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Utilising Speechace to Enhance Speaking Skills among English as a Second Language Pre-University Students

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Abstract

Speaking skills present a significant challenge for second language learners, and recent technological advancements have brought Artificial Intelligence (AI) applications into the forefront of language learning and teaching. The implementation of *Speechace* as an AI-based tool represents a potential opportunity to enhance the speaking skills of English as a Second Language (ESL) students; therefore, this study aims to describe and analyse the use of *Speechace* to improve learners' speaking skills. Guided by the Technology Acceptance Model (TAM), a mixed-method design was employed where 4-point Likert scale questionnaires were administered among 121 pre-university students, and a semi-structured interview was conducted with two teachers. The quantitative data were analysed using descriptive statistics while the qualitative data were analysed using thematic analysis. The study's findings indicate that student participants agree that *Speechace* is useful (M=3.51) and easy to use (M=3.39), and they exhibit a positive attitude(M=3.40) and strong behavioural intentions towards using *Speechace* (M=3.21). In addition, teachers exhibit positive attitudes towards the implementation of *Speechace* as one of the pedagogical tools in ESL-speaking classrooms. The findings of this study will contribute to a better exploration of students' perceptions of the use of AI tools in ESL classrooms and provide valuable insights for ESL educators and researchers which align with innovative pedagogies. Furthermore, these insights support achieving Sustainable Development Goal 4 (SDG 4) by promoting inclusive and equitable quality education and lifelong learning opportunities for all.

Keywords: Artificial Intelligence, English as a Second Language, Speaking Skills, Technology, Technology Acceptance Model

Introduction

English language proficiency stands as a cornerstone of global communication and opportunity. In an increasingly interconnected world, mastery of the English language opens avenues for academic, professional and social advancement (Kadamovna, 2019; Tamala et al., 2023). The global spread of English as a lingua franca highlights its importance, particularly for English as a Second Language (ESL) learners (Crystal, 2003, as cited in Kholis, 2021). Among

pre-university students, proficiency in English is not merely advantageous but often essential for success in higher education and future careers. Within the context of language acquisition, speaking skills hold particular significance. Effective verbal communication is fundamental for expressing ideas, engaging in academic discourse and participating actively in various social and professional contexts (Tamala et al., 2023). Among pre-university students, the ability to articulate thoughts fluently and confidently not only enhances academic performance but also fosters critical thinking and interpersonal skills crucial for their development and future endeavours (Richards & Rodgers, 2014, as cited in Makhlouf, 2021).

However, mastering speaking skills poses unique challenges for ESL students (Andiappan et al., 2022; Karim et al., 2023). Speaking can be difficult for many students since it involves a lot of cognitive processing (Mehrotra, 2019). Despite efforts to integrate speaking practice into language learning curricula, many learners struggle to overcome barriers such as language anxiety, limited opportunities for meaningful interaction and insufficient feedback (Kholis, 2021). For some learners, interference from their first language may also impact their speaking ability (Abdul Rahman, 2010). Abdul Rahman (2010) further emphasises that these learners lack confidence and are afraid of being judged for the mistakes they make.

On the other hand, ESL teachers also face challenges when teaching speaking skills. Several pedagogical reasons contribute to this issue. First, learners' opportunities to rehearse speaking in a second language are restricted (Song, 2009, as cited in Andiappan et al., 2022). Within this constrained amount of time, teachers are expected to cover all language skills, grammar and literary components. Students do not have many opportunities to practise speaking in the teacher's presence. Second, having a large class size frequently makes it difficult to give each student enough opportunity to practise speaking in front of the class (Andiappan et al., 2022). Naturally, a large class size would limit the amount and quality of teacher-student and student-student interactions. Consequently, students have to compete with one another for attention, and they miss valuable feedback from teachers (Chen, 2011; Huang, 2015; Sun, 2009).

Offering learners more opportunities to talk outside of class hours is one method to navigate the limitations mentioned above. Nevertheless, the main barrier to this strategy is that many ESL students lack a social support system; they are not surrounded by people who can converse in English with them (Andiappan et al., 2022). Therefore, the emergence of technology has revolutionised language learning methodologies, shifting the mindset of both educators and students. Digital tools and platforms offer innovative ways to enhance speaking skills, providing interactive exercises, real-time feedback and personalised learning experiences. Andiappan et al (2022) further assert that this technological shift encourages educators to explore new possibilities for language instruction and empower students to take ownership of their learning journey.

