

INTERNATIONAL JOURNAL OF EDUCATION, PSYCHOLOGY AND COUNSELLING (IJEPC)

www.ijepc.com



WINGS OF WORDS: A STRUCTURED USR INTERVENTION FOR GAME-BASED ENGLISH LANGUAGE LEARNING

Nadira M. Jahaya¹, Syazliyati Ibrahim²*, Noor 'Izzati Ahmad Shafiai³, Sharifah Syakila Syed Shaharudin⁴, Razanawati Nordin⁵

- Academy of Language Studies, Universiti Teknologi MARA, Kedah Branch, Malaysia Email: nadirajahaya@uitm.edu.my
- ² Academy of Language Studies, Universiti Teknologi MARA, Kedah Branch, Malaysia Email: syazliyati@uitm.edu.my
- Academy of Language Studies, Universiti Teknologi MARA, Kedah Branch, Malaysia Email: noorizzati@uitm.edu.my
- ⁴ Academy of Language Studies, Universiti Teknologi MARA, Kedah Branch, Malaysia Email: sharifahsyakila@uitm.edu.my
- Academy of Language Studies, Universiti Teknologi MARA, Kedah Branch, Malaysia Email: razanawati@uitm.edu.my
- * Corresponding Author

Article Info:

Article history:

Received date: 09.06.2025 Revised date: 07.07.2025 Accepted date: 25.08.2025 Published date: 18.09.2025

To cite this document:

Jahaya, N. M., Ibrahim, S., Ahmad Shafiai, N. I., Syed Shaharudin, S. S., & Nordin, R. (2025). Wings Of Words: A Structured USR Intervention for Game-Based English Language Learning. *International Journal of Education, Psychology and Counseling, 10* (59), 838-858.

DOI: 10.35631/IJEPC.1059061

Abstract:

This paper is a study on Wings of Words, a half-day University Social Responsibility (USR) initiative organised to support English language enhancement among underprivileged students using game-based pedagogy. The project was designed to improve English language among children from underserved communities, to promote foundational English language skills in an appealing, inclusive, and interactive manner. Organised by university faculty and student volunteers, the programme implemented three structured activity stations that are Giant Block, Word Treasure, and Blockbuster aimed at enhancing the students' vocabulary acquisition, listening comprehension, and verbal communication. The games were carefully planned to align with language learning objectives while encouraging active participation, teamwork and learner autonomy. Data was collected through a questionnaire to assess engagement levels and expected learning outcomes. Findings imply that the integration of play-based methods not only amplified student motivation and participation but also enabled meaningful language use in context. Additionally, the project offered university students essential experiential learning opportunities in community service. The Wings of Words project underscores the potential of short-term, university-led interventions to create a measurable impact on language learning in marginalised communities. It also highlights the shared benefits of USR activities for both learners and

This work is licensed under <u>CC BY 4.0</u>

(C)(†)

facilitators. The paper concludes by discussing pedagogical implications and recommendations for planning such initiatives in wider educational contexts.

Keywords:

Community Outreach, Game-Based Learning, Language Games, USR, Vocabulary Learning

Introduction

English language proficiency is a vital skill for students in Malaysia, especially among underprivileged populations who face systemic educational disadvantages. Vocabulary forms the foundation of language competence and is central to reading comprehension and general language development (Nation, 2001; Thornbury, 2002). Many students from lower-income (B40) and under-resourced communities struggle to acquire core vocabulary because of limited exposure to English and constrained access to quality language instruction (Abd Aziz & Abu Bakar, 2019). The Malaysian Education Blueprint (2013–2025) recognises these gaps and calls for equitable access to language learning opportunities. Yet recent work still documents persistent challenges in vocabulary growth for learners in low-resource Malaysian settings, constraining long-term academic potential and upward mobility (Yunus et al., 2020; see also Malaysian school-based evidence in Ni et al., 2020).

To tackle these challenges, educators have increasingly adopted game-based learning (GBL) for vocabulary instruction. Meta-analytic and recent empirical evidence indicate that digital and classroom game activities meaningfully improve second-language vocabulary learning and learner engagement (Thompson & von Gillern, 2020; Zhang, Zou, & Cheng, 2023). In Malaysia, quasi-experimental classroom studies likewise report vocabulary gains and higher motivation among rural and underserved pupils when language games (e.g., picture tasks, puzzles, word challenges) are used (Ni et al., 2020). These converging findings support incorporating GBL into language programmes targeting underprivileged learners as a pragmatic, high-engagement strategy.

The Wings of Words project aligns with Experiential Learning Theory (Kolb, 1984) by structuring learning as a cycle of concrete experience, reflection, conceptualisation, and active experimentation. Current Malaysian scholarship highlights service-learning's educational value and growing institutional uptake, noting its fit with experiential aims for holistic, socially responsible graduates (Diong, Cheah, & Siah, 2025; Yusof, Tengku Ariffin, Awang-Hashim, Nordin, & Kaur, 2020). Hence, community-based, game-driven vocabulary interventions grounded in experiential learning offer a promising route to reducing language disparities among disadvantaged youth. This study focused on underprivileged (primarily B40) learners in selected low-resource Malaysian primary and secondary schools, examining English vocabulary development, alongside classroom engagement and confidence during the Wings of Words game-based intervention delivered by trained university volunteers through structured stations. Main stakeholders include participating pupils, volunteers, and school partners. It aimed to measure the effectiveness of a gamified English language learning programme implemented among the participants.

