

THE READING STRATEGIST: AN ONLINE READING GAME FOR UNIVERSITY STUDENTS

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Abstract. Gamification is an educational approach that has been gradually introduced into the learning environment in recent years to enhance students' interest and enthusiasm for reading. Digital reading games provide interactive environments where learners may apply reading strategies in a more engaging way. The ongoing study aims to evaluate the usability and acceptance of The Reading Strategist, a Web-based game designed to support students in practicing reading comprehension. A quantitative survey design was used, involving 25 undergraduate students at a Malaysian government university; the participants were exposed to the game beforehand before completing the questionnaire. The survey tool was designed into four different segments assessing perceived usefulness, ease of use, enjoyment and behavioural intention. Findings showed high usability scores and a positive attitude toward the game, with perceived usefulness and enjoyment receiving the highest mean scores. Respondents also wanted to continue using and referring to the game. These findings imply that gamified reading tools like The Reading Strategist have significant potential to facilitate student engagement and reading practice in the language learning context.

Keywords: *acceptance, gamification, reading comprehension, usability, user experience*

Introduction

The use of technology in education has led to the widespread adoption of digital learning resources, significantly changing how students receive academic content. Among the problems that emerge in this situation, one urgent issue ESL (English as a Second Language) students face is the inability to interpret academic texts in online settings. These issues are compounded by the increased reliance on online materials and Internet-based reading resources among Malaysian ESL undergraduates during their academic life. As the digital platforms are increasingly used, the necessity to build the appropriate strategies to stay focused and understood during reading is progressively large. Despite the flexibility of the digital resources and the possibilities of finding a great number of various information sources, distractions also appear, which hinder the process of directing attention and fully comprehending the information. According to research by Mangen et al. (2013), ESL students often experience low attention and engagement when reading digitally.

The lack of proper reading strategies is a major hindrance to effective understanding among ESL learners. It has been shown that many students do not use effective academic reading skills, such as summarization, inference, and the use of supporting materials. The lack of proper implementation of these strategies, accordingly, can hinder students' ability to get the most out of academic texts. To deal with the challenges, the gamified platform, The Reading Strategist: Quest for Academic Comprehension, uses

an explicit teaching of the reading strategies, Global, Problem-Solving, and Support, to promote the acquisition of the skills needed to read successfully in academic writing. In addition to promoting reading comprehension, the platform aims to encourage student motivation, autonomy, and self-regulation, which are key elements of academic success (Nguyen-Viet, B., Doan Ngoc Minh, 2025; Zhang and Hasim, 2023). Gamification, a platform that integrates game elements (rewards, levels, challenges, etc.), has been empirically shown to increase motivation and engagement in educational settings, and it is a valid strategy to counter the problems associated with digital reading (Dawson et al., 2025). Despite the growing body of literature that testifies to the advantages of the digital learning and gamification, there is limited empirical research evaluating the integration of reading comprehension strategies into the gamified learning environments. The existing body of scholarship about gamification in the educational environment has mainly focused on the improvement of student engagement and motivation, as opposed to the emergence of concrete academic skills such as reading comprehension. In fact, studies that assess the usability and effectiveness of gamified environments specifically designed to train ESL students to acquire advanced academic reading skills are also conspicuously missing. This paper aims to fill this gap by considering the usability and acceptance of the Reading Strategist by the Malaysian ESL students and by finding out how much the platform allows students to use reading strategies to understand more.

Statement of problem & objectives of study

The fact that English-as-a-Second-Language (ESL) students have a low level of academic reading comprehension, especially in digital platforms, is an enormous drawback to achieving higher education levels. There are several challenges that ESL learners in Malaysia face on reading educational materials, including the inability to understand tricky language, a lack of lexical materials, and ineffective reading strategies. These challenges often lead to poor performance in school and the hindrance of the skills needed to achieve academic success. Empirical evidence suggests that many ESL students fail to use appropriate reading strategies to overcome such challenges, such as summarising main ideas, making inferences, or using the context to decipher unfamiliar terms. Furthermore, the problem is compounded by the natural distractors in digital learning environments that reduce students' attention spans and lower interaction levels, making academic reading even more exhausting to focus on. Although numerous studies have examined the use of digital reading content, there is a clear gap in the literature regarding the integration of reading comprehension strategies into a gamified learning environment. Studies of gamification have focused more on enhancing student engagement and motivation and less on how such platforms can support the specific academic skills ESL students need, especially reading comprehension. Additionally, despite the availability of several gamified learning tools, only a few market-specifically, they do not explicitly express academic strategies in reading that aim to counter the unique issues faced by ESL students. Recent studies highlight the need to further explore the opportunities offered by gamified platforms to develop ESL learners' reading skills and address the digital learning challenges they face (Nguyen-Viet and Doan Ngoc Minh, 2025; Zhang and Hasim, 2023).