Consequently, numerous studies have investigated effective pedagogical approaches and technologies, particularly on the use of AI applications to support ESL students in improving their speaking proficiency. Nonetheless, these studies originated from neighbouring countries and other continents. There is a scarcity of studies focusing on the use of automatic speech recognition (ASR) software to enhance speaking skills in the Malaysian context. Since AI applications are believed to bring significant potential in ESL classrooms, this

present study is guided by the Technology Acceptance Model (TAM) to investigate learners' and teachers' perceptions of the use of *Speechace* to enhance speaking skills. To address this objective, two research questions are formulated as follows:

i) What are learners' perceptions of the use of *Speechace* to enhance speaking skills?
ii) What are teachers' perceptions of the use of *Speechace* to enhance speaking skills?

Literature Review

Integration of Technology in Education

The emergence of the Fourth Industrial Revolution (IR 4.0) has had a notable influence on educational systems. As a result, higher education establishments are under increasing pressure to implement Education 4.0 in reaction to IR 4.0. It is crucial to create a variety of teaching methods and resources for English language instruction (Cheok & Ran, 2022). To ensure language learning is successful, creative teaching methods and appropriate resources must be utilised. According to Mansor et al (2020), this educational concept places a strong emphasis on integrating environmentally friendly technologies, inclusive learning settings, sophisticated pedagogical methodologies and a heightened focus on creativity.

The onset of technology is evident in the use of various media resources to facilitate a conducive learning environment. At the beginning of the technological era, videos, audio and games were introduced in ESL classrooms to help teachers improve learners' learning experience (Al-Maashani & Mudhsh, 2023). However, COVID-19 has made technology more prevalent in the education field through the implementation of online learning (Mohamad et al., 2023). Since then, education and technology have grown of significant importance for educators and learners. Teachers are becoming more adept in the utilisation of technological applications to create an inclusive and meaningful learning atmosphere for their learners (Alshahrani, 2023).

Artificial Intelligence (AI) in ESL-Speaking Classrooms

The concept of the Internet of Things (IoT) and artificial intelligence (AI) is widely accepted across the globe. The term AI refers to computer programmes and virtual assistants that can mimic human behaviour (Russell & Norvic, 2016, as cited in Zou et al., 2023). Learners are being exposed to the use of AI to help them progress in their education Cheng et al (2023) while teachers equip themselves by exploiting the potential offered by AI tools (Sharifuddin & Hashim, 2024). The emergence of AI has added more value and potential beyond humans' imagination (Malik et al., 2019, as cited in Makhlouf, 2021). The utilisation of AI in education has proven to help learners become more independent towards their learning (Keerthiwansha, 2018). Learners are allowed to get immediate feedback and a personalised learning experience, particularly essential as they learn speaking skills. Several studies Kaur and Gill (2019); Makhlouf (2021); Moxon (2021) believe that AI tools are the key to successful learning experiences in ESL-speaking contexts.

Among the latest advancements in language learning technology are AI applications designed to assist students in mastering ESL speaking skills. These AI-driven tools, such as automatic speech recognition (ASR) software, utilise advanced algorithms to analyse pronunciation, fluency and intonation, offering tailored feedback and targeted practice exercises (Makhlouf, 2021; Pokrivčáková, 2019). By harnessing the capabilities of AI, ESL students can access personalised support and improve their speaking proficiency in a self-

paced and engaging manner, an indicator of a new era of language learning innovation. Learners do not need to wait for corrective feedback from teachers. With AI applications, they may have a progressive learning experience in mastering speaking skills, without a teacher's presence (Ngu et al., 2021, as cited in Karim et al., 2023).