Literature Review

Underprivileged Communities and English Vocabulary Learning

A growing body of international and regional research underscores a persistent vocabulary gap among learners from low socioeconomic and marginalised backgrounds, a group often referred to as underprivileged communities. These learners face compounded disadvantages in English vocabulary acquisition due to factors such as limited access to quality educational resources, minimal exposure to English outside the classroom, and pedagogical approaches that lack engagement and contextual relevance.

In the Malaysian and broader Southeast Asian context, this vocabulary disparity is particularly evident in primary and secondary ESL learners from low-income households, rural settings, and indigenous communities. Studies consistently report that many of these students do not meet the 2,000-word threshold commonly associated with basic communicative competence in English. A qualitative study by Wan Mahzan et al. (2020) examining Orang Asli learners in ESL classrooms highlighted the urgent need for digital, contextually relevant learning materials, as traditional, one-size-fits-all curricula fail to meet the distinct needs of these learners. Similarly, research by Mohamad et al. (2024) on B40 pupils in Sarawak identified systemic issues, such as weak internet connectivity, insufficient access to English reading materials, and minimal enrichment programmes that hinder vocabulary development.

Pedagogical Limitations in Under-Resourced Schools

Traditional teaching methods in under-resourced classrooms that are characterised by rote memorisation, teacher-centred instruction, and limited interaction have long been criticised for impeding effective vocabulary learning. A systematic review by Ling and Abdul Aziz (2022) found that such methods not only disengage learners from low-income backgrounds but also contribute to poor retention and limited contextual application of new vocabulary. These approaches often neglect to foster meaningful, communicative experiences that are essential for internalising vocabulary in real-world settings.

Research also points to disparities in how students from different socioeconomic backgrounds use vocabulary learning strategies. A study by Zaidi et al. (2022) found that low-proficiency learners, many of whom come from underprivileged households, tend to rely on basic, dictionary-based strategies. In contrast, their higher-proficiency peers employed more metacognitive and memory-enhancing strategies. This suggests that students from marginalised backgrounds may benefit significantly from explicit instruction in strategy use and scaffolding that supports autonomous vocabulary learning.

Early Intervention through Play-Based Learning

In early childhood education, alternative pedagogical models are gaining traction. Wasima (2021) explored the impact of play-based activities on vocabulary development in a low-income preschool setting in Selangor. The findings emphasised that interactive, socially mediated, and developmentally appropriate tasks such as repetition, role play, and cooperative games may enhance vocabulary retention, especially for children with limited exposure to English outside school. These results align with the broader literature advocating for experience-based learning environments for young learners from disadvantaged backgrounds.

Incidental Learning and Narrow Reading

Complementing these findings, a recent case study by Rajendran and Mustafa (2022) demonstrated that narrow reading, which is a method involving thematically related texts, substantially improved incidental vocabulary acquisition among primary school pupils from low-income families in Johor Bahru. This approach also increased learners' motivation, illustrating the dual benefit of language development and learner engagement, even in resource-constrained settings. Taken together, these studies highlight an urgent need for innovative, context-sensitive interventions that address the systemic and pedagogical challenges faced by learners from low socioeconomic and marginalised communities. Traditional methods are not only insufficient but can further alienate learners who already struggle with language access and classroom engagement.

To address these gaps, several pedagogical directions emerge which support the design of game-based activities for English vocabulary learning. First, digital and game-based tools, such as multimedia platforms and mobile applications, are especially promising for rural and low-income learners due to their interactive, learner-centred nature (Wan Mahzan et al., 2020; Ghapar et al., 2024; Mohamad et al., 2024). In addition, play-based strategies in early education support vocabulary development through social interaction, repetition, and contextual engagement, making them ideal for disadvantaged preschool populations (Wasima, 2021). Narrow reading and incidental learning also offer low-cost, scalable solutions that foster vocabulary growth while simultaneously enhancing learner motivation and comprehension (Rajendran & Mustafa, 2022). Teaching vocabulary learning strategies also explicitly helps level the playing field by equipping underprivileged students with tools for independent learning (Zaidi et al., 2022).

Programmes such as *Wings of Words* align with these research insights. By offering game-based, student-driven vocabulary learning tailored to resource-constrained environments, such initiatives present a viable alternative to conventional instruction. They have the potential not only to build foundational vocabulary but also to motivate learners, bridge language gaps, and create more equitable learning opportunities.

Educational Games in English Language Learning

An expanding body of literature highlights the powerful role of game-based learning in enhancing vocabulary acquisition among English language learners, particularly through its capacity to increase learner motivation, foster contextualised language use, and improve long-term retention. Across both traditional and digital platforms, educational games have consistently demonstrated potentials to transform passive vocabulary learning into interactive, student-centred experiences.

Central to this effectiveness is the motivational dimension of games, which offer learners a sense of autonomy, immediate feedback, and playful challenge. Yang and Charubusp (2023), in a comparative study of structured vocabulary games versus rote memorisation techniques, found that learners engaged in game-based tasks not only achieved significantly higher vocabulary test scores but also demonstrated sustained enthusiasm throughout the learning process. This underscores a key strength of educational games, in which they reduce affective filters by making learning enjoyable and emotionally engaging.

In younger learners, especially those from low-exposure or under-resourced backgrounds, developmentally appropriate game design is essential. Qualitative investigations in Thai primary classrooms revealed that English lessons incorporating concrete vocabulary, visual supports, audio input, and scaffolding mechanisms promote both comprehension and active participation (Lampai & Sukying, 2023; Utthavudhikorn & Soontornwipast, 2024). Such games designed with these elements may simulate meaningful communication scenarios, hence reinforcing vocabulary through experiential and contextualised use rather than abstract memorisation.

