan Digital Malaysia [Malaysia Digital Education Policy]. Ministry of Education Malaysia.

Mukhtar, D., & Nasir, M. (2023). Trends, Issues, and Challenges in E-Learning in the Malaysian Education Landscape. Journal of Social Sciences and Business, 1(1), 1-10.

Mundy, K. (2008). Educational Multilateralism – Origins and Indications for Global Governance: An Introduction. International Perspectives on Education and Society, 9, 1–12.

Pitriani, N. (2019). Learning Vocabularies Using Short Stories at Primary School: Students Perception. JET Journal of English Teaching.

Ndayishimiye, E., Ngabonziza, J. D. A., & Ngirabakunzi, S. N. (2023). The effect of gamification on learners' English-speaking skills performance: A case of five schools. Journal of Educational Technology, 44(3), 109-122.

Ambigapathy, P. (2002). English Language Teaching in Malaysia Today. Asia Pacific Journal of Education. Vol.22. 35-52.

González, M. E., López-Belmonte, J., Segura-Robles, A., & Moreno-Guerrero, A. J. (2021). Gamification and flipped learning and their influence on aspects related to the teaching-learning process. Journal of Educational Technology & Society, 24(1), 22-38.

Plass, J. L., Homer, B. D., Bromley, M., Froehlich, F., Shao, Y., & Young, J. (2023). Does Digital Game Play Affect Social/Emotional Child Wellbeing? In Joint International Conference on Serious Games .Cham: Springer Nature Switzerland.

Safapour, E., Kermanshachi, S., & Taneja, P. (2019). A review of nontraditional teaching methods: Flipped classroom, gamification, case study, self-learning, and social media. Education and Information Technologies, 24(3), 2079-2102.

Sailer, M., & Homner, L. (2020). The Gamification of Learning: A Meta-Analysis. Educational Psychology Review, 32(1), 77-112.

Sailer, M. and Sailer, M. (2021), Gamification of in-class activities in flipped classroom lectures. Br. J. Educ. Technol., 52: 75-90.

Sargent, J., & Casey, A. (2020). Flipped learning, pedagogy and digital technology: Establishing consistent practice to optimise lesson time. European Physical EducationReview, 26(1), 70-84.

Seaborn, K., & Fels, D. I. (2015). Gamification in theory and action: A survey. International Journal of Human-Computer Studies, 74, 14–31.

Shute, V., & Ke, F. (2022). Games, Learning, and Assessment.Handbook of Game-Based Learning, 123-145.

Suparman, A., Kusnadi, S., & Adiredja, R. (2023). The flipped classroom: A story from an EFL classroom in Indonesia. MEXTESOL Journal, 47(2). Retrieved from https://files.eric.ed.gov/fulltext/EJ1397165.pdf on 19 February 2025.

Smith, A., & Lee, B. (2022). Communicative competence in game-based ESL learning. TESOL Quarterly, 56(1), 123-145.

Tan, C. S., Zakuan, N., & Abd Aziz, M. I. (2022). Recent trends of blended learning and flipped classroom in Malaysia. Arab World English Journal, 2nd Special Issue on Covid 19 Challenges, 292–306.

Timotheou, S., Miliou, O., & Ioannou, A. (2022). Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review. Education and Information Technologies, 27(2), 1781-1798.

Turan, Z., & Akdag-Cimen, B. (2020). Flipped classroom in English language teaching: A systematic review. Computer Assisted Language Learning, 33(5-6), 590-606.

Turgut, Y., & İrgin, P. (2021). Teacher Training for Game-Based Learning in ESL Contexts. TESOL Quarterly, 55(2), 345-367.

Universiti Kebangsaan Malaysia (UKM). (2024). Agenda Pendigitalan Pendidikan: Cabaran Masa Kini. Retrieved from https://www.ukm.my/beritaukm/agenda-pendigitalan pendidikan-cabaran-masa-kini/ on 18 February 2025.

Wang, T., Chen, L., & Liu, Y. (2023). Cognitive engagement in game-based language learning. Educational Psychology Review, 35(2), 210-230.

Xiao, X., and He, G. (2023). Subjective experiences and perceptions of learning a second language through digital games: A case study of Chinese college students. Front. Psychol.

Yong, X. J., Zakaria, A. Z. b., & Hassan, H. B. (2023). The use of gamification in enhancing students' engagement and performance in ESL speaking lessons. Journal of Education & Learning, 12(2), 45-62.

Yunus, C. C. A., & Kim, T. K. (2023). Exploring a gamified learning tool in the ESL classroom. Journal of Language and Technology, 10(1), 35-48.

Zhang, X., & Lin, Y. (2023). The role of autonomy in game-based language learning. System, 110, 102-115.