This research gap is even more relevant to the Malaysian higher education system, where students must overcome not only the language barrier but also the challenge of using digital environments. Given the growing importance of digital literacy, it is urgent

to identify new ways to help ESL students improve their reading comprehension. The growing reliance on online learning and electronic reading in Malaysian universities underscores the need to identify effective approaches to help these learners engage with academic readings. As such, the proposed research will analyze the ability of the gamified application, The Reading Strategist, to help ESL learners develop the reading strategies needed to improve their academic understanding and address obstacles in the online learning context. Moreover, the usability and acceptance of gamified learning tools in an academic setting is another area that needs to be studied further. Although it is a common fact that gamification may positively affect the motivation factor, the possible impact that gamified platforms may have on the quality of reading comprehension strategies has not been studied. This paper aims to fill this gap by checking the efficacy of the Reading Strategist in enhancing reading comprehension among ESL learners and also by examining the usability and acceptability of the platform by Malaysian students. The results of the research will serve as a source of useful data regarding the application of gamified tools to assist ESL students in their learning process and it will also offer suggestions on how the tools can be refined to suit their interests of both learners and teachers. This research objective are: (1) To determine students' acceptance of the game in terms of its perceived usefulness, ease of use, attitude toward use, and intention to use it for improving reading skills. (2) To assess the overall usability of the game using the System Usability Scale (SUS) to evaluate its functionality, design, and user experience. (3) To gather students' feedback and insights to identify the strengths, challenges, and possible improvements for enhancing the game's learning and engagement value.

Literature review

TAM in educational technology

The Technology Acceptance Model (TAM) by Davis (1989) is one of the most widely used theoretical models to understand user acceptance of technology. The model assumes that the decision to use and adopt a new technology is determined by two key factors: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). Perceived Usefulness refers to how an individual perceives that using a technology will improve his/her performance or help meet a specific need. Perceived Ease of Use, on the other hand, indicates the extent to which an individual believes that there will be no struggle in using the technology (Davis, 1989). The above factors, in turn, influence personal opinions about using the technology, which will eventually affect the intention to use it. The desire to use a technology is a very important predictor of actual use behavior (Davis, 1989). In educational technology, the Technology Acceptance Model (TAM) has been widely used to assess students' perceptions and adoption of digital learning tools, including e-learning platforms, learning management systems, and gamified educational applications. Gamification, the application of game elements to non-gaming environments such as learning platforms, is one of the technological advances that has seen increased use in learning environments. The results of research by Nguyen-Viet and Doan Ngoc Minh (2025) as well as Zhang and Hasim (2023) demonstrate significant student engagement and motivation on gamified platforms, which are key factors in achieving better learning outcomes. These studies found that once learners perceive a gamified platform as valuable and easy to use, they develop a positive attitude towards it, thereby increasing their intention to use it.

Technology Acceptance Model (TAM) has particularly been useful in assessing how effective technology is in the education sector as it explains the psychological factors that influence the decision of users to accept and use new technology. In one example, Dawson et al. (2025) studied an educational application that was designed to suit ESL learners and established that the Perceived Usefulness served as a strong predictor of students who will use the application to learn the language.. Moreover, Perceived Ease of Use proved to be a decisive factor in shaping students' attitudes towards the application, with more user-intuitive platforms being adopted as a result (Dawson et al., 2025). These findings support Davis (1989) assumption that ease of use is a key factor in users' intention to adopt new technology. Therefore, understanding how students perceive the usability and usefulness of gamified platforms is invaluable for their proper assimilation into the learning environment. As with The Reading Strategist, a gamified solution designed to help ESL students develop their reading skills, the Technology Acceptance Model (TAM) provides an effective framework for evaluating students' acceptance of the platform. In particular, the analysis of Perceived Usefulness and Perceived Ease of Use will provide input on students' readiness to use and work with the platform, a key variable in enhancing reading comprehension. Additional analysis of students' attitudes toward use and their intention to use the platform will help establish the probability of continued use, thereby making TAM an infallible theoretical framework for exploring issues that underpin platform effectiveness. In most cases, the Technology Acceptance Model continues to be an essential construct in the study of educational technologies since it can help scholars and educators understand the psychological determinants of adopting and using digital technologies. The use of the TAM will make the researchers able to gain a more detailed understanding of how students perceive the usefulness and usability of gamified learning platforms and, thus, will inform the creation and adoption of more effective educational technologies.