Synthesis of broader empirical trends confirms these individual findings. A systematic review by Yieng and Abdul Aziz (2022) concluded that game-based methods are most effective when aligned with learners' cognitive readiness, instructional goals, and timing within the lesson flow. These conditions enhance not only vocabulary acquisition but also spelling accuracy and language retention. Similarly, Ling and Abdul Aziz (2022), in their focused review of ESL learners in primary education, reported consistent vocabulary gains across diverse settings that used game-based strategies. However, they also emphasised that successful outcomes depend heavily on teacher preparedness and the availability of appropriate materials. These are among resources often scarce in low-income or marginalised educational contexts.

With the growing ubiquity of technology, digital and online vocabulary games have emerged as powerful tools, particularly in settings like Malaysia where digital access is expanding. Hasram et al. (2020) found that online games not only improved vocabulary retention and learner satisfaction but also fostered digital literacy and independent learning skills. These outcomes aligned with broader 21st century educational goals. These platforms offer scalable, low-cost alternatives to traditional instruction, making them especially valuable in resource-constrained classrooms.

However, while the pedagogical promise of educational games is well-supported, critical limitations remain. A recent educational audit by Tengku (2024) affirmed the overall benefits of game-based learning, which include improved engagement, contextual understanding, and language application. However, he also noted that many implementations suffer from misalignment with curricular goals and inconsistent pedagogical frameworks. This finding highlights a persistent challenge: effective integration of games into formal education systems requires not just engaging content, but intentional instructional design and coherence with learning objectives.

Collectively, as shown in Table 1, these studies cited above emphasise that while game-based vocabulary instruction holds considerable promise, its effectiveness depends on thoughtful design, alignment with learner needs, sufficient educator support, and integration into broader curricular frameworks. These insights provide a strong foundation for initiatives like the *Wings of Words* project, which leverages structured, engaging, and context-sensitive games to foster meaningful language learning among underprivileged students.

Table 1: Summary of Past Findings

	Table 1: Sun	nmary of Past Fin	dings
Author(s)	Context /	Strategies /	Key Findings
	Target Group	Tools	
Wasima (2021)	Low-income preschoolers	Play-based activities: repetition, role play, cooperative games	Enhanced vocabulary retention through developmentally appropriate and socially mediated learning tasks
Wan Mahzan et al. (2020); Ghapar et al. (2024); Mohamad et al. (2024)	Rural and low- income learners	Digital tools, multimedia platforms, mobile apps	Interactive, learner-centred tools suitable for disadvantaged learners
Zaidi et al. (2022)	Underprivileged students	Teaching vocabulary learning strategies	Empowered independent learning and leveled educational inequities
Yang & Charubusp (2023)	General English learners	Structured vocabulary games vs. rote memorisation	Higher test scores and sustained learner motivation through game-based tasks
Lampai & Sukying (2023); Utthavudhikorn & Soontornwipast (2024)	Thai primary students	Games with visual/audio support, scaffolding, contextual tasks	Promoted comprehension and active participation through experiential learning

Building on the evidence supporting game-based vocabulary instruction, it is essential to consider the theoretical underpinnings that explain why such approaches are effective. One relevant framework is Experiential Learning Theory (ELT), which emphasises learning through direct experience, active engagement (Lampai & Sukying, 2023; Utthavudhikorn & Soontornwipast, 2024), and reflective practice that align closely with the interactive and learner-centred nature of initiatives like the *Wings of Words* project.

Theoretical Framework

Experiential Learning Theory (ELT), developed by David Kolb (1984), posits that learning is a process grounded in experience, where knowledge is constructed through a cyclical model of four stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation. This model encourages learners to engage in direct tasks, reflect on those experiences, derive lessons, and apply them in new contexts. Kolb (1984) affirms the relevance

of ELT in modern educational environments, emphasising that experiential learning enhances students' adaptability and deepens understanding through real-world application. Illeris (2007) similarly contends that experiential learning is effective because it integrates cognitive, emotional, and social dimensions. As such, ELT serves as a robust framework for initiatives that involve both hands-on activities and reflective practice, such as university outreach programmes.

The Wings of Words project exemplifies ELT in practice by using game-based learning as a form of concrete experience for underprivileged students. Through interactive vocabulary games and student-led facilitation, both learners and facilitators participate in dynamic, real-time learning processes. These experiences are not isolated but are continuously reflected upon and adapted throughout the project. According to Eyler (2002), meaningful learning occurs when learners are immersed in socially relevant, reflective environments, a notion echoed in more recent studies emphasising structured, reflective engagement. In the Wings of Words setting, game-based vocabulary tasks provide engaging contexts where learners not only acquire language but also develop confidence and motivation through repeated cycles of experience and feedback. For example, Putra et al. (2024) highlight how service-learning programs, when built on experiential foundations, significantly improve academic outcomes and community connectedness. In the Wings of Words setting, game-based vocabulary tasks provide engaging contexts where learners not only acquire language but also develop confidence and motivation through repeated cycles of experience and feedback.

Moreover, ELT supports not only the cognitive development of underprivileged students but also the pedagogical and professional growth of the university student volunteers. As these volunteers teach and interact with children, they cycle through the ELT's stages—learning by doing, observing learners' responses, conceptualising improvements, and refining their instructional methods. This dual learning opportunity aligns with Ash and Clayton's (2009) assertion that structured reflection in service-learning deepens critical thinking and fosters civic responsibility. Kolb (1984) further asserts that experiential environments enhance learners' capacity to adapt and problem-solve—skills that university students cultivate through community projects like the *Wings of Words*. In this way, ELT underpins the educational impact of the project, reinforcing it as a transformative learning experience for all involved.

