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Integrating Technology in ESL Reading Classroom: Accounting Pupils' Perspectives

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Abstract
Technology integration in language teaching has become a more prominent option for more effective teaching and learning process. However, few studies have examined the use of technology in reading classrooms, especially in the Malaysian context. This study aims to investigate pupils' perceptions of technology use in ESL (English as a second language) reading classrooms. In order to fulfill the research objective, the research question, 'What is the perception of Year 6 primary school pupils on using technology in the reading classroom?' was formulated to guide the study. The present study investigates the pupils' perceptions towards the integration of technology in reading classrooms by collecting data from 70 participants of a semi-urban primary school in Pahang using a questionnaire that is adapted from the Technology Acceptance Model model. The findings indicated that pupils have positive perceptions towards the use of technology in reading classrooms in terms of perceived usefulness, perceived ease of use, attitude towards the use of technology and behavioural intention of using technology. Significantly, this study's findings offer teachers and stakeholders with evidence to embrace technology in language teaching. Understanding pupils' perceptions of technology use in reading in language learning classrooms provide significant information for teachers, school administrators and stakeholders
Keywords: language learning, pupils' perceptions, reading classroom, technology integration

Introduction

Technology integration has been regarded as an important instructional instrument in language classes because of the extensive use and convenient access that technology offers in improving the quality of teaching and learning. According to Shafie, Majid, and Ismail (2019), there is a drastic change in the traditional teaching method with the introduction of technology in the classroom because technology opens a window of learning opportunities. The proliferation of media technology has caused teachers and pupils to adapt and utilise technology in the classroom. The nature of education in today's classroom is highly dependent on taking full advantage of the use of technology, including open educational resources, social media, augmented reality, virtual reality and other sources of technology (Bagul, 2020). Technology has been defined as a key to facilitating the learning process because technology provides unlimited resources for language learning. The integration and application of technology in teaching and learning is a need in today's classroom, reflecting on the transformation of education (Hashim, 2018).

Acquiring English as a medium of communication is paramount in this globalised world, for the English language is known as the world's lingua franca (Yaccob & Yunus, 2019). In line with the eminence of the English language, the Malaysian government has highlighted the importance of ESL (English as a Second Language) with the implementation of many efforts that range from primary education to tertiary level education (Ahmad, Hamid, & Renshaw, 2019). Nonetheless, there are many concerns raised regarding second language learning because learners are required to master four essential language skills: listening, speaking, reading and writing, which is a difficult and challenging process (Ahmad et al., 2019). Reading skills present as a demanding skill for second language learners because of the lack of exposure to the English language (Yunus, Zakaria, & Suliman, 2020), lack of socialisation with people of adept linguistic abilities (Hassan, Latiff, Muhamad, & Abdullah, 2021) and inadequate learning skills and reading strategies (Miyane, 2020). These are the contributing factors to learners' challenges in the reading classroom, which inhibit the mastery of the language.

In an attempt to overcome the challenges, English teachers have adapted and customised reading lessons with the use of technology. According to Ahmad et al. (2019), implementing technologies in English classrooms is to dominantly help second language learners learn better and solve probable challenges in language learning. The case is also reflected in Malaysian language classrooms when language teachers have begun welcoming the idea of technology integration in education (Bujang, Selamat, Krejcar, & Maresova, 2020). Similarly, a study conducted by Mustaffar, Baharuddin, and Yunus (2019) revealed that the integration of technology provided maximum exposure promoted excitement and provided better learning opportunities. Ahmadi (2018) also argued that technology could boost teaching and learning processes when it is implemented successfully with the guidance of teachers. However, there are also studies revealing that the integration of technology has posed some challenges despite the benefits and positive feedback obtained from previous studies (Bakar & Lynn, 2019). The challenges include inadequate infrastructure, facilities, low bandwidth and internet connectivity (Ahmad et al., 2019; Roy, 2019), lack of teachers' skill, competence and training in adapting technology in classrooms (Ahmadi, 2018; Ahmad et al., 2019) and preparation time for materials and lessons (Hameed & Hashim, 2022).