The ongoing advancement of AI has greatly enhanced both the quality of learning in ESL classes and the level of skill development for teachers (Abdelghany Elgohary & Al-Dossary, 2022, as cited in Adipat, 2023). Sandip (2019) highlights the change of role among teachers since AI is used in ESL classrooms where teachers assume as facilitators to assist and monitor learners' progress. Additionally, AI advancements have assisted ESL learners in their speaking practice, such as speech evaluation programmes that feature automatic speech recognition (Natale & Cooke, 2021). A similar study by Adipat (2023) shows a significant impact was evident on the participants' speaking skills when AI-enhanced phenomenon-based learning instruction was implemented. Salija and Rahman (2023) also observed positive perceptions among ESL learners when AI-based instruction is implemented in the classrooms.

Speechace

With AI, emerge automatic speech recognition (ASR) software to help students in language learning. One of the ASR software is *Speechace* which is recognised as a key instrument in language learning and instruction, particularly in the strengthening of speaking skills among ESL learners. Developed as an AI programme, *Speechace* offers a comprehensive platform for testing and improving pronunciation, fluency and intonation in English speaking (Alnifasah, 2022). Its powerful algorithms evaluate spoken language patterns with exemplary accuracy, offering thorough feedback and specific recommendations for learners to develop their speaking proficiency (Aiello & Mongibello, 2019). This technology-driven solution has earned recognition for its success in tackling common issues experienced by ESL students, such as language anxiety and limited practice opportunities. By giving interactive exercises, real-time assessments and individualised instruction, *Speechace* strives to empower learners to gain confidence and proficiency in English speaking (Alemi & Khatoony, 2020). As such, within the framework of ESL language training, *Speechace* is a promising tool for promoting tailored and immersive learning experiences, contributing to the broader conversation on novel pedagogical techniques and the incorporation of technology in language education (Moxon, 2021).

Past Studies

It has been discovered that the AI speech evaluation programme or ASR helps ESL learners improve their speaking abilities (Dai & Wu, 2023; Dizon, 2020; Xiao & Park, 2021). There have been several previous studies on the topic of teaching speaking using *Speechace*. For instance, Moxon (2021) has conducted a study to investigate the effectiveness of using *Speechace* to enhance speaking skills among Thai undergraduate students. Throughout two six-week periods, treatment and control sample groups were inverted following a pre-test and post-test design. Participants in the treatment group were given access to *Speechace* where they could record and submit their speech for automated evaluation and feedback. An independent samples t-test analysis revealed a statistically significant enhancement in pronunciation accuracy among students in the treatment group compared to those in the control group.

Another study was conducted by Aiello and Mongibello (2019), who implemented a pilot project on 372 undergraduate students at the University of Naples "L'Orientale", Italy. *Speechace* was integrated into the e-learning course to offer real-time practice and feedback on students' pronunciation. Results showed that following their involvement in the experiment, student participants rated themselves statistically considerably higher. They also showed a statistically significant increase in L2 self-confidence by the end of the project. This suggests that the participants find *Speechace* to be highly effective.

Theoretical Framework

This study employs the Technology Acceptance Model (TAM) framework by (Davis, 1989). The TAM model comprises two cognitive beliefs: perceived usefulness (PU) and perceived ease of use (PEoU). It suggests that factors including PU, PEoU, attitude (Att) and behavioural intentions (BI) have an impact on how the technology is used by them. Therefore, the adoption of this framework is deemed suitable as TAM can be used to assess students' perceptions regarding the use of *Speechace* as a language learning aid. Researchers can assess students' acceptance and adoption of *Speechace* by analysing aspects like PU (effectiveness in improving speaking abilities) and PEoU (user-friendliness). The integration of the Technology Acceptance Model (TAM) enables a structured examination of the elements that impact the application and efficiency of *Speechace* in educational settings. Thus, this study helps in developing strategies for the successful incorporation of *Speechace* into language learning programmes. The figure below illustrates the constructs of the TAM model.