Methodology

Research Design

This research utilised a quantitative approach to assess how the structured game-based English language programme Wings of Words affects learners' motivation, confidence, and views on English language learning. The aim of employing a quantitative design was to gather quantifiable proof of shifts in attitudes and perceptions in participants prior to and following the intervention (Creswell & Creswell, 2018). Utilising a pre-test/post-test method with a structured Likert-scale questionnaire, the research sought to evaluate if the incorporation of educational games affected students' self-reported language engagement and motivation levels.

Quantitative research is particularly appropriate for educational interventions aimed at identifying observable patterns, assessing changes in attitudes, and systematically comparing data over various time intervals (Fraenkel, Wallen, & Hyun, 2019). Within the *Wings of Words* initiative, researchers employed a quantitative method to monitor variations in learners'

responses across various aspects like confidence in English usage, motivation for learning, and perceived effectiveness of game-based learning through numerical scales amenable to statistical analysis.

The Likert-scale tool was utilised because of its efficiency in gathering subjective feedback in a systematic, measurable way (Boone & Boone, 2012). Likert scales are commonly utilised in educational research to evaluate attitudes, beliefs, and self-assessments, especially when analysing interventions focused on behavioural or motivational results (Boone & Boone, 2012). Figure 1 presents the data-collection flow for the Wings of Words intervention and the sequence of the steps.

The pre- and post-intervention Likert-scale surveys were used to measure confidence, motivation, engagement, and perceived learning efficacy from 31 participants, ages 6 to 17. Comparative analysis of the responses allowed the study to monitor changes in learners' attitudes and beliefs in relation to these aspects. Data was tabulated and precented in percentages in graphs.

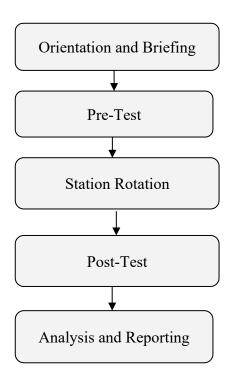


Figure 1: Flow Chart Of Data Collection

Sampling and Participants

The sample consisted of 31 student participants aged between 6 and 17 years old, drawn from an underprivileged community learning centre in northern Malaysia. The age distribution was skewed toward older participants, with 17-year-olds (23.3%) and 14-year-olds (16.7%) comprising the largest age groups. Younger learners (ages 6 to 10) were underrepresented, collectively forming only 16.7% of the sample.

Participants were selected through purposive sampling, as the intervention specifically targeted learners from underserved backgrounds with limited English language exposure. This sampling strategy is commonly used in community-based educational programmes where accessibility and demographic specificity are key considerations (Etikan, Musa, & Alkassim, 2016).

Limitations of Study

The current study has several limitations that limit the scope and generalisability of its findings, even if it has produced valuable preliminary evidence on the short-term impacts of a game-based, university-led intervention. First, results may not generalise to other age groups, areas, or poor communities due to the small sample size (N = 31) and purposeful sampling from a single community centre, which restrict statistical power and raise questions about sampling bias (Etikan, Musa, & Alkassim, 2016). Secondly, because the intervention was only conducted for one half-day session, the design does not account for the impacts of repeated or prolonged exposure to game-based pedagogy, nor does it measure medium- or long-term learning retention (Fraenkel, Wallen, & Hyun, 2019). Additionally, the study mostly used self-reported Likert-scale measures of confidence and motivation, which are susceptible to response-style biases and social desirability biases, especially when younger participants needed help filling out the questionnaire (Boone & Boone, 2012).

Findings and Discussion

This study evaluates the effectiveness of a gamified English language learning programme implemented among 31 participants aged 6 to 17. The intervention aimed to enhance key aspects of language learning: confidence, motivation, engagement, and perceived learning efficacy. Data was collected using a Likert-scale survey administered before and after the programme, allowing for a comparative analysis of shifts in learners' attitudes and beliefs. The findings reveal a consistent and significant improvement across multiple dimensions, demonstrating that game-based learning positively influences language acquisition experiences.

Demographic Profile

All participants were drawn from the same residential institution, ensuring a uniform socioeducational environment, which strengthens the internal validity of the results. The age distribution ranged from 6 to 17 years, with the largest groups being 17-year-olds (23.3%) and 14-year-olds (16.7%). This diverse age range suggests that the programme was accessible and relevant across developmental stages, supporting its potential scalability (Hamari, Koivisto, & Sarsa, 2014).

Learner Enjoyment In English Learning

Figure 2 shows the results from the survey conducted on the participant regarding their enjoyment in learning English before and after the conducted programme.

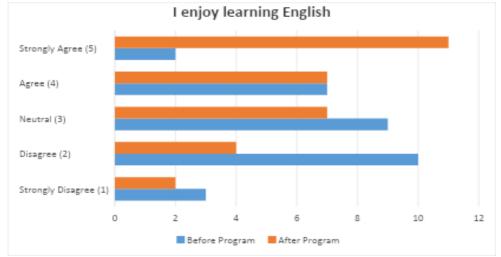


Figure 2: Pre-post Programme on Learner Enjoyment in English Learning

One of the most striking outcomes was the increase in enjoyment of learning English. Preprogramme, only 29% of participants (9 out of 31) reported positive feelings toward English learning. This figure rose to 58% (18 participants) post-intervention. Conversely, negative sentiment dropped from 42% (13 participants) to 19% (6 participants), and neutral responses declined from 29% to 23%. The most notable change was in the "Strongly Agree" category, which surged from 2 to 11 respondents. This indicates not just a mild improvement but a transformative shift in emotional engagement. The reduction in neutral responses suggests participants developed stronger, more confident opinions, with a clear tilt toward enjoyment. These results align with existing research on gamification, which shows that interactive and playful elements increase intrinsic motivation and reduce the anxiety often associated with language learning (Sailer & Homner, 2020; Deterding et al., 2011).