Researchers and practitioners in education, policymakers, parents, and the general public are all concerned about the adoption of ICT tools such as computers and modern technologies in Malaysian schools. Despite several disputes and arguments regarding the efficacy of technology

in ESL classroom instruction, the majority of researchers continue to believe and agree that technology may be deployed effectively as a cognitive tool in ESL classrooms. According to researchers, technology is an effective tool for enhancing ESL classroom teaching and learning (Kumar, Bervell, & Osman, 2020). The Malaysian education system has been reformed to suit the needs of today's learners by employing technology in classrooms. Through the 1BestariNet initiative, the Malaysian government has made substantial investments in infrastructure to connect the nation's 10,000 primary and secondary schools (Zainal & Zainuddin, 2020). The implementation of the project is motivated by a desire to expand Information and Communication Technology (ICT) access for students and revolutionise teaching and learning.

The discussion of the effectiveness of technology extends to the reading classroom. Teachers have a crucial role in providing students with active, hands-on learning and authentic activities and audiences for their work through designing the learning environment. The research on learner-centred, active learning strategies shows the usefulness of these approaches for enhancing student learning and achievement. Moreover, under a learner-centered paradigm, teachers foster social relationships among students and encourage collaborative learning. Students' reading skills, vocabulary acquisition, critical thinking, and learning assistance are enhanced by mobile devices and social media platforms (Han & Niu, 2019; Haerazi & Irawan, 2020). In addition, numerous instructional strategies and models are utilised to assist students in the development of their reading skills and to foster collaborative learning. According to Baharuddin and Hashim (2020) study, the customisable features and user-friendly layout of digital tools have also contributed to the digital reading choice of many readers. The results also revealed that by employing the application or software tools to the greatest capacity, readers could examine the text. The learner perspective is taken into consideration when implementing technology in the reading classroom. Studies focusing on students' perceptions are eminent because the researchers examined the advantages of student-centered education, such as students sharing responsibility for their learning with their teachers, students interacting with the teachers, and students collaborating and communicating with one another (Layali & Al-Shlowi, 2020).

Consequently, studies on pupils' perceptions towards the use of technology in reading classrooms will provide insights into their acceptance and preference concerning technology in improving reading skills. Pupils' perceptions towards the use of technology in reading classrooms will provide insights into their acceptance and preference with regard to technology in improving reading skills. Furthermore, their acceptance and preference would enable teachers to design reading lessons that would suit primary school pupils. It is crucial to comprehend how the integration of technology is impacting teaching and learning for educators and learners from all levels of education. There is a need for research on investigating the technological perception of students to discern the impacts of technology integration, especially among primary school pupils (Balkan, 2018; Yunus et al., 2019). This study centers on the perceptions of pupils on the use of technology in learning English to address the research gap. The study aims to investigate pupils' perceptions towards the use of technology in ESL reading classrooms. It is important to understand what perceived factors influence pupils' perceptions towards the use of technology which sheds light on their behaviour and acceptance towards the use of technology. Students and teachers will benefit from the findings of a study on pupils' perception towards technology which can be used as an evaluation of the teaching and learning process (Sari, Santihastuti, & Wahjuningsih 2020)