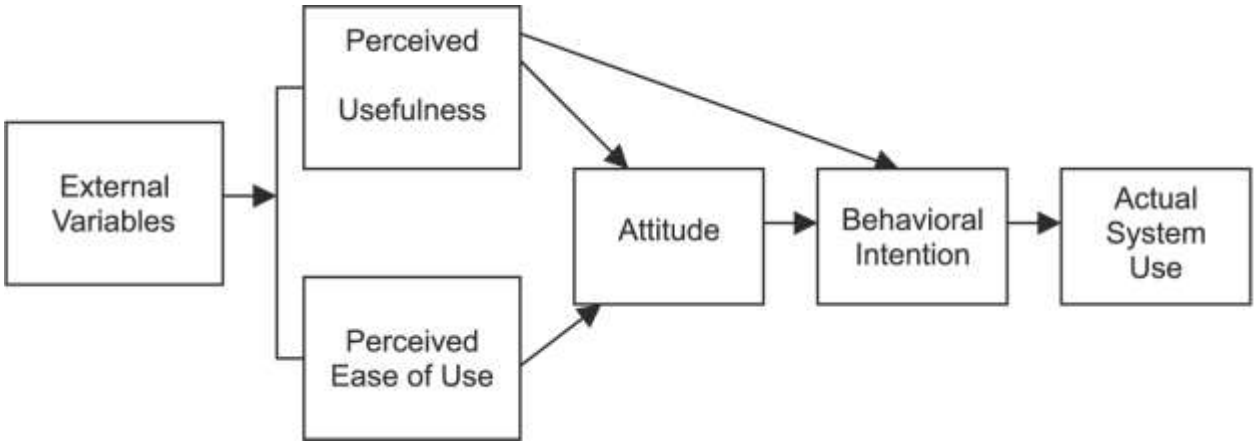

Figure 1: Technology Acceptance Model

Methodology

This study utilised a mixed-method approach. The study's main data were gathered via a survey questionnaire and a semi-structured interview. The TAM constructs were integrated into both instruments. The survey questionnaire utilised a 4-point Likert scale. The scale was anchored by (1) Strongly disagree, (2) Disagree, (3) Agree, (4) Strongly agree. Unlike common questionnaires, the researchers assert that using a four-point Likert scale provides better reliability and validity in findings compared to a five-point Likert scale. Previous studies by Isnaeni et al (2021); Weems and Onwuegbuzie (2001) support the idea that the midpoint (Neutral) in an odd number rating scale could lead to reduced dependability since respondents tend to over-select this option.

Sampling

The study involved 121 pre-degree students and two teachers (n =2) from one of the public universities in West Malaysia. Purposive and convenience samplings were used as these teachers and students underwent the English proficiency programme that incorporated *Speechace* as a pedagogical tool. Students and teachers were exposed to *Speechace* for seven weeks.

Instruments

This study used two research instruments: (1) an online survey questionnaire and (2) a semi-structured interview. The survey questionnaire was administered online, and the items were adapted from Ghani et al (2019) who conducted similar research investigating the use of technology in language learning. The decision to adapt an existing questionnaire was based on the need for a validated instrument that could effectively capture relevant constructs and variables related to the research objectives. Pallant (2007) stated that a Cronbach's Alpha coefficient of 0.70 or higher indicates that the items on a scale are consistent and measure the same underlying construct (as cited in Ghani et al., 2019). Below are the findings of the reliability tests conducted on the measurement scales. The Cronbach's alpha reliability ratings for all constructs are over 0.75, indicating high reliability for all items within each construct. Therefore, the questionnaire from Ghani et al (2019) is a valid assessment tool to be adapted in this present study.

Table 1
Cronbach's Alpha Coefficient from Ghani et al (2019)

Construct	Cronbach's Alpha	No. of Item
Perceived Ease of Use (PEU)	0.818	6
Perceived of Usefulness (PU)	0.870	5
Attitude (AT)	0.846	5
Behavioural Intention to Use (BI)	0.757	4

Data Analysis

The data from the survey questionnaire were analysed using SPSS ver.29 for descriptive analysis. On the other hand, the findings from the semi-structured interview were analysed using thematic analysis. Combining survey questionnaire data with semi-structured interview responses aids triangulation, improving the validity of the research. By triangulating data from both sources, researchers achieve a more comprehensive understanding of the research phenomenon, strengthening the credibility of the findings.

Results and Findings

Demographic Data of the Participants

Table 2
Demographic Data of the Participants

Gender	N
Male	39
Female	82

Table 2 shows there are 32.2% of male participants (n = 39) and 67.7% of female participants (n = 82) volunteered to answer the online questionnaire. 95% of the total respondents (n=115) were foundation students while 5% were diploma students (n = 6).

