

THE USE OF SPEAKQUEST FOR ENGLISH SPEAKING PRACTICE: STUDENTS' PERCEPTIONS AND EXPERIENCES

Nur Atiqah Lewi ^{1*}

Arif Hakimi Zulazli ²

Muhamad Lothfi Zamri ³

Farah Natchiar Mohd Khaja Hameed Maricar ⁴

Daniel Boo Wei Ern ⁵

Nur Afiqah Lewi ⁶

¹ Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, Malaysia

Email: atiqah.lewi@fbk.upsi.edu.my

² Faculty of Education and Social Sciences, Universiti Selangor, Malaysia

Email: arifzul@unisel.edu.my

³ Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, Malaysia

Email: farah.natchiar@fbk.upsi.edu.my

⁴ Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, Malaysia

Email: lothfi@fbk.upsi.edu.my

⁵ Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, Malaysia

Email: danielboo@fbk.upsi.edu.my

⁶ Faculty of Languages and Communication, Universiti Pendidikan Sultan Idris, Malaysia

Email: afiqahlewi02@gmail.com

* Corresponding Author

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Abstract: *The integration of artificial intelligence (AI) and gamification has created new opportunities for English speaking practice. This study aimed to explore students' perceptions and experiences of using SpeakQuest, an AI-powered, gamified platform for English-speaking practice. The study used a mixed-method approach involving 150 English major students at a public university in Malaysia. A questionnaire was used to gather quantitative data, and semi-structured interviews were used to gather qualitative data. The results showed that students had positive attitudes about SpeakQuest, especially in the aspects of usefulness, ease of use, speaking confidence, and satisfaction. The platform was also found to build students' confidence and engagement levels, and offer them valuable opportunities to communicate in a meaningful way using AI-enabled role-playing exercises, as revealed by the interviews. The study shows that SpeakQuest has great potential as an additional tool for learning English. The platform's conversational AI, role-playing, and gamified elements help to foster confidence, engagement, and communication-based learning among English language learners.*

Keywords: *Artificial Intelligence (AI), Gamification, English Speaking Practice, Student Perceptions*

Introduction

The ability to speak English is known to be one of the most important skills for academic success, business communication, and in a globalised society. English remains the main international language, and learners are being asked to communicate more and more effectively in a range of educational and professional settings. Many second language learners of English (ESL) still have trouble speaking confidently and fluently after years of formal English instruction. Some of the problems that learners experience are communication anxiety, fear of making mistakes, lack of opportunities to show their English language skills in a natural way, and lack of exposure to meaningful speaking activities, which can affect learners' desire to communicate in English (Özalp & Merç, 2022).

All these problems have led to the greater importance of two things in language learning, namely education technology and learning technology. Technology-enhanced learning environments offer the learner more flexibility and opportunities for language practice outside of class. Research results have indicated that digital learning platforms can facilitate student independence, improve students' interest in learning, and make learning more interactive, so as to stimulate students' participation in language learning activities (Woo & Choi, 2021).

Artificial Intelligence (AI) is a game-changing innovation in language learning in recent years. AI applications can respond to queries in a personalised way, mimic real-life conversations, and engage students with instant feedback. These abilities are especially valuable for speech training as learners are able to practice communication without any limitations in time and space. Some previous studies indicated that AI-driven L2 learning could offer personalised assistance, help with language production, and language learning opportunities for learners to communicate in a low-risk setting (Kohnke et al., 2023; Irianto et al., 2024).

Gamification is another instructional method that has received significant focus in tandem with the use of artificial intelligence, going so far as to incorporate game elements like levels, missions, challenges, and rewards into learning environments. Gamification is regarded as enhancing the motivation, participation, and engagement of learners as it makes the learning process enjoyable and goal-oriented. In language education, a gamified learning environment can be used to stimulate learners to participate more actively in language activities and to keep learners interested in learning tasks over time. Moreover, gamification of learning has been shown to be beneficial for students' speaking abilities as it offers them opportunities to practice their language skills in an interactive and motivating way (Arip & Hashim, 2024; Juárez & Patiño, 2025).

An increasing number of speaking technologies using AI have now opened doors for language learning. Positive impacts of AI language learning applications have been recently reported, such as boosted engagement, greater confidence, better language practice, and more personalised learning experiences (Alshammari, 2024; Kohnke et al., 2023). The results indicate potential for AI tools to overcome some of the shortcomings of traditional speaking teaching methods and offer learners convenient and continuous speaking practice in English.