Literature Review
The Integration of Technology in Malaysian ESL Classrooms

Successful teaching and learning are now synonymous with the use of technology in ESL classrooms. ESL teachers in Malaysia have additional options and resources to improve teaching and learning, ultimately improving the experience gained by the students. The performance of pupils in Malaysian schools, as well as their overall fluency in English, has been the focus of multiple initiatives spearheaded by the Ministry of Education. The Malaysian Education Blueprint 2013-2025 emphasises the teacher's responsibility to incorporate ICT into teaching and learning process as it relates to globalised learning (Bakar, 2020). The Malaysian government prioritises Information and Communication Technology (ICT) innovation to enhance teaching and learning processes. Based on the Malaysian Education Blueprint, the Frog Virtual Learning Environment (Frog VLE) is one of the methods proposed to meet the educational needs of Malaysian students (Mai & Muruges 2018). The Frog virtual learning environment is a method of instruction under the "1 Bestari Net Project." It employs 4G high-speed wireless broadband for the use of technology in classrooms. According to Majid and Hashim (2019), Frog VLE provides the learning experiences that inspires and motivates students to have a positive outlook on their education, which is highly significant and powerful in terms of engaging learners whether they are in traditional classrooms or online. Similarly, another initiative by MOE is the introduction of DidikTV with the primary goal of helping students who have less access to the internet. DidikTV aired lessons on television taught by teachers for many subjects for primary and secondary school students. According to Harun (2021), students in Malaysia find DidikTV easily accessible and easy to use as the students can always rewind lessons that they have missed. The efforts and initiatives made by MOE helped learners of a second language need to be exposed to a variety of language skills to become proficient in that language, including listening, speaking, reading, and writing.

The traditional method of teaching has been modified and changed with the infusion of technology which has altered instructional strategies in the classroom. The integration of technology has changed the way teachers teach and pupils learn because the modern methods of teaching have shifted from the traditional recalling of information, facts, concepts and principles into thinking processes involving creative thinking, problem-solving and higher-order thinking skills Rou and Yunus (2020) added the implementation of technology in language learning has become more popular because of the flexibility, dynamic and interactive content creation that technology offers for a more active learning experience. The shift toward modern teaching methods equips learners with the necessary skills required in the globalised world. Based on a study conducted by Rahman, Azmi and Hassan (2020), the use of technology such as social media, Learning Management System (LMS) tools and other forms of web platforms and multimedia has encouraged learners to be more active in discussion, developed self-directed learning and improved learning experience. Similarly, a study conducted by Samat and Aziz (2020) revealed that the use of multimedia had improved pupils' visualisation skills and process of the information presented in the reading text, which ultimately contributed to the comprehension of the text and improvement in their language learning.

The integration of technology has irrefutably spearheaded language teaching in this era. However, in the process of the integration of technologies in language classrooms, several issues have impacted pupils' learning. Pupils' reading behaviour is highly influenced by their preferences for the media and the use of teaching strategies based on the learning media. (Baharuddin &

Hashim, 2020). Based on Gharawi, Bidin, and Choo (2020) study, pupils' motivation and engagement are affected when the selected use of technology media does not suit pupils' learning styles and preferences. Teachers' consideration in implementing technology during language classes is imperative for an effective lesson. Additionally, screen text brings possible distraction and misuse when pupils are given tasks to complete as they can easily surf the internet for entertainment purposes (Pazilah, Hashim, & Yunus 2019). The lesson carried out would only be successful when the teacher uses the technology effectively while monitoring the pupils to be on task. Pedagogical limitations, elements of distraction and classroom disruption are some of the concerns that teachers have to be mindful of when integrating technology to facilitate learning (Metruk, 2020).

Reading skills in primary ESL classrooms

Reading comprehension is a multifaceted and taxing cognitive process that takes place through active interaction between the reader and the text (Choi & Zhang 2021). Reading comprehension often becomes arduous for pupils with poor reading ability since they do not acquire the necessary knowledge, vocabulary and skill to understand the text. Reading impacts learners' development through the acquisition of phonics, vocabulary, and sentence structures which lead to comprehension of the reading material. Reading comprehension requires understanding at the word level and actively engaging with the reading content to create a mental representation of the text. The study conducted by Abdullah and Yunus (2019) revealed that pupils face difficulties in deriving and understanding information from texts due to their lack of schemata and vocabulary, which ultimately leads to poor reading skills. Lim, Eng, Mohamed and Ismail (2018) also supported that reading comprehension becomes challenging, and disadvantageous for pupils with poor reading ability. However, to become successful users of a second language, there is a great need to improve reading skills. Pupils will be able to learn and read with comprehension provided with the right aid, technique, media and teaching strategies (Putri & Tiarina, 2021)