Confidence in English Usage (Speaking and Writing)

Figure 3 shows the data results survey from the participants on their confidence level in English in terms of writing and speaking before and after the programme has finished.

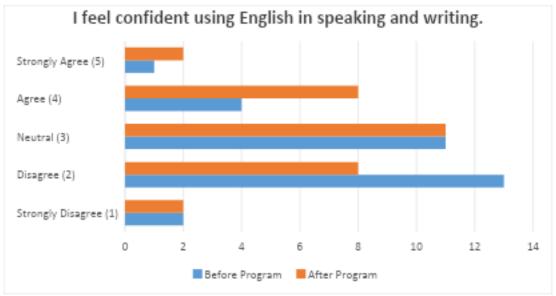


Figure 3: Pre-post Programme on Learner Confidence Level in Using English for Speaking and Writing

Participants' confidence in using English, particularly in speaking and writing, also improved. Initially, only 16% expressed positive sentiment, while 48% held negative views. After the programme, positive responses nearly doubled to 32%, and negative sentiment decreased to 32%. Although neutral responses remained stable at 35%, the reduction in negative attitudes especially in the "Disagree" category (from 13 to 8) suggests the programme helped alleviate learners' insecurities. The increase in "Agree" responses (from 4 to 8) and a slight rise in "Strongly Agree" (from 1 to 2) reflect a growing sense of moderate confidence. While the shift in the highest confidence level was modest, the overall trend indicates that gamified activities provided a safer, more supportive environment for language practice, reducing fear of mistakes and encouraging risk-taking which the key components in language acquisition (Picheta, de Oliveira, & da Silva, 2021; Tsai et al., 2020).

Gamification Experience

Figure 4 shows the result of the survey conducted on participants regarding prior experience and familiarity with gamification concepts.



Figure 4: Pre-post Programme on Learner Gamification Experience

Before the programme, only 22.6% of participants expressed confidence in traditional teaching methods, while 48.4% were sceptical or negative. After exposure to gamified learning, positive perceptions rose sharply to 64.5%, with negative views dropping to 22.6% and neutral responses falling to 12.9%. The number of participants who "Strongly Agree" with the effectiveness of gamification tripled from 2 to 9. This dramatic shift indicates that direct experience with game-based learning significantly enhanced participants' appreciation of alternative pedagogical approaches. The decline in both negative and neutral responses suggests that the programme successfully demystified gamification, transforming uncertainty and scepticism into acceptance and enthusiasm. This finding underscores the importance of experiential learning in shaping educational attitudes (Landers et al., 2018).

Belief in the effectiveness of Games for English Learning

Figure 5 shows the result of pre-post programmes on the participants' belief that playing games can help participants learn English better.

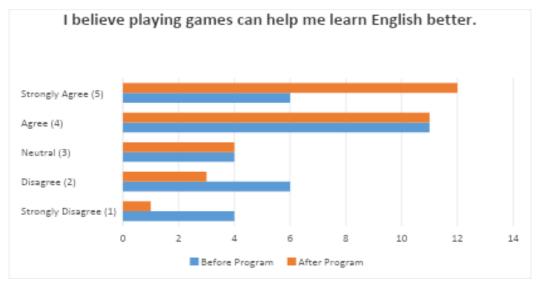


Figure 5: Pre-post programme on Learner Belief That Games Help Learning English Better

A majority (54.8%) already believed in the value of games for language learning before the programme. However, this belief strengthened significantly post-intervention, with 74.2% agreeing or strongly agreeing. Negative sentiment dropped from 32.3% to 12.9%, and the number of "Strongly Agree" responses doubled from 6 to 12. This indicates that the programme not only reinforced existing beliefs but also converted sceptics. The stability of neutral responses (12.9% before and after) suggests that the programme had less impact on those initially undecided, possibly due to limited exposure or personal learning preferences. Nonetheless, the overall trend reflects a growing consensus that games are effective tools for language development, supporting their integration into mainstream pedagogy (Plass, Mayer, & Homer, 2020; Yang, Chen, & Hsu, 2021).

Attitudes Towards Traditional Methods

Figure 6 shows the survey results on the pre-post programme in measuring the participants' attitudes to see whether traditional methods like lectures or textbooks are more effective compared to gamification methods.

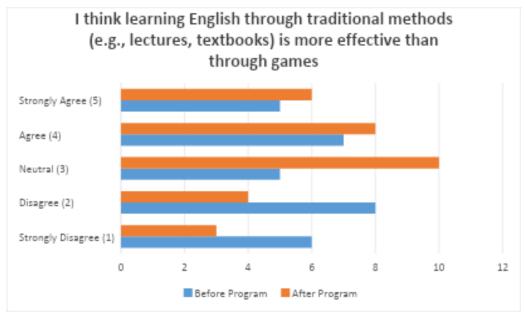


Figure 6: Pre-post programme on Learner Attitudes Towards The Traditional Methods
Of Learning English

Interestingly, while gamification gained favour, attitudes toward traditional methods became more nuanced. Pre-programme, 38.7% believed traditional methods were more effective, while 45.2% disagreed. Post-programme, positive sentiment rose slightly to 45.2%, but the most significant change was the doubling of neutral responses from 16.1% to 32.3%. This suggests that exposure to gamified learning prompted critical reflection rather than outright rejection of traditional approaches. The decline in strong disagreement indicates reduced resistance, while the slight increase in strong agreement (from 5 to 6) shows some reinforcement of traditional beliefs. The rise in neutrality reflects cognitive dissonance or a more balanced evaluation of both methods. This outcome is valuable, as it fosters a more flexible and adaptive mindset toward learning, encouraging students to appreciate the strengths of different instructional strategies (Huang et al., 2022).