In response, SpeakQuest was born as an AI-powered gamified platform, tailored to enhance English speaking skills. It features AI-powered conversational answers, speech recognition, role-playing scenarios, and gamified missions to provide authentic communication opportunities for learners. While the effectiveness of AI language learning and gamification has been shown in previous studies, there are not many studies that have investigated the combined

effects of conversational AI, speech recognition, role-playing scenarios, and gamified missions in the same platform that is purpose-built for authentic English-speaking practice. Moreover, the current research has mostly focused on students' perceptions of AI tools like ChatGPT or the impact of the use of gamification as an independent method of teaching (Irianto et al., 2024; Arip & Hashim, 2024). There has been less work done to understand the learners' experiences and perceptions of the integrated use of AI-powered gamified speaking environments, which integrate conversational AI, speech recognition, role-playing, and mission-based learning in a single platform.

So the study in this paper focuses on the use of SpeakQuest in practicing English speaking ability for students in the English major at university. In particular, the study investigates students' attitudes towards the platform and their experiences following their involvement in the SpeakQuest activities. The study is a valuable addition to the existing literature on AI in language learning by offering empirical evidence of students' perceptions and experiences using an AI-powered gamified role-playing platform for learning English. The study was guided by the following research questions:

- Research Question 1 : What are students' perceptions towards the use of SpeakQuest for English speaking practice?
- Research Question 2 : What are students' experiences using SpeakQuest for English speaking practice?

Literature Review

Recent developments in artificial intelligence and gamification have created new opportunities for English language learning. This review examines studies related to AI-assisted language learning, gamified learning, and English-speaking practice.

English Speaking Skills in ESL Contexts

The skill of speaking is generally believed to be one of the most difficult to acquire in the second language learning process, and it necessitates that learners use language knowledge, communication strategies, and cognitive processing processes at the same time in the process of the real communicative act. Speaking is the most immediate language skill as it requires language output in order to communicate meaningfully. For this reason, many English as a Second Language (ESL) learners face difficulties in communicating effectively and with confidence in English.

Numerous factors have been discovered that affect learners' performance in speaking. Derakhshan et al. (2022) underlined the importance of affective variables in the field of language learning and showed that negative emotions can have a negative effect on learners' involvement in communication activities. Likewise, Khajavy et al. (2021) found that language achievement and communication performance are significantly influenced by factors related to the learners, such as mindset and individual differences. It can be inferred from these findings that language competence is not the only factor that affects successful speaking, but also the readiness of the learners in psychological aspects.

In addition to providing opportunities to use meaningful written material in oral language, meaningful speaking opportunities are important to oral language development. Sato and McDonough (2019) highlighted the importance of the quality of communicative practice on second language acquisition. Speaking activities that provide opportunities for meaningful

interaction and negotiation of meaning are most effective for the learner. Similarly, Pawlak (2018) reported that the use of speaking strategies would have a positive effect on the oral performance of learners, especially if the communicative goals were clearly set in the communication task. These results suggest that purposeful interaction is necessary for speaking development, not rote learning of language.

Recent research has also shown the significance of willingness to communicate in language learning. Peng (2025) suggests that willingness to communicate is one of the determining factors of the learners' involvement in communication activities and then the language development. Learners who are more willing to communicate tend to practise speaking, build up communicative competence, and enhance their overall language proficiency. It is still a key goal in language teaching to provide settings that promote the confidence of learners in their communication.

These findings, in conjunction with each other, indicate that development of effective speaking must be facilitated in learning environments that minimise communication barriers and offer appropriate opportunities for interaction. Therefore, educational technologies which enable authentic communication practice could be useful for English language learning for learners who want to improve their English-speaking skills.

Artificial Intelligence in Language Learning

In the field of education, AI is a significant technological advancement that is reshaping the way learning and teaching are done, including by using personalised support, adaptive learning, and intelligent feedback systems. In language education, AI tools have been increasingly integrated to enhance language practice, learner autonomy, and personalised learning experiences. Kasneci et al. (2023) noted that LLMs and Generative AI have significant promise to improve educational practices by delivering real-time responses, personalised support, and interactive learning experiences to learners. Similarly, Tlili et al. (2023) recommended the use of AI-powered chatbots to facilitate learning processes by providing immediate assistance in learning and promoting autonomous learning.

AI's presence in higher education has been growing rapidly over the past few years. Crompton and Burke (2023) noted that artificial intelligence technologies are being used more and more to aid in teaching, evaluation, and student learning in a variety of educational settings. Similarly, Chiu et al. (2023) pointed out the opportunities that AI could bring to education: personalised learning paths, intelligent tutoring systems, automated feedback, and improved learner engagement. These capabilities allow teachers to create learning opportunities that are more responsive to the needs of each learner.