The issues faced by ESL learners during reading class can be improved with the integration of technology. This generation of ESL learners is more exposed to technology and has more interest in learning with the introduction of technology in the classroom. Learners interact with text effectively with the help of technology in the reading classroom and proper classroom strategies (Ariffin & Razali, 2019). Pupils gradually have the potential to understand the reading processes and the interaction needed with the text when the learning processes are eased with the integration of technology. The use of technology in reading classes has significantly improved pupils' learning experience, supported comprehension of the text and developed reading skills (Bani-Hamad & Abdullah, 2019; Samat & Aziz, 2020). Reading activities can be supported by an array of social media platforms such as TikTok, Facebook, YouTube, Instagram, Twitter and Whatsapp. The integration of multimedia and social media enabled pupils to extract information that eases the understanding of reading the text through the multimedia elements of graphics, audio, video and animation (Hasin & Nasir, 2021). The inclusion of Augmented Reality (AR) and Virtual Reality (VR) further spurred the changes in language teaching that benefits teachers and pupils by transforming and elevating the learning processes in classrooms. AR and VR technology integration allows immersive learning experience and limitless exposure time to learners while boosting motivation, engagement, comprehension, cognitive skills and long-term memory retention (Adnan, Shak, Karim, Tahir, & Shah, 2020; Jamrus & Razali, 2021).

Additionally, the integration of technology in reading classrooms helps shape learners that

acquire 21st-century learning skills. According to Chu, Reynolds, Tavares, Notari, and Lee (2021), learners that obtain 21st-century skills would be more prepared to face the complexities in today's global and knowledge-driven economy as the learners would be equipped with skills of critical thinking, creativity, problem-solving, written and oral communication skills, adaptability, collaboration and responsibility. The enthusiasm towards learning grows with the integration of technology and the application of multimedia mainly because of the exploration and fun elements that technology brings into language learning. Ahmadi (2018) added that learning becomes more active, fun and meaningful for learners with the inculcation of technology while teachers play the role of facilitators. The integration of technology is synonymous with the theory of constructivism learning (Azhari et al., 2020) where the learners are actively involved in the learning process through the process of constructing new knowledge and understanding by building upon prior knowledge. The function of technological instruments in education, such as the computer, has been primarily considered as an educational tool and a means of creating a more engaging and stimulating learning environment. By focusing on the learner, the function of technology can help the development of new understandings and skills, thereby providing a cognitive tool to support cognitive and metacognitive processes (Mattar, 2018). Through photographs, narratives, and multimedia programmes, technological instruments provide diverse cultural views. The learning experience for learners would be enlightening whilst enhancing their comprehension through engagement in the learning process.

Nevertheless, there are challenges in the process of incorporating technology in reading classrooms such as the mental retention of text that learners have to retain while scrolling and reading digital materials. A study conducted by Yang (2020) found that learners were overwhelmed due to the cognitive load of scrolling pages of reading text while trying to comprehend the text. In the same vein, though using learning platforms has improved learners' language learning, factors such as time and difficulty constraints accompanied by appropriate teaching strategies influence the delivery of successful teaching and learning (Bujang et al., 2020). Consequently, the implementation of technology in improving reading skills and shaping 21st-century learners is highly dependent on factors such as learners' styles and preferences, appropriateness of media and teachers' skills and strategies in incorporating technology into reading classrooms.

Pupils' Perceptions of the Use of Technology in the Classroom

Technology has been widely used in teaching and learning for the benefit of pupils. Technological applications assist pupils in having visual representation, using graphics and simulations to form connections and supply contextual information on the reading texts. Technologies provide opportunities for pupils to learn based on their individual learning needs and various learning styles, which progressively motivate pupils to learn. Akhmedov and Shuhkrat (2020) exemplified that technology complemented with teaching strategies and suitable materials impacts learners of various learning styles to benefit from the advancement and integration of technology through the use of visuals, graphics, animations, audio, videos and other forms of media. Pupils become more enthusiastic about language learning with the integration of technology. This is also supported by Yee and Zainuddin's (2018) research signifying that utilising E-books increased pupils' engagement and motivation which helped pupils' comprehension by listening attentively and participating in discussions. Advanced learners can explore more depth regarding a topic, whereas intermediate and starters can learn more efficiently. The changes in the

teaching methods address pupils of different backgrounds and cultures. Ultimately, language learning becomes a space for learning opportunities of different forms of meaning-making where the textual equips to the visual, audio, spatial and behavioural aspects. Integrating technology goes beyond building knowledge, grammar, vocabulary and pronunciation but also supports learners in becoming an effective communicators, and developing critical thinking skills and soft skills (Yunus, 2018).