Learner Motivation to Participate in Future English Programmes

Figure 7 presents the findings of a pre- and post-programme survey conducted to assess changes in participants' motivation to engage in future English lessons.

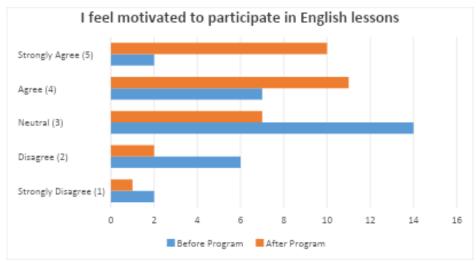


Figure 7: Pre-post programme on Learner Attitudes Towards the Traditional Method of Learning English

Perhaps the most encouraging finding was the dramatic increase in motivation to continue learning English. Pre-programme, only 29% expressed interest in future classes; this rose to 67.7% post-intervention. Negative motivation dropped from 25.8% to 9.7%, and neutral responses decreased from 45.2% to 22.6%. The surge in "Strongly Agree" responses from 2 to 10 highlights a powerful boost in enthusiasm. This suggests that the gamified environment not only made learning enjoyable but also fostered a sense of ownership and long-term commitment. The reduction in ambivalence indicates that learners became more decisive in their positive outlook, likely due to increased confidence and engagement. High motivation is a strong predictor of sustained learning, making this a critical success indicator (Deci & Ryan, 2000; Ortega & Zhang, 2022).

Perceived Focus and Engagement Through Games

Figure 8 shows the result of a survey conducted to measure participants' pre-post programme towards games in helping to stay focused and engaged in learning English.



Figure 8: Pre-post programme on Learner Perceived Focus and Engagement Through
Games

Participants' belief in games as tools for maintaining focus and engagement showed the most dramatic improvement. Initially, only 32.3% believed games helped them stay focused; this soared to 77.4% after the programme. Negative sentiment plummeted from 45.2% to 6.5%, and "Strongly Disagree" responses dropped to zero. The number of "Strongly Agree" responses more than doubled (from 5 to 13), and "Agree" responses also increased significantly. This near-universal endorsement underscores the power of gamification to capture and sustain attention especially in younger learners who may struggle with concentration in traditional settings. The slight drop in neutral responses further confirms that most learners developed clear, positive views. These findings support the theory that game mechanics such as challenges, feedback, and progression enhance cognitive engagement and reduce distractions (Koivisto & Hamari, 2022).

Overall effectiveness of the programme

Figure 11 provides a detailed analysis of how participants perceived the effectiveness of the games used in the programme to help them understand English better.

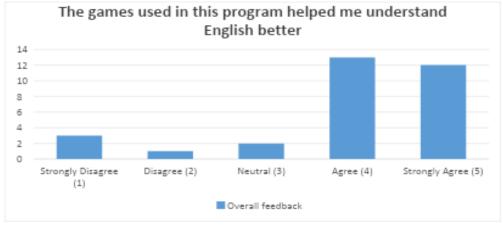


Figure 11: Pre-post programme on The Overall Effectiveness of the Programme.

In the final assessment, 80.6% of participants agreed or strongly agreed that the games helped them understand English better, with only 12.9% expressing negative views and 6.5% remaining neutral. The high proportion of "Strongly Agree" responses (38.7%) reflects deep satisfaction and perceived impact. This overwhelming endorsement confirms that the gamified approach was not only engaging but also educationally effective. The minimal dissatisfaction suggests the programme was well-designed and inclusive, though the small number of neutral or negative responses indicates room for personalisation to meet diverse learning needs. These findings highlight the potential of incorporating games into language learning programmes to create more engaging, effective, and enjoyable learning experiences (Plass, Mayer, & Homer, 2020). By continuing to refine and adapt these tools, educators can further maximise their impact on students' language acquisition journeys.

Conclusion & Recommendations

This study achieved its objective of examining the effectiveness of game-based learning (GBL) as a beneficial approach for strengthening English abilities among disadvantaged students. Using organised, hands-on activities grounded in Kolb's Experiential Learning Theory (1984), participants reported increased confidence, motivation, and willingness to use English. Analysis of pre- and post-intervention Likert-scale feedback showed statistically meaningful gains in students' self-assessment and enthusiasm for English, aligning with evidence that welldesigned gamification supports improved learning and sustained engagement in language education (Gee, 2003; Hamari, Koivisto, & Sarsa, 2014). Given these favourable outcomes, comparable interventions should be piloted at a greater scale and across diverse learner groups to examine external validity and transferability. Teachers and curriculum designers are encouraged to embed game mechanics in both formal lessons and informal enrichment to cultivate a more learner-centred environment that accommodates varied learning preferences and deepens affective engagement (Deterding et al., 2011). As this phase relied primarily on quantitative self-reports, future work should triangulate with qualitative methods such as semistructured interviews, focus groups, or reflective journals to capture learners' lived experiences and provide richer insight into how gamified tasks shape attitudes and language use over time (Creswell & Plano Clark, 2018).