Recent studies have also looked into what learners think about AI-supported experiences for learning. The students generally had positive attitudes towards the use of generative AI technologies, as they were found to be accessible, convenient, and able to offer immediate assistance. (Chan and Hu, 2023) But there are reports of issues with relying too much on AI tools and how they affect independent thinking. Likewise, Farrokhnia et al. (2024) have pointed out opportunities and challenges to AI adoption in educational contexts. In conclusion, AI can be a valuable tool for enhancing language learning and engagement by offering personalized feedback, aiding in self-directed learning, and enabling continuous language practice.

Gamification in Language Learning

Gamification is the use of game design for non-game purposes to improve user engagement, motivation, and participation. In educational contexts, gamification has been much discussed as a pedagogical strategy that can turn existing learning activities into more engaging and fun ones. Gamification techniques are intended to engage learners in learning activities, and they consist of points, badges, levels, leaderboards, challenges, rewards, and progression systems.

Adoption of gamification can be attributed to the challenges it can solve in the area of motivation that is frequently seen in educational settings. According to Dichev and Dicheva (2017), gamification can make learners more engaged by using motivational mechanisms common in games. Likewise, Toda et al. (2019) emphasised the importance of gamification frameworks as offering a structured way to introduce game elements within the learning environment and give teachers guidelines to create learning experiences that encourage extended participation and results.

There are reports of the effectiveness of gamification in different educational contexts. Zainuddin et al (2020) conducted a systematic review of empirical research and determined that gamification has mostly positive impacts on learning outcomes, motivation, and classroom engagement. Similarly, Sailer and Homner (2020) carried out a meta-analysis and found evidence of positive effects of gamification on cognitive, motivational, and behavioural learning outcomes. The results indicate that a learning environment using gamification can establish an environment in which learners are more willing to put more effort into learning activities.

In the higher education sector, gamification has been linked to higher engagement and learning experiences. Subhash and Cudney (2018) noted that gamified learning usually leads to high student engagement and active involvement in their learning. Gamification can improve the intrinsic and extrinsic motivation of learners and motivate them to do educational tasks by means of rewards, challenges, and achievement systems.

In the context of language learning, gamification has shown great potential in making language learning practices more interesting and meaningful. According to Juárez and Patiño (2025), gamified learning environments positively affected learners' advances in the language of instruction (English), and the learning of English-speaking skills occurred in a pleasurable context. Engaging in games allowed students to actively engage in speaking activities and lessened anxiety from speaking task activities.

The results indicate that gamification has the potential to be an effective instructional approach for enhancing language learning by motivating the learners, stimulating their involvement, and engaging their participation. Therefore, the incorporation of gamification features into an AI-facilitated language learning environment could offer meaningful practice opportunities for learners in enjoyable and motivating contexts.

AI-Powered Speaking Platforms

Artificial intelligence has recently evolved very quickly, resulting in the creation of AI-based language learning platforms that enable communication practice using conversational agents, intelligent feedback systems, and speech recognition technologies. AI-powered speaking platforms can replicate the interactive nature of real-life communication, enabling students to practice real-time language use and receive feedback. Unlike traditional language learning apps,

AI-powered speaking platforms can simulate natural conversations, allowing students to practice their speech and get feedback in real-time. The developments have opened up new avenues for assisting language development in speaking outside the classroom.

It has been shown that there is growing interest in the application of AI in the field of language education. According to Huang et al. (2023), the use of AI technologies in learning is widespread and is being applied in several ways to support language learning, such as personalisation, adaptive learning, intelligent tutoring, and conversational applications. The authors also commented that AI could encourage more interactive and learner-centred language learning experiences, especially in contexts where there is a need for repeated communication practice.

Recent empirical studies have shown that the use of AI for speaking acquisition is an effective approach. According to Qiao and Zhao (2023), the use of AI in language learning was beneficial for learners' speaking proficiency and self-regulated learning (SRL). The research indicated that the use of AI technologies could offer flexible learning opportunities for students to speak English and promote self-regulated learning. These findings suggest that AI-based learning environments can contribute to overcoming some of the challenges of conventional speech instruction, especially in situations with restricted opportunities for authentic speech communication.

The studies that centred on learner perceptions have also highlighted positive attitudes towards AI-assisted language learning tools, indicating that learners generally view AI environments positively in relation to their language learning. Positive perceptions about the acceptability of the technology and its effectiveness indicate that learners will engage with technologies when they can offer meaningful support for their learning activities.