Additionally, students welcome the use of technology positively. A supportive learning environment is established with the inclusion of technology as the emphasis will shift to making learning more personalised and relevant for the varsity learners while encouraging student engagement (Elmahdi, Al-Hattami, & Fawzi, 2018; Ovbiagbonhia, Kollöffel, & Brok, 2019). Active participation in learning can be influenced with the help of technology through engaging class contents and fun activities, enabling students to communicate and socialise with peers. A technology-integrated environment is more integral for language learning rather than environments where students from universities work on tasks alone and receive negative feedback from teachers, which inhibits learning (Ghory & Ghafory, 2021). A study conducted by Baba and Affendi (2020) also found that Malaysian students had better reading habits and an overall positive attitude towards reading when exposed to digital materials as opposed to printed texts due to students' preference for technology and accessibility. This was also evident in Pandian, Baboo and Yi (2020) study where Malaysian students were self-confident and aware of their digital media skills. Likewise, a study carried out by Azmuddin, Nor and Hamat (2020) showed that Malaysian students' learning progresses effectively with the addition of technology in the learning environment. The results of a study by Halim, Hashim and Yunus (2020) conceded that primary school pupils have higher motivation, interest, and positive perceptions towards learning English because online quiz games like Kahoot! and Quizizz provides elements of excitement, fun, and enjoyment while promoting healthy competition between individuals which makes learning more interesting.

There is a need for additional studies to assess the efficacy of technology in the teaching of languages to students in elementary schools, particularly with regard to the improvement of language abilities from the perspective of learners (Fithriani, Dewi, Daulay, Salmiah & Fransiska, 2019; Dalim, Sunar, & Billinghurst 2020). There exists a necessity to account for learners' perspectives when implementing technology in the reading classroom, as this could reveal insights about their acceptance of technology. Hoi (2020) emphasised that there is relatively little empirical evidence has been offered to understand the acceptability of technology among learners, particularly in the context of a developing country. There is not enough research investigating pupils' perceptions, especially primary school pupils towards the implementation of technology in language classrooms. In this study, the research gap is addressed by examining learners' perspectives, particularly primary school pupils' perspectives towards the integration of technology in the reading classroom. The success or failure of the integration of technology is contingent on the degree to which ESL learners are prepared to embrace technology as an educational tool (Moorthy, Yee, T'ing, & Kumaran, 2019).

Method

This study employed a survey research design conducted in a semi-urban primary school in Pahang. Survey research is the process of doing research through the distribution of questionnaires to respondents. The researcher wanted to investigate the phenomenon of pupils'

perception when dealing with technology integration to provide an understanding of the propriety of integrating technology in classrooms.

Participants

Seventy ESL Year 6 primary school pupils which consist of twenty-seven boys and forty-three girls participated in this study. All of the participants were of Malay race from a low socioeconomic background with a mixed level of English language proficiency. The majority of the time, the Malay language is utilised because it is the pupils' mother tongue, whereas the English language is utilised rarely outside of the educational setting. The participants also reported having experienced learning English with the integration of technology, specifically during reading lessons.