Gamification in education and its impact on learning

The effects of gamification on learning have been studied extensively, particularly regarding increases in student engagement and academic performance. In a study, Gee (2003) examines the overall impact of video games on learning and literacy development. The research presented by Gee focuses on how video games provide an interactive environment that enables students to develop problem-solving, critical thinking, and teamwork skills. The sample of respondents in this research comprised students at learning institutions; the exact number has not been specified. The paper used qualitative research of games and related learning patterns. The results indicate that when students are exposed to game-based learning, they become more motivated and more likely to retain information. The study's findings indicate that learning through a game-based approach can generate greater involvement and learning outcomes. A study by Anderson and Dill (2000) examined the role of violent video games in the development of aggressive behaviour. Their studies have focused on aggression, even though their approaches to investigating the effectiveness of video games on behaviour and learning processes are useful for understanding the overall implications of video-game use in the educational sphere. The participants were college students, and the study used surveys and behavioural analysis as its tools, with 227 participants. The results indicated that even though violent games can make people more aggressive, non-violent games can improve learning and cognitive abilities. This highlights the

possibility that educational games can enhance learning, provided they are well-designed.

Venkatesh and Davis (2000) conducted a study to determine the relevance of the Technology Acceptance Model (TAM) in understanding the issue of acceptance of new technologies in users. The authors aimed at determining the correlation between the ease of use, usefulness, and the intention to use those technologies. The sample of the study consisted of 128 people whose representatives took part in it having filled in the structured questionnaires and operated within the system in question. The findings showed that the usefulness and ease of use were found to be a good predictor of technology acceptance. In turn, the results obtained indicate that any educational tools, including games, should be convenient and easy to use to reach a high level of acceptability among students. Brooke (1996) reviewed the System Usability Scale (SUS) as a tool that would be used to measure the usability of a wide range of systems, especially in the case of educational technologies. The researchers used a sample of 250 individuals who provided structured responses on how various online platforms are usable. The results emphasized the importance of usability of educational games and tools, showing that these tools have to be entertaining in addition to effective and easy to use. This study shows that, to succeed in popularity, The Reading Strategist's usability should be high; in this case, ease of use and functionality should be prioritized. Overall, the papers mentioned above highlight the importance of engagement, usability, and functionality in gamified learning tools. The motivational and cognitive benefits of game-based learning have been mentioned by Gee (2003) as well as Anderson and Dill (2000) and the importance of user acceptance and system usability is stated by Venkatesh and Davis (2000) as well as Brooke (1996). These results support the claim that The Reading Strategist can improve reading competencies because it engages learners and is user-friendly, realistic, and convenient (*Figure 1*).

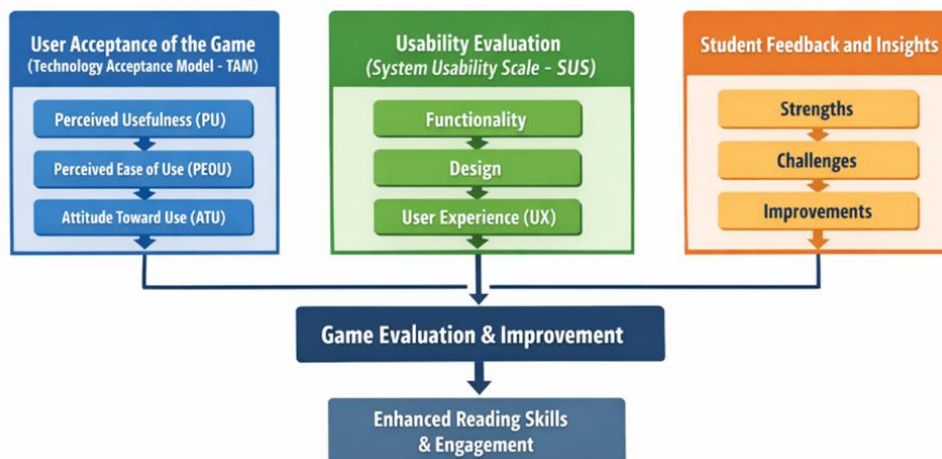


Figure 1. Conceptual framework of the study evaluating user acceptance, usability and feedback.

Technology Acceptance Model (TAM) (Davis, 1989) assumes that users' Attitude Towards Use (ATU) and Intention to Use (IU) for a technology depend on two key variables: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). In the given study, Perceived Usefulness refers to how students assess the game's ability to improve their reading skills. The students will find it easier to play the game regularly if they

perceive it as useful. Similarly, Perceived Ease of Use refers to how students evaluate the game's interface and features in terms of convenience and ease of use. An intuitively easy game is expected to reach greater adoption and use. Attitude Towards Use summarizes students' general perception of the game, as they enjoy it and are motivated to use it, which is a key determinant of further use. Lastly, Intention to Use describes the likelihood of whether students will continue using the game to develop their reading ability, depending on their perceptions of how useful the game is, its ease of use, and their overall attitudes towards the game (Ajzen, 1991). When combined, the constructs have provided a complete picture of user acceptance, clarifying what leads to favorability and continued use of *The Reading Strategist*. The second element is focused on the determination of the usability of the game, which is measured with the help of the System Usability Scale (SUS) (Brooke, 1996). The SUS is a popular tool in the assessment of the functionality, design and the total user experience of a product. The term functionality will be used in the current study to denote the necessary functionality of the game, which in this case is the interactive reading of the game, the feedback mechanism, and the tracking features. Such features must be designed in a way that promotes the aspect of reading in a way that is effective and entertaining.