In a similar manner, Alshammari (2024) found that the learners had a positive attitude toward their learning experiences with AI, especially because they felt that they received personalised help and assistance and were able to practice language in a flexible way. Participants said that AI tools might help improve their learning experiences with the ability to access language learning resources and communication opportunities at all times, away from school.

More pertinent to the current study, Wang et al. (2024) studied the influence of conversational generative AI chatbots on EFL learners. The results showed that the use of AI chatbots positively affected the attitudes of learners towards communicating with AI chatbots, lowered foreign language speaking anxiety, and enhanced self-perceived communicative competence. The findings indicate that the application of conversational AI technologies could create supportive contexts in which learners could practice speaking without fear of negative evaluation and improved confidence in their speaking skills.

While previous research has shown the educational value of AI-supported language learning tools, there has been a focus on conversational chatbots, AI-supported learning systems, or the perceptions of learners with regard to generative AI technologies. A smaller number of studies have focused on integrated platforms that integrate conversational AI, speech recognition services, role-play scenarios, and gamified mission-based learning in a single space that is specifically geared towards conversational English practice. This gap serves as a motivation for the creation of SpeakQuest and also serves as an impetus for the research of user perceptions and experiences of such integrated AI-powered speaking platforms.

Conceptual Framework

This study is guided by concepts of artificial intelligence-supported language learning and gamification. Previous research has shown that AI can aid with one-to-one interaction, conversational practice, immediate feedback, and self-directed learning by providing personalised interactions and support, while gamification increases learners' motivation, participation, and engagement by integrating game elements and goal-based learning experiences. Combining these strategies can serve as a basis for creating innovative language learning environments, which facilitate genuine language practice.

SpeakQuest combines AI functions and gamification to support practicing English in this research. The AI features include AI-generated conversational responses and speech recognition technology, which enable learners to engage in simulated communication activities. The gamification aspects consist of role-play situations, missions, challenges, and progression systems that promote active participation and long-term engagement.

The integration of AI features and gamification features is expected to impact learners' perceptions of the platform based on the framework. These perceptions are reflected by four dimensions: perceived usefulness, ease of use, speaking confidence, and user satisfaction. Good scores on each of these dimensions can lead to positive learning experiences and to students' overall learning experience with SpeakQuest for English speaking practice.

The conceptual framework shows the proposed relationship between SpeakQuest features and learner outcomes. In particular, the framework indicates that the use of AI and gamification features has an impact on students' perception of the platform regarding usefulness, ease of use, confidence, and satisfaction. These perceptions then influence students' experiences of their use of SpeakQuest for English speaking practice. Thus, the framework can be used as a basis to answer the research questions in the study.

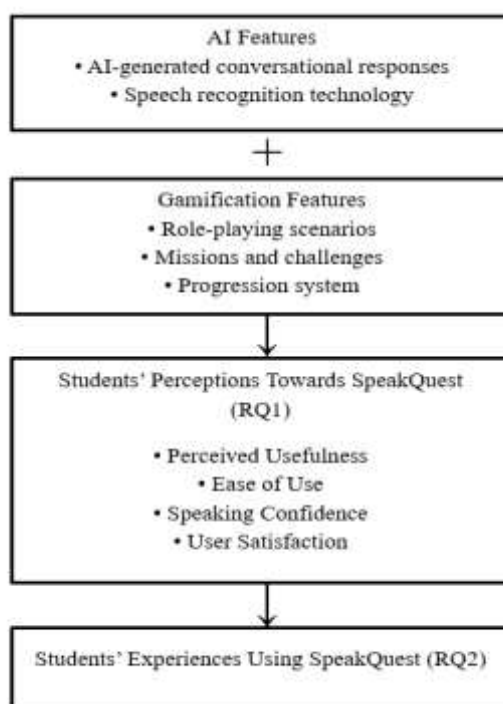


Figure 1: Conceptual Framework

Methodology

The research involves quantitative and qualitative approaches to investigate students' perceptions and experiences of using SpeakQuest. Data were collected to provide a comprehensive understanding of the study.

Research Design

The study adopted a mixed-method research design in studying the perceptions and experiences of the students on the use of SpeakQuest for English speaking practice. Mixed-method research is used to gain a more holistic picture of a research problem than would be provided by either method alone (Creswell & Creswell, 2018). The quantitative data were collected using a questionnaire to explore students' perception of SpeakQuest, and the qualitative data were collected using semi-structured interview to deepen the students' perception.