Research Instruments

A set of questionnaires based on the Technology Acceptance Model (TAM) was adopted from Quadir and Zhou (2021)'s study with five points Likert scale. TAM is proven to be a reliable foundation for this study based on previous research on the evaluation of the perceptions of teachers and learners, acceptance towards technology, and interventions (Rafiee & Abbasian-Naghneh, 2021). The items and scale indicators in the questionnaire were also translated into Malay language because the participants mostly communicated using their mother tongue. Translation serves the purpose of communicating the context's true meaning from English to Malay while maintaining the text's original meaning, style, and effect. To obtain a high-quality translation, attention was placed on the instrument's reliability, fluency, and suitability (Hawkins, Cheng, Elsworth, & Osborne, 2020). The translated questionnaire was evaluated by a Bahasa Malaysia teacher with 30 years of experience. The teacher had a comparatively good command of English and Malay language. This was to ensure the content validity of the questionnaire items. The participants' parents filled in a consent form that was given out physically to the pupils to be brought home to their parents. Participants' parents were required to provide written consent of their agreement for their child's participation in the study.

The reliability of the instrument was determined through the computation of Cronbach alpha coefficients for each subscale. The outcome of the Cronbach alpha coefficients should demonstrate a reliable coefficient that is greater than 0.70 (Taber, 2018). The results of each subscale in this questionnaire are presented in Table one. All of the subscales have scores of more than 0.70, which indicates that the questionnaire is reliable.

Table 1. *Cronbach's Alpha coefficient results*

Variables	N	Cronbach's Alpha
Perceived Usefulness (PU)	5	0.848
Perceived Ease of Use (PEU)	4	0.815
Attitude (AT)	4	0.810
Behavioural intention (BI)	3	0.811

Research Procedures

The research was carried out by distributing the questionnaire via Google Forms. Social media platforms which are Whatsapp and Telegram were utilised to share the link to the questionnaire as the participants were largely active using these apps. The participants were informed and briefed on the purpose and type of data collected as well as that their participation was voluntary, data was collected anonymously and confidentiality was assured. The data was collected from 11th April to 15th June 2022. IBM SPSS (Statistical Package for the Social Sciences) version 26 and the descriptive analysis method were used to analyse the data collected.

Findings

The first section was to know the technological tools that the pupils have used in their reading classrooms. Some of the technological tools frequently used are television, smartboard, and Liquid Crystal Display (LCD) whereas some of the common technological media tools integrated during reading lessons are Youtube, Whatsapp and Telegram. Table two (refer Appendix A) shows the results of each item in the perceived usefulness section.

Most of the pupils, 45 (64.3%), perceived the use of technology in reading classrooms to be very helpful in their learning, but some of the pupils, four (5.8%), did not perceive the same. This finding signifies that pupils agree that technology improves reading skills (M=3.91, SD 1.108). Correspondingly, 41 (58.6%) of the pupils indicated that technology helps them score better during reading lessons (M=3.57, SD=1.111) because most pupils perceive that technology improves their reading skills. 46 (65.7%) of the pupils have agreed that technology makes reading easier (M=3.87, SD=1.115), in which the pupils use educational technology to simplify the understanding of a reading text. Besides, some pupils with a percentage of 36 (51.5%) find that the integration of technology is effective (M=3.67, SD=1.164). The (M=3.51, SD=1.126) shows that pupils, 33 (47.1%) equally agree that the integration of technology is also useful in reading classes. These pupils apply reading skills better with the help of technology such as educational videos and online games. Only eight (11.4%) of the pupils find the integration of technology to be ineffective in reading classes.

The next construct is the perceived ease of technology use among pupils which is shown in Table three (refer Appendix B). A large number of pupils, 52 (74.2%) with (M=4.24, SD= 1.021), strongly agree that they find it easy to use technology to look for information during reading lessons. Pupils would look for information on the meanings of words, pictures related to the text and other forms of facts that help during reading processes. Furthermore, 50 (71.5%) of the pupils agree that it is easy to become skilful in using technology (M=4.10, SD=0.976) with the teacher's guidance during reading classrooms. This finding that pupils can be easily skilful in using technology expresses that pupils are technology savvy. On top of that, 47 (67.1%) of the pupils agree that learning to use technology is easy (M=3.87, SD= 1.115). However, two (2.9%) of the pupils find it difficult to use technology during reading lessons, whereas 43 (61.4%) believed otherwise. The (M=3.84, SD=0.973) implies that pupils agree that using technology for reading lessons is easy.