Design is associated with visual and navigation aspect of the game, including layout, understanding, and the user interface in general. A good interface displays a high level of user satisfaction and interaction. The user experience (UX) is not to be evaluated only in respect of functionality and aesthetics, but also concerning the affective responses, satisfaction, and motivation of the learners when using it. This is a critical consideration because good user experiences will probably keep the interest alive and make the game effective and enjoyable to the learners as a tool of learning (Nielsen, 1994). Proper gameification mechanisms should lead to the development of enjoyment and feeling of accomplishment thus encouraging the further usage and the gradual advancement of reading skills. Student Feedback and Insights is the third element of the framework and the qualitative information about the students experience of the game. Such feedback is critical in identifying strengths, weaknesses, and future improvements of the game. Strengths refer to the aspects of the game that learners consider to be the most engaging or effective in the process of developing reading skills; and they could include such unique features as a mixture of different reading tasks, high engagement rate, and instant feedback. Challenges in turn denote the hurdles that students face during the usage of the game which might include the problem of usability, technical reliability, or elements that are unmotivating or hard to play. Such challenges can be identified and this will result in specific changes to the design and functionality of the game. Lastly, the area of Improvements focuses on the changes needed to the game such as adding new levels into the game, updating the content, and streamlining the user interface. The insights are essential in informing the process of refining the game successively and in determining whether the game will still be able to fulfill the learning requirements of the students (Shneiderman, 2010).

These three elements, user acceptance, usability evaluation, and student feedback, are the basis of the systematic evaluation and improvement of the game. Synthesizing quantitative and qualitative data will help pinpoint key areas for improvement in the game's design and functionality in this study. The final goal is to increase the game's potential to promote reading proficiency and, at the same time, to increase student engagement. This detailed analysis will provide practical information to guide further development of *The Reading Strategist* and, in turn, enhance students' literacy

development through entertaining, gamified learning processes. The final objective of this framework is to achieve Enhanced Reading Skills and Engagement. The research aims to develop a more effective learning tool by understanding the factors that influence student involvement and the game's usefulness, and by identifying possible ways to improve it. The feedback received from students will not only help improve the game but also inform the implementation of its application toward the overall goal of improving reading performance using gamified technologies.

Materials and Methods

This paper used the model of ADDIE instructional design which includes Analysis, Design, Development, Implementation and Evaluation to formulate The Reading Strategist: Quest to Academic Comprehension. The Analysis phase consisted of identifying the needs and reading issues of students through the previous research (Belaman et al., 2023). The Design stage was intended to integrate global, problem-solving, and support-reading strategies into a gamified system that comprises missions, rewards, and feedback. The Reading Strategist was designed digitally in the Development phase. The game featured missions with a story, comprehending questions, and technologies to facilitate the use of strategies by learners. Content experts and English lecturers checked the prototype on content accuracy, language appropriateness and effectiveness as a pedagogic resource. Their feedback was used to make layout, reading and navigation better. *Figure 2* shows the main interface of The Reading Strategist, while *Figure 3* presents an example of a reading task within the game.

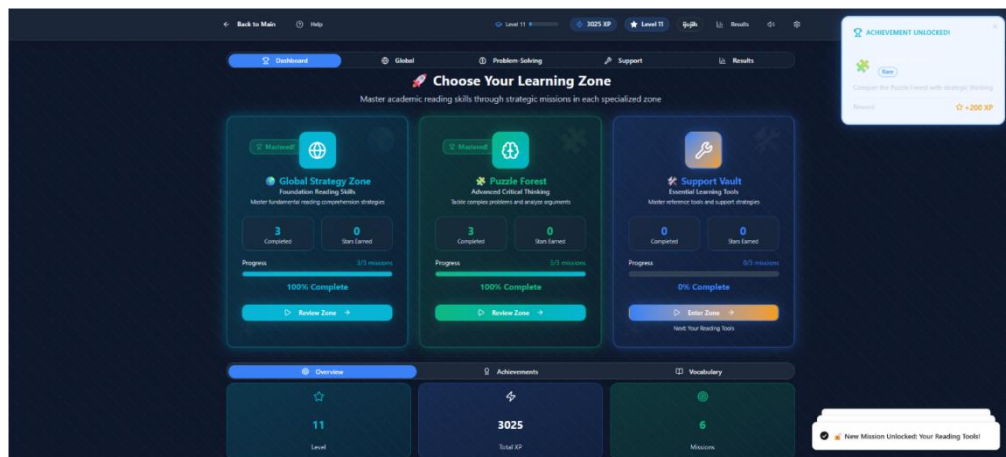


Figure 2. Main interface of the reading Strategist.