The explanatory mixed-method design was thought to be suitable because it allowed for the quantitative results to give a general overview of the students' attitudes about the platform, while the qualitative results provided detailed explanations for the students' experiences and attitudes. Combining the two types of data allowed for an overall assessment of SpeakQuest as an AI-based gamified English-speaking platform.

Participants

The subjects were 150 undergraduate English major students at the University of Malaya. The participants had the language background and English language proficiency required to interact with the AI-powered speaking activities offered in SpeakQuest, so it was decided to use purposive sampling.

A three-week course of three instructional sessions was completed. Students completed these sessions with SpeakQuest, practicing their speaking skills through role-play scenarios, conversational tasks, and mission-based speaking challenges with AI. The participants were deemed appropriate to test the effectiveness and usability of the platform with the intended target users since they were English-speaking learners.

Research Instruments

In this study, two instruments were used: a questionnaire and semi-structured interviews.

Questionnaire

A questionnaire that aimed to explore the students' attitudes to English speaking practice using SpeakQuest was designed. There were two sections in the questionnaire. Section A gathered the demographic data, and Section B consisted of 20 Likert scale items to get the students' perceptions of the platform.

The four dimensions covered by the questionnaire were:

- Perceived Usefulness
- Ease of Use
- Speaking Confidence
- User Satisfaction

There were five items on each dimension. The responses were obtained on a 5-point Likert scale from strongly disagree (1) to strongly agree (5). The questionnaire was adapted and modified according to the foreign language learners' ChatGPT Usage Scale created by

Çobanoğulları and Özbek (2025). The initial instrument aimed to assess the perceptions of the AI-assisted language learning technologies by focusing on the three dimensions of Overall Usability, Learning, and Development. The original dimensions were re-contextualised and reorganised to align with the characteristics and learning goals of SpeakQuest, an AI-powered gamified English-speaking platform. The adaptation process resulted in alignment with validated constructs of the original instrument and catered to the specific goals of the current study.

The questionnaire was checked by two English language teaching and educational technology experts to determine the content validity. Feedback was used to enhance the clarity, relevance, and appropriateness of the items on the questionnaire. Before the main study was carried out, a pilot study was carried out with 30 students. Cronbach's alpha was used to determine the reliability of the questionnaire. Taber (2018) determined that Cronbach's Alpha scores $> .70$ signify acceptable internal consistency. The results of the pilot study showed good reliability, suggesting the instrument was appropriate for the main study.

Semi-Structured Interviews

Conversations with students were held in the form of semi-structured interviews to gain insight into the students' experience with SpeakQuest. A total of 150 students were sampled, and ten students were purposively sampled. Qualitative interviews usually have fewer respondents and are used to delve deeper into the experiences and views of the respondents (Creswell and Creswell, 2018). The sample size of 10 was regarded as adequate for the qualitative analysis to provide rich and detailed information.

The sample of participants in the interviews was selected using a Maximum Variation sampling strategy. Interviews were conducted with students who had a wide range of questionnaire scores and experiences with SpeakQuest. This method allowed the researchers to get a variety of viewpoints about the platform and minimised the chances of getting feedback from just one type of user. Therefore, the sample used for the interviews did not consist of only the most positive and active SpeakQuest users, but rather included all perceptions and experiences.

The semi-structured interview protocol was modified and adapted from Alshammari (2024), who studied the experiences and perceptions of learners in the use of AI in English language learning. The questions were made relevant to the goals of the current study and the characteristics of SpeakQuest as a gamified, AI tool for English speaking practice.

The interview protocol included open-ended questions regarding students' experiences with SpeakQuest, perceived benefits of SpeakQuest, problems students faced with SpeakQuest, and ideas for improvement. The semi-structured format helped participants to expand on their answers and ensured that all of the key areas were discussed in each interview session.

Data Collection Procedure

Three weeks of data were collected. In the first week, participants were briefed on SpeakQuest and shown how it works, such as the AI conversation interactions, speech recognition capabilities, role-playing scenes, and mission activities. Students had chances to get acquainted with the platform before engaging in the speaking activities.

In the second and third weeks, the students participated in structured speaking activities in class with the help of SpeakQuest. The tasks involved simulation exercises, where participants had to engage with AI agents and complete speech tasks that represented real-life scenarios. The 3 instructional sessions were completed, after which the participants were invited to fill out the questionnaire. Ten participants were then chosen for semi-structured interviews based on maximum variation sampling. For the qualitative phase, participants were selected to have varying answers to the questionnaire items and varied experiences with SpeakQuest so that a variety of perspectives were represented. The study was voluntary, and all the participants were briefed about the purpose of the study. Data collection and reporting were confidential and anonymised.