In sum, the findings support the view that carefully planned and implemented gamification can serve as an inclusive, engaging pathway for language teaching, particularly in underserved settings where conventional approaches may be less effective. Its primary contribution is to provide context-specific evidence from Malaysia on how ELT-aligned, community-based game-based learning can be operationalised at low cost, complete with structured activity sequences and facilitation routines that other parties can adapt. Later projects will have follow-ups on students' English language results and include mixed-methods research designs to examine differential effects such as age, proficiency, and gender. Conducting this project surfaced practical challenges such as scheduling with partner establishments, occasional resource constraints (space, materials, connectivity), and consent/ethical logistics that will help strengthen training, monitoring, and contingency planning in subsequent projects.

Acknowledgement

The authors would like to express their heartfelt appreciation to Universiti Teknologi MARA (UiTM) Cawangan Kedah for the continuous support to carry out the University Social Responsibility (USR) project. Special thanks are also extended to the Research Management Unit (RMU) for their assistance in publishing this report. Our sincere gratitude goes to our

collaborators and all team members whose commitment and collaboration shaped the success of this project.

References

- Abd Aziz, Z., & Abu Bakar, A. Y. (2019). Perception and attitude of Malaysian underprivileged students in learning ESL: A preliminary case study. *Journal of Educational and Learning Studies*, 2(1), 18–24. doi:10.32698/0362
- Ash, S. L., & Clayton, P. H. (2009). Generating, deepening, and documenting learning: The power of critical reflection in applied learning. *Journal of Applied Learning in Higher Education*, 1(1), 25–48.
- Bakhsh, S. A. (2016). Using games as a tool in teaching vocabulary to young learners. *English Language Teaching*, *9*(7), 120–128. doi:10.5539/elt.v9n7p120
- Boone, H. N., Jr., & Boone, D. A. (2012). Analyzing Likert data. *The Journal of Extension*, 50(2), Article 48. doi:10.34068/joe.50.02.48
- Chen, C.-H., Chang, C.-Y., & Huang, C.-Y. (2023). The effects of gamification on motivation and learning outcomes in language education: A meta-analysis. *Computers & Education*, 192, 104672. doi:10.1016/j.compedu.2022.104672
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268. doi:10.1207/S15327965PLI1104 01
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining "gamification." *Proceedings of the 15th International Academic MindTrek Conference*, 9–15. doi:10.1145/2181037.2181040
- Diong, F. W., Cheah, P. K., & Siah, P. C. (2025). Advancing understanding of service-learning: A case study of a university in Malaysia. *Malaysian Journal of Learning and Instruction*, 22(1), 117–139. doi:10.32890/mjli2025.22.1.7
- Donald, L. Z., Subon, F., & Unin, N. (2019). Using language games for vocabulary retention in a rural primary school in Sarawak. *International Journal of Service Management and Sustainability*, 4(2), 123–144.
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1–4. doi:10.11648/j.ajtas.20160501.11
- Eyler, J. (2002). Reflection: Linking service and learning—Linking students and communities. *Journal of Social Issues*, 58(3), 517–534. doi:10.1111/1540-4560.00274
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). New York, NY: McGraw-Hill Education.
- Gee, J. P. (2003). What video games have to teach us about learning and literacy. New York, NY: Palgrave Macmillan.
- Ghapar, M. A., Ibrahim, N., Shamsudin, A., & Hassan, N. F. N. (2024). Digital game-based value learning model for management students in Malaysian higher education institutions. *Journal of Creative Practices in Language Learning and Teaching*, 12(2), 88–99. doi:10.24191/cplt.v12i2.3621

- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? A literature review of empirical studies on gamification. *Proceedings of the 47th Hawaii International Conference on System Sciences* (pp. 3025–3034). IEEE. doi:10.1109/HICSS.2014.377
- Hasram, S., Arif, F. K. M., Nasir, M. K. M., Mohamad, M., Daud, M. Y., Abd Rahman, M. J., & Mohammad, W. M. R. W. (2020). Online games for primary school vocabulary teaching and learning: A literature review. *Creative Education*, 11(11), Article 104189. doi:10.4236/ce.2020.1111170
- Huang, B., Li, Y., & Chen, X. (2022). Blended learning in EFL classrooms: Students' perceptions of traditional and gamified instruction. *Language Learning & Technology*, 26(2), 45–67. doi:10.10125/73421
- Illeris, K. (2007). How we learn: Learning and non-learning in school and beyond. London, UK: Routledge.
- Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prentice Hall.
- Koivisto, J., & Hamari, J. (2022). The rise of motivational information systems: A review of gamification research. *International Journal of Information Management*, 64, 102498. doi:10.1016/j.ijinfomgt.2018.10.013
- Lampai, C., & Sukying, A. (2023). Vocabulary learning through audio-visual input of Thai primary school EFL students. *Journal of Education and Learning*, 12(4), 26–41. doi:10.5539/jel.v12n4p26
- Landers, R. N., Auer, E. M., Collmus, A. B., & Armstrong, M. B. (2018). Gamification science: A review and synthesis. *Computers in Human Behavior*, 87, 283–296. doi:10.1016/j.chb.2018.05.009
- Ling, N. S., & Abdul Aziz, A. (2022). The effectiveness of game-based learning strategies on primary ESL learners' vocabulary learning. *International Journal of Academic Research in Progressive Education and Development, 11*(2), 845–860. doi:10.6007/IJARPED/v11-i2/13266
- Mohamad, M., Magasvaran, V., Salwana, B., & Jamaludin, K. A. (2024). ESL learning environment for B40 primary school pupils: Issues, challenges and strategies. *Revista de Gestão Social e Ambiental*, 18(5), 1–21. doi:10.24857/rgsa.v18n5-017
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge, UK: Cambridge University Press.
- Ni, C. K., Jong, B., Dison, M. A., Thomas, S. A., Yunus, M. M., & Suliman, A. (2020). Enhancing Malaysian primary pupils' vocabulary skills using Pocable game and Pear Deck. *International Journal of Learning, Teaching and Educational Research*, 19(6), 128–143. doi:10.26803/ijlter.19.6.9
- Ortega, L., & Zhang, D. (2022). Gamified language learning and learner motivation: A longitudinal study. *ReCALL*, 34(3), 312–330. doi:10.1017/S0958344022000055
- Picheta, F. M., de Oliveira, M. R., & da Silva, C. F. (2021). Gamification in language learning: Effects on motivation and self-efficacy. *Computer Assisted Language Learning*, 34(5–6), 678–701. doi:10.1080/09588221.2019.1648292
- Plass, J. L., Mayer, R. E., & Homer, B. D. (2020). *Handbook of game-based learning*. Cambridge, MA: MIT Press.
- Putra, F. A., Annas, N., & Reni, R. (2024). Service learning in higher education: Impact evaluation and best practices. *Journal Ligandi of Community Service*, 1(2), 82–93. Retrieved from https://www.researchgate.net/publication/384443554