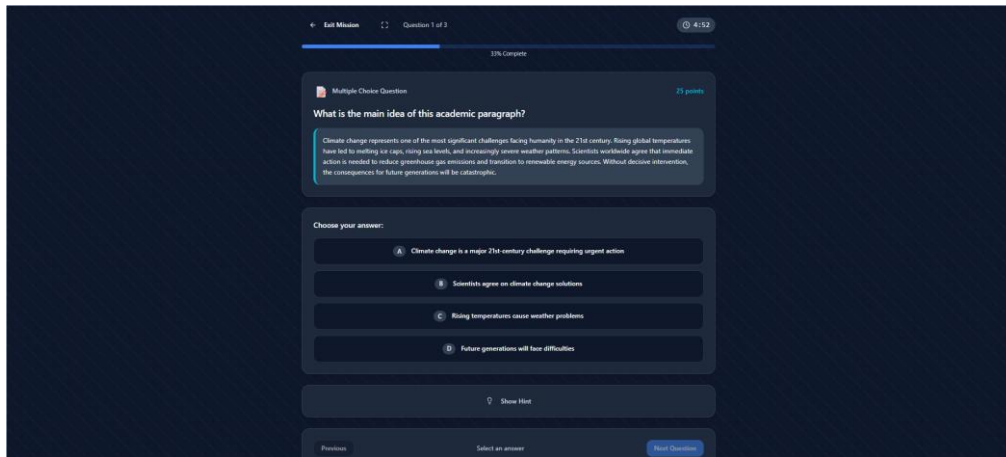


Figure 3. Reading task within the game.

The implementation phase consists of a pilot test involving 25 undergraduates who answered an online questionnaire about the Technology Acceptance Model (Davis, 1989) and the System Usability Scale (Brooke, 1996) using Google Forms. Formative and summative assessments were done during the Evaluation stage. The learner acceptance was evaluated using the Technology Acceptance Model (TAM) and four constructs which included Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Attitude towards Use (ATU), and Behavioural Intention (BI). The System Usability Scale (SUS) was a scale of the overall usability and experience. The quantitative data were analyzed with descriptive statistics involving means and standard deviations and the qualitative answers were thematically coded to refer to the strengths, challenges and opportunities to be improved. The instrument used is a 5-point Likert-scale survey and is rooted to reveal the variables in *Table 1*. *Table 1* shows the Likert scale categories: 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree, and 5 = Strongly Agree. *Table 2* presents the distribution of items in the survey, which includes two main sections: TAM (Technology Acceptance Model) and SUS (System Usability Scale). The TAM section comprises 4 items each for Perceived Usefulness, Perceived Ease of Use, and Attitude towards Use, and 3 items for Behavioral Intention, for a total of 15 items with a Cronbach's Alpha of 0.854. SUS section contains 15 questions that measure Usability and Cronbach Alpha is equal to 0.91. The survey has a total of 30 items and it has high internal consistency, especially the usability scale. The reliability analysis shows that TAM and SUS section are both highly reliable and also the SUS section has great internal consistency.

Table 1. Likert scale use.

Category	Description
1	Strongly Disagree
2	Disagree
3	Uncertain
4	Agree
5	Strongly Agree

Table 2. Distribution of items in the survey.

Section	Variable	Constructs	No. of Items	Total	Cronbach Alpha
2	Technology Acceptance Model (TAM)	Perceived Usefulness (PU)	4	15	0.854
		Perceived Ease of Use (PEOU)	4		
		Attitude towards Use	4		

		Behavioral Intention (BI)	3		
3	System Usability Scale (SUS)	Usability Scale	15	15	0.91
		Total		30	

Results and Discussion

Demographic analysis

Zienefuss et al. (2021) use percentages to present demographic data because they believe this method allows for the creation of representative samples and the generalization of results to the wider population. The demographic profile of the participants is also presented in this research. The presentation as percentages is a clear, understandable representation of the sample's composition. Most of the respondents were females (72%), and the males were in 28% of the total. The vast majority of the participants belonged to Business programmes (40%), then to Science and Technology (32%), and to Social Sciences and Humanities (28%). The respondents were all Diploma students (100). Regarding experience with educational games, 56 percent of them indicated that they play them sometimes, 20 percent indicated they seldom play them, 12 percent indicated that they play them all the time, and 4 percent indicated never play them, which implies that they are moderately exposed to educational games (Table 3).