Data Analysis

The quantitative data gathered from the questionnaire were analysed using SPSS (Statistical Package for Social Sciences). To analyse students' perceptions towards SpeakQuest across the four dimensions, descriptive statistics (frequencies, percentages, means and standard deviations) were conducted. Moreover, Cronbach's Alpha was computed to verify the internal consistency reliability of the questionnaire.

The interpretation of mean scores was done by the equal interval method. The five-point Likert scale (1, 2, 3, 4, 5) was partitioned into three intervals: low, moderate, and high. The width of the interval was calculated using the formula $\text{scale range} = 5 - 1 = 4$, and the number of categories = 3, giving an interval value of 1.33. According to this calculation, a score of 1.00 to 2.33 was considered low; 2.34 to 3.66 was considered moderate; and 3.67 to 5.00 was considered high.

The thematic analysis techniques described by Braun and Clarke (2021) were used to analyse the qualitative data collected from the semi-structured interviews. The recordings from the interviews were initially transcribed verbatim. These transcripts were then read again and again in order to get to know the data. Initial codes were produced, and these were then categorised to look for commonalities and patterns. They were then grouped under the more general themes of students' experiences in using SpeakQuest for practicing English.

The quantitative and qualitative results were codified in the interpretation phase to give an overall picture of students' perceptions and experiences with the use of SpeakQuest. By linking both data sources, the researchers were able to have a depth and breadth of evaluation of the platform's effectiveness and usability.

Findings

The findings are presented according to the research questions and are based on both quantitative and qualitative data. Together, they provide insights into students' perceptions and experiences of using SpeakQuest for English speaking practice.

Findings for Research Question 1: What are students' perceptions towards the use of SpeakQuest for English speaking practice?

The quantitative data gathered from the questionnaire were analysed by using the SPSS (Statistical Package for Social Sciences). To analyse students' perceptions towards SpeakQuest across the four dimensions, the descriptive statistics (frequencies, percentages, means and standard deviations) were conducted. Moreover, Cronbach's Alpha was computed to verify the internal consistency reliability of the questionnaire.

The findings from the questionnaire used are presented in this section, which was answered by 150 English major students. The questionnaire was divided into four components: Perceived Usefulness, Ease of Use, Speaking Confidence, and User Satisfaction. The descriptive data (mean score and standard deviation) was used to analyse students' perceptions towards SpeakQuest.

Reliability Analysis

Table 1: Reliability Analysis of Questionnaire Dimensions

Dimension	Number of Items	Cronbach's Alpha
Perceived Usefulness	5	0.892
Ease of Use	5	0.822
Speaking Confidence	5	0.749
User Satisfaction	5	0.760

Cronbach's Alpha was used to determine the reliability of the questionnaire. The internal consistency of all subscales was acceptable to excellent (α values ranged from .749 to .892), as indicated in Table 4.1. The best reliability coefficient ($\alpha = .892$) was for Perceived Usefulness and the second best was for Ease of Use ($\alpha = .822$). The internal consistency of Speaking Confidence ($\alpha = .749$) and User Satisfaction ($\alpha = .760$) was also acceptable. Hence, the questionnaire was found to be appropriate to measure students' perceptions about SpeakQuest.

Table 2 presents the descriptive statistics for students' perceptions towards SpeakQuest across four dimensions: Perceived Usefulness, User Satisfaction, Ease of Use, and Speaking Confidence.

Table 2 Students' Perceptions Towards SpeakQuest

Dimension	Mean	SD	Rank
Perceived Usefulness	4.29	0.61	1
User Satisfaction	4.26	0.61	2
Ease of Use	4.21	0.54	3
Speaking Confidence	4.14	0.63	4

The findings showed that the students' overall mean score ($M = 4.23$, $SD = 0.23$) indicated a positive attitude towards SpeakQuest for English speaking practice. The mean scores of all four dimensions were high, showing good perceptions of the platform.

The results indicated that the mean score of Perceived Usefulness ($M = 4.29$, $SD = 0.50$) was the highest among the four dimensions, indicating that students perceived SpeakQuest to be useful for English speaking practice. This was followed by User Satisfaction ($M = 4.26$, $SD = 0.45$) and Ease of Use ($M = 4.21$, $SD = 0.48$). The mean score ($M = 4.14$, $SD = 0.48$) of Speaking Confidence was the lowest of the high range.