Reliability of the Questionnaire using Cronbach's Alpha

Table 3

Cronbach's Alpha Coefficient for the present study

Construct	Cronbach's Alpha	No. of Item
Perceived Ease of Use (PEU)	0.861	5
Perceived of Usefulness (PU)	0.844	4
Attitude (AT)	0.906	5
Behavioural Intention to Use (BI)	0.846	3

To verify the reliability of the data, a reliability study using Cronbach's Alpha was performed. The Cronbach's Alpha values for each construct in this questionnaire are tabulated in Table 3. The values range from 0.844 to 0.906. As explained earlier, a Cronbach's Alpha coefficient of 0.70 or higher indicates that the items on a scale are consistent. Thus, all 17 items studied are reliable as Cronbach's Alpha values satisfy the internal consistency of the data.

The findings and discussion are explained based on the research questions.

RQ1: What are learners' perceptions of the use of *Speechace* to enhance speaking skills?

To answer this research question, researchers used mean and standard deviation values to analyse the questionnaire. The results are segmented into four constructs derived from the TAM framework namely perceived usefulness (PU), perceived ease of use (PEoU), attitude (Att) and behavioural intention to use (BI). The overall findings are shown in Table 4.

Table 4

Factors perceived by learners to influence their acceptance of Speechace

Constructs	Total Mean	Std. Deviation
Users' perceived usefulness (PU)	3.51	.537
Users' perceived ease of use (PEoU)	3.39	.587
Users' attitude (Att)	3.40	.546
Users' behavioural intention to use (BI)	3.21	.620

The average scores indicate that, on the whole, users perceived *Speechace* as practical (M=3.51; SD=0.537), user-friendly (M=3.39; SD=0.587), and held a positive attitude towards it (M=3.40; SD=0.546). Nevertheless, their behavioural intention to keep on using the application was slightly lower (M=3.21; SD=0.620), suggesting that they might have some concerns or limitations regarding its application in practice.

Based on the data, the most important factor perceived by students to influence their acceptance of *Speechace* is the usefulness of the AI application in enhancing their speaking skills (M=3.51). This is followed closely by their attitude towards the application (M=3.40).

Behavioural intention to use (M=3.21) is the factor least perceived to influence their acceptance. The tables 5 to 8 below provide further information on the items under each construct.

Table 5
ESL learners' perceived usefulness of Speechace

	Mean	Std. Deviation
Using *Speechace* will enhance my speaking performance through personalised feedback.	3.43	.514
Using *Speechace* will save my time by providing instant feedback.	3.58	.528
Using *Speechace* can make it easier for students to practice speaking skills.	3.55	.577
Using *Speechace* will enhance the effectiveness of acquiring speaking skills.	3.48	.534
I find *Speechace* useful.	3.53	.533

In this study, perceived usefulness reflects students' perception of whether the use of *Speechace* has enhanced their speaking skills. Data from Table 5 show that student participants agree using *Speechace* has saved them time as they are given instant feedback for each completed activity (M=3.58; SD=0.528). Students also agree that using *Speechace* makes speaking practices easier (M=3.55; SD=0.577). In general, most of the students agree that *Speechace* is a useful application (M=3.53; SD=0.533). These findings align with results from previous studies Alnifasah (2022); Kaur & Gill (2019); Keerthiwansha (2018); Makhlouf, (2021); Moxon (2021) which highlight the effectiveness of AI tools in ESL classrooms, particularly in speaking contexts.

Table 6
ESL learners' perceived ease of use of Speechace

	Mean	Std. Deviation
I find *'Speechace'* easy to use.	3.40	.600
Learning how to use *'Speechace'* is easy for me.	3.45	.548
It is easy to become skilful in using *'Speechace'*.	3.33	.554
Improving pronunciation is easy through *'Speechace'*.	3.37	.647

Perceived ease of use refers to a student's perception that using *Speechace* in learning speaking skills requires minimal effort. In general, learners agree that learning how to use *Speechace* is easy for them (M=3.45; SD=0.58). *Speechace* is perceived by students as easy to use (M=3.40; SD=0.600). Additionally, learners find that using *Speechace* has helped them to improve pronunciation easily (M=3.37; SD=0.647). This aligns with the study by Natale and Cooke (2021) where they discovered that perceived ease of use is the key factor that influences users' attitudes and behavioural intentions.