Table 3. Percentage for demographic profile.

Question	Demographic profile	Categories	Percentage (%)
1	Gender	Male	28%
		Female	72%
2	Cluster	Social Sciences and Humanities	28%
		Science and Technology	32%
		Business	40%
3	Education level	Diploma	100%
4	How Often Do You Play Educational Games?	Never	4%
		Rarely	20%
		Sometimes	56%
		Often	12%

In determine students' acceptance of the game in terms of its perceived usefulness, ease of use, attitude toward use, and intention to use it for improving reading skills, the findings reveal that the respondents have a high level of perceived usefulness of the game. The game makes reading more fun item achieved the best mean score (M = 4.68, SD = 0.53), which implies that students were interested in the gamified platform. This was succeeded by the following questions: This game helps me to understand reading texts better (M = 4.64, SD = 0.64) and The game helps me read better (M = 4.60, SD = 0.66) which meant that the platform did not ignore reading comprehension in the students. Moreover, the item I would find this game useful in practising reading had also a high mean score (M = 4.56, SD = 0.70). In general, the results indicate that the students found the game helpful in enhancing their reading and that it made learning more enjoyable (Figure 4). In Figure 5, the outcomes further show that the perceived ease of use of the game is high. The highest mean scores were obtained by the items It is easy to learn how to use the game (M = 4.60, SD = 0.64) and I find the game easy to navigate (M = 4.60, SD = 0.58), which is why it can be assumed that students found the platform easy to use. The question item Playing the game is easy and does not make me feel confused and frustrated received the average result of 4.52 (SD = 0.77): the

majority of students did not face significant challenges playing the game. On the same note, the game was also rated using the statement I feel confident using the game without help obtained a mean score of 4.52 (SD = 0.71). Overall, these findings suggest that the gamified platform was easy to use and accessible for the students.

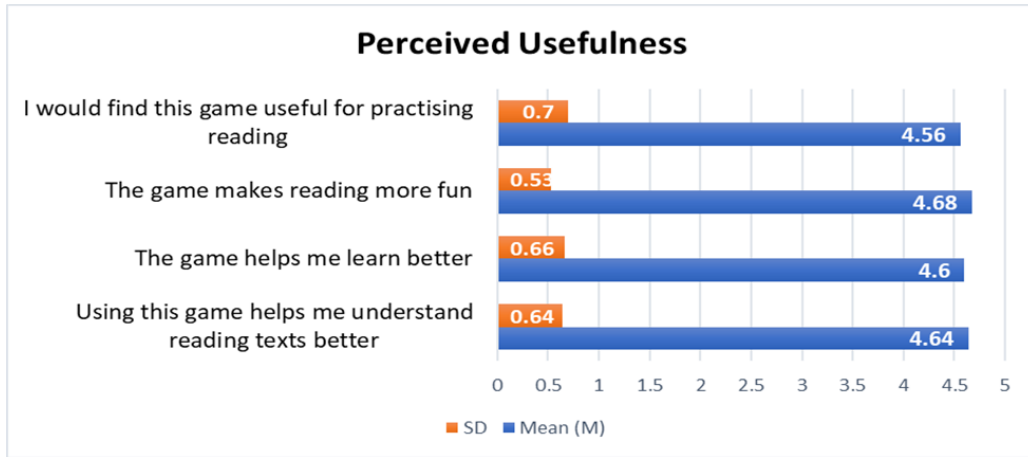


Figure 4. Perceived usefulness.

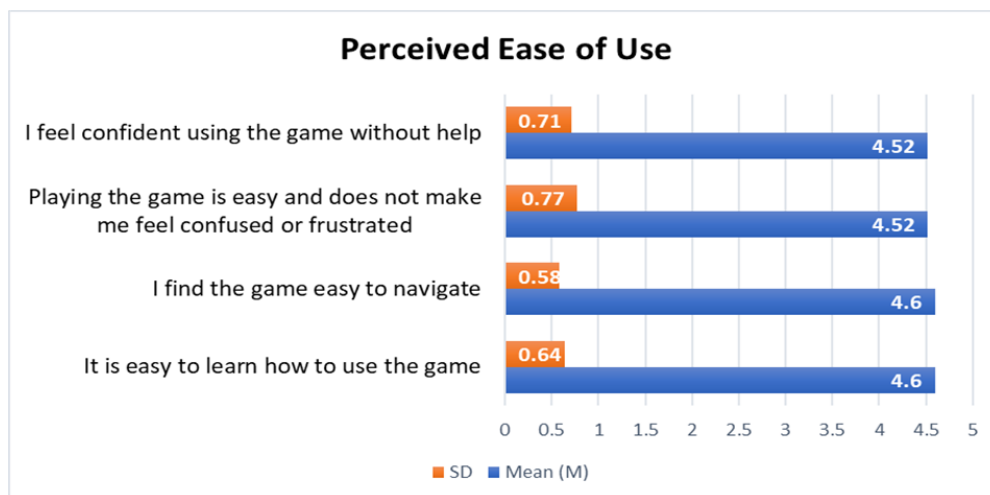


Figure 5. Perceived Ease of Use (PEOU).