However, at the item level, the highest scores were for PU1, PU2, PU4 and US3 ($M = 4.29$), reflecting high levels of agreement on the usefulness of SpeakQuest and student satisfaction with the platform. The mean score for SC4 was the lowest ($M = 4.06$), indicating that it might take a longer time for users to get better at using the platform when speaking with confidence. However, the mean scores for all items were above 4.00 and thus showed positive perceptions throughout the questionnaire.

In conclusion, the results reflect a positive attitude of the students towards SpeakQuest as a tool for practicing English. Thus, the research findings provide answers to the first research question of this study, that is, in general, students' perception about using SpeakQuest for English speaking practice is favourable.

Findings for Research Question 2: What do the students experience when using SpeakQuest for the purpose of speaking practice in English?

Semi-structured interviews were carried out with 10 students selected using maximum variation sampling, to gain insight into their experiences of using SpeakQuest. Thematic analysis as described by Braun and Clarke (2021) was used to analyse the interview data. From the analysis, four themes arose:

1. Increased Speaking Confidence
2. Engaging and Enjoyable Learning Experience
3. Communication-Focused Learning Through AI-Powered Role-Playing
4. Challenges and Suggestions for Improvement

Increased Speaking Confidence

The results of the interviews indicated that "SpeakQuest" helped those interviewed grow in confidence to interact in English. When using AI-driven characters, students also reported feeling less anxious when interacting with the characters because of the supportive and non-judgmental nature of the platform they used. In the traditional classroom speaking activity, students would fear being ridiculed or criticised by peers, instructors, etc. In the traditional classroom speaking activity, the fear of being ridiculed or criticised by peers and instructors would be a problem for the students. The participants' responses include:

P3 : I was more comfortable speaking English knowing that the AI wouldn't judge my errors.

P7 : When I speak in class, I'm usually shy, but with the character, it was easier.

P9 : The more missions I did, the more confident I was in my speaking.

The answers indicate that SpeakQuest provided a context where students had opportunities to speak more confidently. Repeated interaction with AI characters seemed to help decrease the anxiety of speaking English and improve students' willingness to communicate in English.

Engaging and Enjoyable Learning Experience

The user-friendly and fun experience of the platform was another theme that arose from the interviews. SpeakQuest was often perceived as fun, interesting, and motivating by the participants. The use of gamification, including missions, progression, and character interactions, motivated students to actively engage in speaking exercises. The participants' responses include:

P2 : It seemed like a game and not a speaking exercise.

P5 : The missions got me motivated to keep talking because I wanted to do the things.

P10 : The platform was more stimulating than the conventional speaking exercises in the classroom.

The results suggest that the gamified elements of SpeakQuest had a positive effect on the students' learning experiences. The platform seemed to motivate students to engage in speaking activities and keep them engaged in learning.

Communication-focused learning using AI for role-playing.

The study also showed that the students found the role-plays a meaningful opportunity for communication, based on the findings of the interview. Participants did not just report paying attention to correct grammar, but also to keeping both conversations and missions going, and to reacting correctly to the AI characters. The participants' responses include:

-
- P1 : I aimed to get the job done, rather than getting it wrong.
P4 : I was able to respond to the situation in the conversations, making them feel natural.
P8 : Thinking about what to say rather than worrying about grammar.
-

The results imply that the role-playing tasks prompted the students to give attention to communication and completion of tasks. The spontaneous language production elicited by AI-generated interactions allowed students to practice language in a meaningful way and engage in authentic communication.

Challenges and suggestions for improvement

Most people were happy with SpeakQuest, but there were some issues raised and recommendations for improvements. Occasional speech recognition issues were reported, as were interest in more characters/missions/feedback. The participants' responses include:

-
- P6 : One example is that sometimes the speech recognition process did not accurately record my words.
P7 : I'd like more characters, more storylines.
P10 : It would be nice if the site could give me more specific comments on my speech.
-

The following responses demonstrate that SpeakQuest was well received, but that there were some areas identified which could be improved to make future versions of the platform even better.

Table 3 Summary of Themes Emerging from Interview Data

Theme	Description
Increased Speaking Confidence	Students felt more confident speaking English in a non-judgemental environment.
Engaging and Enjoyable Learning Experience	Gamified features increased motivation and participation.
Communication-Focused Learning Through AI-Powered Role-Playing	Students prioritised communication and task completion during speaking activities.
Challenges and Suggestions for Improvement	Students identified technical and design improvements for future development.