Table 7
Users' attitude after using Speechace

	Mean	Std. Deviation
Improving speaking skill using *Speechace* is a good idea.	3.48	.534
I feel positive towards the use of *Speechace* in speaking class.	3.41	.543
I believe that *Speechace* helps me to be better in speaking.	3.40	.526
I generally favour the use of *Speechace* for speaking class.	3.31	.603
I believe that it is a good idea for me to use *Speechace* to further improve my speaking skills in the future.	3.40	.524

Table 7 tabulates the data on users' attitudes after using *Speechace*. In this study, attitude refers to students' judgement on whether the use of *Speechace* is beneficial to them. As seen in Table 5, most of the students show a positive attitude towards using *Speechace* to improve their speaking skills (M=3.48; SD=0.534). Students believe that *Speechace* has improved their speaking skills (M=3.40; SD=0.526), and they also believe that *Speechace* can be employed in the future to further improve their speaking abilities (M=3.40; SD=0.524).

These results match several past studies Aiello and Mongibello (2019); Alemi and Khatoony (2020); Moxon (2021) that outline the benefits students obtained from *Speechace* which have influenced their positive attitudes towards the implementation of *Speechace*.

Table 8
Users' behavioural intention after using Speechace

	Mean	Std. Deviation
I intend to frequently use *Speechace* to practice my pronunciation.	3.19	.596
I intend to use *Speechace* throughout this semester and the following.	3.23	.602
I intend to repetitively use *Speechace*.	3.21	.661

Under this construct, researchers investigate students' intention on actual use of *Speechace*. The mean scores for all three items range from 3.19 to 3.23, indicating a high level of intention to use the AI application. Based on the collected data, students' intentions to use *Speechace* for the upcoming semester are high (M=3.23; SD=0.602). Students also intend to repetitively use *Speechace* to enhance their speaking skills (M=3.21; SD=0.661). Hence, it is evident that the learners have a positive attitude and positive intention to use *Speechace* more frequently to help them develop good speaking skills.

RQ2: What are teachers' perceptions of the use of *Speechace* to enhance speaking skills?
To answer this research question, the interview protocol was set based on the TAM constructs by Davis (1989) which was discussed earlier. This model consists of PU, PEoU, Att and BI. The findings were analysed using thematic analysis as proposed by Braun and Clarke's (2006) six-phase framework. Therefore, the responses will be discussed based on these main constructs. Generally, both teachers agreed that there is greater potential offered by AI tools which led to the implementation of *Speechace* in their classrooms.

This semi-structured interview was conducted with two ESL teachers who taught the same proficiency course. Table 9 shows the demographic profiles of both teachers.

Table 9
Participants' Demographic Profiles

Participants	Gender	Years of teaching experiences	Highest Qualification
Teacher 1 (T1)	Female	7	Bachelor's Degree in TESL
Teacher 2 (T2)	Male	18	Master's Degree in Education

Perceived Usefulness (PU)

i) Improved speaking skills

The students' enhanced performance is a key factor influencing the integration of AI tools by teachers. Teachers have expressed great pleasure with students' pronunciation and better confidence when *Speechace* is incorporated into the speaking class. Pseudo-names are used to replace the teachers' names. These two teachers were labelled as T1 and T2. The abbreviation (INT) was used for the interview.

> *"Yes, it can be seen from my students. They have better pronunciations now after completing a series of practices and tests in Speechace."* (T1, INT)

> *"Somehow I could sense students have better self-esteem. They are no longer reluctant to participate in speaking activities as they somehow know that their pronunciation has improved…"* (T2, INT)

This aligns with previous studies which have discovered the use of AI speech evaluation programmes has significantly improved ESL learners speaking abilities (Adipat, 2023; Aiello & Mongibello, 2019; Dai & Wu, 2023; Dizon, 2020; Xiao & Park, 2021).

ii) Time-saving

Efficient time management is essential in the educational setting to ensure that learners acquire the most benefit from the lessons. This notion was underlined by Teacher 1 (T1). The employment of *Speechace* in her classes has saved students' time in completing speaking tasks, which has indirectly improved the students' speaking skills. This finding supports Aiello and Mongibello's study (2019), highlighting the importance of AI tools to provide feedback and specific recommendations to help learners progress.