The results indicate a positive attitude toward using the game for reading (Figure 6). The items “I enjoy using this game for reading” and “Using this game is fun for reading” both recorded the highest mean scores (M = 4.68, SD = 0.63; M = 4.68, SD = 0.70), suggesting that students found the gamified platform enjoyable. The item “I like the idea of using this game for reading” also showed a high mean score (M = 4.64, SD = 0.63), reflecting students’ favourable perception of the approach. Additionally, “I think using this game is a good way to practice and improve my reading skills” recorded a mean score of 4.52 (SD = 1.00). Overall, the findings indicate that students demonstrated a strong positive attitude toward using the game for reading practice. In Figure 7, the results indicate positive behavioural intention to use the game. The item “I would recommend this game to my classmates” recorded the highest mean score (M = 4.44, SD = 0.75), suggesting that students were willing to share the platform with their peers. This was followed by “I plan to use this game often” (M = 4.28, SD = 0.87) and “I plan to use this game in the future” (M = 4.24, SD = 0.82). Overall, the findings

suggest that students showed a favourable intention to continue using the gamified platform for reading practice.



Figure 6. Attitude towards use.

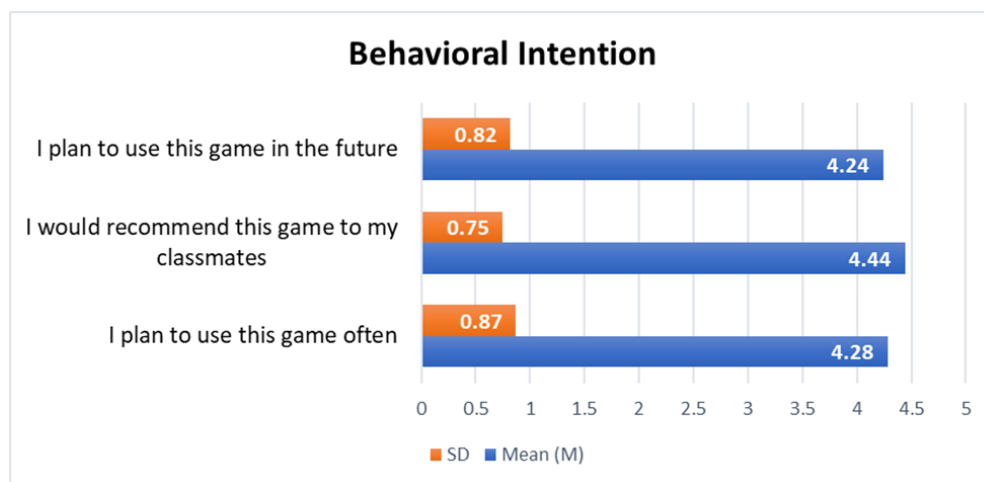


Figure 7. Behavioral intention.

To assess the overall usability of the game using the System Usability Scale (SUS) to evaluate its functionality, design, and user experience, the results regarding the game's overall usability and experience indicate generally positive perceptions, with some mixed responses (Figure 8). The item "I would need help from someone to use this game" recorded the highest mean score ($M = 4.56$, $SD = 0.55$), suggesting that some students still felt they required guidance. Despite this, students reported confidence in using the game ("I felt confident using the game", $M = 4.40$, $SD = 0.56$) and agreed that most students would learn to use it quickly ($M = 4.36$, $SD = 0.54$). Items reflecting the game's usability, such as "All parts of the game worked together smoothly" ($M = 4.12$, $SD = 0.81$) and "I thought the game was easy to use" ($M = 4.08$, $SD = 1.16$), indicate moderate ease of use, while "I found the game more complicated than it needed to be" ($M = 4.20$, $SD = 0.61$) and "The game sometimes worked in a confusing or inconsistent way" ($M = 4.16$, $SD = 0.63$) reflect occasional challenges. Similarly, higher scores for "I found the game very difficult to use" ($M = 4.52$, $SD = 0.58$) and "I needed a lot of instructions before I could play it" ($M = 4.36$, $SD = 0.68$) suggest that while the platform was generally usable, some features may require clearer guidance. Overall,

students perceived the game as functional and engaging, though minor usability adjustments could further enhance the user experience.