- Rajendran, K., & Mustafa, H. R. (2022). Incidental vocabulary acquisition through narrow reading among primary school pupils. *Sains Humanika*, 14(3–2), 87–93. doi:10.11113/sh.v14n3-2.2023
- Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review*, 32(1), 77–112. doi:10.1007/s10648-019-09498-w
- Tengku, A. (2024). Evaluating the impact of educational games on English vocabulary acquisition in children. *International Journal of Literature and Languages*, 4(8), 1–9. Retrieved from https://inlibrary.uz/index.php/ijll/article/view/39992
- Thompson, C. G., & von Gillern, S. (2020). Video-game-based instruction for vocabulary acquisition with English language learners: A Bayesian meta-analysis. *Educational Research Review*, 30, 100332. doi:10.1016/j.edurev.2020.100332
- Thornbury, S. (2002). How to teach vocabulary. Harlow, UK: Pearson Education.
- Tsai, C.-C., Hwang, G.-J., Hsiao, H.-C., & Chang, C.-Y. (2020). A learning progression approach to early childhood science education: The case of plant growth. *Journal of Computer Assisted Learning*, 36(2), 223–235. doi:10.1111/jcal.12398
- Utthavudhikorn, M., & Soontornwipast, K. (2024). An exploration of Thai primary school teachers' experience of using scaffolding techniques in an EFL classroom. *LEARN Journal: Language Education and Acquisition Research Network*, 17(1), 857–880. Retrieved from https://so04.tci-thaijo.org/index.php/LEARN/article/view/270447
- Wan Mahzan, M. S., Alias, N. A., & Ismail, I. S. (2020). Investigating the needs of developing a digital vocabulary learning material for Malaysian indigenous learners in ESL classroom. *Journal of Nusantara Studies*, 5(2), 282–302. doi:10.24200/jonus.vol5iss2pp282-302
- Wasima, A. (2021). Exploring preschool children's English vocabulary learning through play-based learning activities: A case study at a preschool in Selangor, Malaysia (Master's thesis). International Islamic University Malaysia. Retrieved from https://studentrepo.iium.edu.my/handle/123456789/10672
- Yang, W., & Charubusp, S. (2023). The effect of play-based instruction on young learners' English vocabulary learning: A case study of primary school students in Guangxi Zhuang autonomous region. *Journal of Modern Learning Development*, 8(11), 297–313. Retrieved from https://so06.tci-thaijo.org/index.php/jomld/article/view/268044
- Yang, Y., Chen, C.-H., & Hsu, C.-K. (2021). Gamified mobile apps for English vocabulary learning: Effects on achievement and motivation. *British Journal of Educational Technology*, 52(1), 254–270. doi:10.1111/bjet.12996
- Yieng, C. D. M., & Abdul Aziz, A. (2022). A systematic literature review on using game-based learning to enhance English vocabulary and spelling for primary school pupils. *International Journal of Academic Research in Progressive Education and Development*, 11(2), 1725–1737. doi:10.6007/IJARPED/v11-i2/14081
- Yunus, M. M., Lau Yen Yen, E., Mohd Khair, A. H., & Mohd Yusof, N. (2020). Acquisition of vocabulary in primary schools via GoPic with QR code. *International Journal of English Language and Literature Studies*, 9(3), 121–131. doi:10.18488/journal.23.2020.93.121.131
- Yusof, N., Tengku Ariffin, T. F., Awang-Hashim, R., Nordin, A. B., & Kaur, A. (2020). Challenges of service learning practices: Student and faculty perspectives from Malaysia. *Malaysian Journal of Learning and Instruction*, 17(2), 227–251. doi:10.32890/mjli2020.17.2.10
- Zaidi, A., Raslee, N. N., Karim, R. A., Awaluddin, F. A., Ghani, M. H. @ M., & Iksan, H. (2022). The use of vocabulary learning strategies by high, medium, and low ESL

- proficiency learners in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 12(10), 2184–2197. doi:10.6007/IJARBSS/v12-i10/15056
- Zainuddin, Z., Chu, S.-K., Shujahat, M., Perera, C. J., & Darmawan, I. G. N. (2020). The impact of gamification on learning and instruction: A meta-analysis of educational research. *Educational Research Review*, 31, 100336. doi:10.1016/j.edurev.2020.100336
- Zhang, R., Zou, D., & Cheng, G. (2023). Learner engagement in digital game-based vocabulary learning and its effects on EFL vocabulary development. *System*, 119, 103173. doi:10.1016/j.system.2023.103173