> *"… students no longer need to wait for my feedback. With Speechace, they have more flexibility in time as speaking practices can be completed outside class hours. They also get immediate feedback to help them correct errors in pronunciation."* (T1, INT)

Perceived Ease of Use (PEoU)

i) Easy to use

Similar to the findings gathered from the students, both teachers also agree that *Speechace* is easy to integrate into their classrooms. They agreed that the tools are user-friendly for both

instructors and learners, as the interface of the systems has additionally motivated them to employ the tools.

> *"When the first time the coordinator of the course explained about Speechace, I was worried that it would take a lot of time to understand how to use this app. However, after signing up and exploring Speechace, I was amazed by the user-friendly interface. I didn't take long to explain to the students as they were able to manoeuvre on their own after the first demo."* (T1, INT)

> "*Speechace is definitely an easy software to use. Explaining phonetics can be challenging and tiring. But with Speechace, I let the students repeat the sounds as many as they wanted. It helped them to pick up the right sounds and practice pronouncing English words more accurately too."* (T2, INT)

The findings of this study are parallel to the findings by (Moxon, 2021). He highlights the same notion whereby students show a positive attitude towards the use of *Speechace* because it is a user-friendly tool namely a user-friendly interface. The user-friendly interface helps the students to manoeuvre the website independently.

Teachers' attitudes after using *Speechace*

Both teachers exhibited a positive attitude after *Speechace* was implemented in their classes. This attitude is drawn by the benefits they have enjoyed from *Speechace*. Alshahrani (2023) notes the increasing technological proficiency among teachers as they adapt to the demands of the digital age.

> *"I believe that Speechace is a useful AI tool that should be used by other teachers too. I feel the implementation of Speechace may help to lower teachers' burdens and substantially improve my students' speaking skills."* (T1, INT)

> *"We need more AI tools like Speechace. It helps students to be more progressive in their learning."* (T2, INT)

Teachers' behavioural intention after using Speechace

Aligned with positive attitudes projected by both teachers, they also expressed strong intention to use *Speechace* in the future for other ESL classes. They believe that *Speechace* has helped them to equip students with improved speaking abilities.

> *"Of course. I will keep on using Speechace. I will also introduce it to my undergraduate students next semester."* (T1, INT)

> *"Yes, sure. I will continue using Speechace. I'm also interested in exploring other AI tools that are suitable for my students."* (T2, INT)

However, Teacher 2 also expressed his concern about the overdependence on AI tools among teachers. Therefore, this concern suggests that stakeholders and other educators should carefully plan the integration of AI tools in ESL learning classrooms, without neglecting the importance of teachers' presence and role.

> *"… it's important for teachers to use AI tools sparingly in their lessons. It is important to keep monitoring students' progress from time to time and not rely too much on AI tools. I believe that AI is there to assist teachers. But AI should never replace a teacher's presence"* (T2, INT)

Conclusion and Recommendations

In summary, this study offers insights into ESL teachers' and students' engagement with *Speechace* and its perceived benefits at a public university in Malaysia. *Speechace* serves as a valuable tool in improving the speaking abilities of ESL learners. Research in both quantitative and qualitative forms has demonstrated that both learners and teachers benefit from the implementation of *Speechace*. This sophisticated AI tool allows learners to mimic accurate pronunciation and allows conversation to take place where they can practice the language in a stress-free environment. Furthermore, its user-friendly interface also contributes to the acceptance of *Speechace* among both learners and teachers.

Both teachers and learners also agree that the use of *Speechace* is time-saving as learners may continue to practice their pronunciation outside of class hours, without teachers' presence. This allows independent and progressive learning to take place. Learners will get immediate and personalised feedback as they complete each *Speechace* task, which teachers may not be able to provide in large-scale classrooms.

It is hoped that the findings of this study will shed light on other teachers who are still contemplating to incorporate AI applications as part of their pedagogical tools in ESL classrooms. Nonetheless, the present study was centred on a limited number of participants. Therefore, future research may utilise longitudinal analyses involving a larger sample size and have participants from several educational institutions to yield generalisability.

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