The results show that students in general had a positive experience in applying the SpeakQuest for English speaking practice. The role-playing activities with AI tools led to participants' confidence in speaking, engagement, and meaningful communication. Moreover, gamification elements enhanced students' enjoyment and motivation to use the platform. While a few technical and design suggestions were made, the overall results showed that SpeakQuest created a positive and supportive learning environment for English speaking practice.

Discussion

The findings are interpreted in relation to previous studies and relevant literature. The discussion highlights the implications of the findings for AI-assisted language learning and English-speaking practice.

Positive perceptions towards SpeakQuest for English Speaking Practice

The results showed that the students' attitudes towards SpeakQuest for English speaking practice were generally positive. Students' perceptions of usefulness, ease of use, and user satisfaction in this platform were measured with high average values ($M = 4.29$ for Perceived Usefulness, $M = 4.21$ for Ease of Use, and $M = 4.26$ for User Satisfaction), suggesting high usefulness, ease of use, and user satisfaction scores. These positive perceptions could have been shaped by the inclusion of conversational AI, speech recognition technology, role-playing, and mission-based progression, which can offer interactive opportunities for speaking practice.

The results align with the study by Huang et al. (2023), which emphasised the prospect of AI technologies in language learning, fostering interaction and personalised learning experiences, and the study by Kasneci et al. (2023), which discussed the role of AI in enhancing language learning experiences. Likewise, Çobanoğulları and Özbek (2025) revealed positive attitudes of learners regarding AI-enabled language learning technologies, and Chan and Hu (2023) identified the advantages of generative AI for language learning and students' attitudes regarding its utility and accessibility. Overall, the results indicated that SpeakQuest was well-received by the students and could be a valuable tool for further English speaking practice in supplementary ways.

SpeakQuest Enhanced Students' Speaking Confidence and Engagement

The results showed that SpeakQuest had a positive impact on students' speaking self-confidence and participation. Speaking Confidence had the lowest mean score ($M = 4.14$); however, it was still considered to be in the high range. Chat with AI characters was also found to make the participants more comfortable in speaking English. This could be explained by the fact that AI-backed communication is non-judgemental, so learners were not afraid of committing mistakes.

This result corroborates the conclusions of Wang et al. (2024), whose study shows that conversational AI had a positive impact on learners' willingness to communicate and that it decreased speaking anxiety. Likewise, Qiao and Zhao (2023) revealed that AI-based language learning aids speaking learning and self-regulation. These results are also reinforced by Peng (2025), in the discussion of willingness to communicate, which focuses on the significance of supportive learning environments.

The gamified elements of SpeakQuest were also mentioned as its fun and motivational elements for the students. The result is similar to the previous study conducted by Zainuddin et al. (2020) and Sailer & Homner (2020) that showed that gamification has the potential to improve the engagement and participation of learners. Overall, the use of AI-based interaction and gamification seems to have boosted confidence and engagement in the process of speaking practice.

AI-Powered Role-Playing Promoted Communication-Focused Learning

One important observation in the study was that the students' attention was often drawn to the communicative and task completion aspects of the speaking activities, instead of focusing on linguistic accuracy. The participants indicated that they focused on keeping conversations

going, responding to scenarios, and accomplishing missions instead of trying to avoid too many grammatical mistakes. This could be due to the role-play design of SpeakQuest, which made it easy for learners to use English to communicate with meaning.

The result confirms Sato and McDonough (2019), who pointed out the significance of contextualised communicative practice, as well as Pawlak (2018), who emphasised communicative goals in successful speaking performance. The discovery also aligns with the work of Huang et al. (2023), who found that AI technology could provide opportunities for real language usage.

Contrary to the majority of studies that have examined the role of motivation or confidence, the present study indicates that AI-based role-playing can motivate learners to focus more on communication and task completion in speaking practice. This demonstrates the capabilities of AI-driven role-playing platforms for language learning that focus on communication skills, and adds to the rapidly expanding body of research on language learning assisted by AI.

Despite the positive findings, several limitations should be acknowledged. First, the study was conducted at a single public university in Malaysia, which may limit the generalisability of the findings to other educational contexts. Second, the study focused on students' perceptions and experiences rather than objective measures of speaking performance. Finally, the intervention period was relatively short and may not fully reflect the long-term effects of using SpeakQuest. Future research could involve participants from different institutions, employ longer intervention periods, and examine the impact of AI-powered speaking platforms on learners' actual speaking proficiency. Further studies may also explore additional features such as automated feedback, adaptive learning pathways, and more advanced role-playing scenarios to enhance AI-assisted language learning.

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