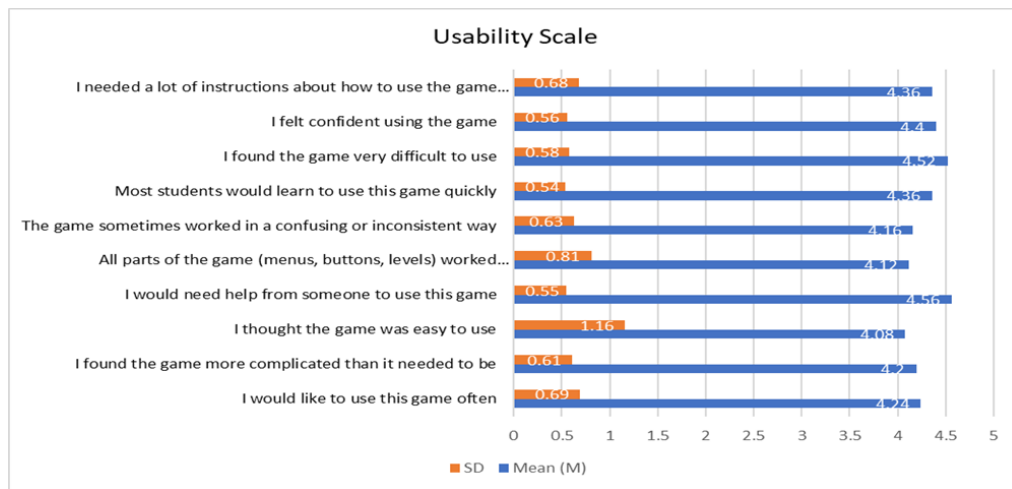


Figure 8. Usability Scale (SUS).

In gather students’ feedback and insights to identify the strengths, challenges, and possible improvements for enhancing the game’s learning and engagement value, the students gave feedback on The Reading Strategist, noting its strengths and minor concerns and suggestions (Table 4). The strengths included the progress system, the achievements, XP reward system, as well as the interactive design, which made the game engaging and encouraging to learn. Another support offered to the students by means of hints, detailed explanations, and the option to revise their answers was valued by them to improve their reading skills. The design and graphics, such as the space background, and the layout of the quiz were found attractive. Navigation and general usability did not pose any issues, and only some details, including confusing menu designs or a reset button here and there, were a problem. Some technical issues were also faced including display on mobile phones. The students provided their suggestions of how to make it better, including more questions, daily assignments, ranking system, customizable avatars, and progress monitoring per account. The overall response is that the game is efficient, fun, and very applicable and that it would offer actionable information to be developed further.

Table 4. Students’ feedback and insights.

Theme	Codes/sub-theme	N*	Example Feedback
Game Features / Rewards	Progress system, achievements, XP, missions	12	“The progress system”, “I liked the fact that we could get XP after a mission.”
Learning Support / Feedback	Hints, explanations, and answer review	10	“The hint helps me think better in finding an answer.” “It gave me a detailed explanation for each answer.”
Design & Graphics	Background, theme, graphics, quiz layout	8	“I like the background covered with a space theme,” “The design and the questions.”
Usability / Navigation	Menu navigation, level layout, smooth transitions	7	“The layout of the main page is a bit confusing.” “Smooth transition from one menu to another.”
Device / Technical Issues	Screen display, glitches, progress reset	4	“Sometimes the screen doesn’t work well on phones.” “When I press back to main, it resets all my progress.”
Engagement / Interactivity	Interactivity, fun, medium-level difficulty, competitive features	6	“Interactive,” “The ‘Quizizz-like’ structure makes it engaging.”
Suggestions / Improvements	Add more questions, daily quests, an account system, customization, ranking, music	11	“Make it so progress is able to be saved by logging into an account,” “Add daily quests to keep users engaged,” “Add fun cartoon characters or customizable avatar.”

Conclusion

The current research attempted to evaluate the usability and acceptance of The Reading Strategist, a Web-based reading game developed to help students to understand reading. The instrument was well accepted and rated to be helpful, fun, and effective in reading practice based on the responses obtained by 25 respondents who were undergraduate students. The usefulness dimension and enjoyment dimension produced the greatest mean scores which showed that learners found the game to be both interesting and motivating. Findings in the area of behavioral intention also indicated a strong conviction in students to keep on using and revisiting the game. Despite the relative lower scores of the ease-of-use dimension, participants agreed to a large degree that the game was easy to use and navigate with the issues raised by the participants being regarded as minor and pertaining to the layout and progression. Overall, the pilot test confirmed that The Reading Strategist is highly usable and very educational. Positive user feedback indicates that incorporating game-based learning can effectively supplement the reading process and enhance understanding. Having been slightly upgraded in interface design and functionality, the game may serve as a reliable and innovative digital tool to foster literacy and assist language acquisition in classrooms and online settings in the future.

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Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

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