Another factor is examining pupils' attitudes towards using technology as shown in Table four(refer Appendix C). 51 (72.9%) of pupils with (M=4.24, SD=0.924) show that pupils strongly agree that the use of technology in reading classrooms increases enjoyment during the learning process. This correlates with the percentage of 50 (71.4%) and (M=4.13, SD=0.931) that indicates pupils agree with being positive toward the use of technology in reading classrooms. However,

only two (2.9%) of the pupils disagree that technology does not create enjoyment during reading lessons. Contrastingly, 45 (64.3%) of pupils with (M=3.77, SD=0.820) exhibit that pupils agree that using technology to acquire reading skills is a good idea. Besides, 46(65.7%) of pupils agree that technology helps improve engagement during reading lessons (M=3.76, SD=0.892).

The last factor is pupils' behavioural intention towards the use of technology in reading classrooms. The results are shown in Table five (refer Appendix D). 58 (82.8%) of pupils strongly agree with the construct of feeling confident in using technology during reading classrooms (M=4.40, SD=0.875). There are only three (4.3%) of the pupils who lack confidence in using technology. This finding corresponds to the intention of using more technology in reading classrooms where 54 (77.2%) of pupils agree with the statement (M=4.06, SD=0.961). Likewise, (M=3.83, SD=0.851) shows that 49 (70%) of pupils agree that technology should be used repeatedly during reading lessons. However, four (5.7%) of pupils do not want to use technology very frequently in reading classrooms.

According to the data collected, it can be inferred that pupils positively perceive using technology during reading lessons. The highest and lowest mean reported implying that the overall pupils' perceptions towards technology in the reading classroom are highly positive.

Discussion

The data collected from the questionnaire aims to answer the research question investigating pupils' perceptions towards the use of technology in ESL reading classrooms. The results of the study indicated the plausibility of TAM as a reliable model to gauge pupils' perceptions towards the use of technology in Malaysian ESL reading classrooms. The statistical analysis of pupils' perceptions revealed that the participants considered their level of acceptance moderately high, with all construct mean scores reported higher than 3.5. This was revealed by the means computed through the pupils' perception analysis. The findings imply that pupils widely embrace technology for their use in reading classes. A study by Elmahdi et al. (2018) supports the results of this study. They found that students are aware of the impact technology has on their education which boosts student involvement, shortens the amount of time spent learning and ensures equal participation opportunities while producing stimulating learning environments. Similarly, Azmuddin et al. (2020) found that digital annotation tools promoted reading comprehension among Malaysian students in an online reading environment. However, this contradicts the results of a study conducted by Yang (2020) which affirmed that students expressed their concerns when using technology as students needed support and guidance from the teachers despite the benefits that come with the use of technology. In a similar vein, another study by Bujang et al. (2020) also implied that some educators do not prefer online learning platforms due to time and difficulties constraints, although these platforms allow Malaysian students easy access to teaching materials, quizzes and tests.

Perceived Usefulness

Based on the results of this study, most pupils have a positive perception of the use of technology in the reading classroom. The positive perceptions arise from the impact of using technology when reading text, namely improving reading skills, quiz or test scores, and easing reading processes. Reading becomes easier and less demanding when integrating technology simplifies the reading processes with visual aids, videos, online games and other forms of media. A study carried out by Hasin and Nasir (2021) reflects the results of this study where the students

have shown improvement in reading and learning performance when using multimedia and social media in the classroom. This is further supported by studies that found that the integration of technology into reading instruction has greatly boosted the quality of the students' educational experiences, enhanced text comprehension, and fostered the growth of their reading abilities (Bani-Hamad & Abdullah, 2019; Samat & Aziz, 2020).

Perceived Ease of Use

Results also indicate that the use of technology allows pupils to search for information easily during reading lessons. This is corroborated by Tong (2022), who discovered that pupils had a new reading experience when they had access to the most recent ideas and information on the internet. The new reading experience is interactive and engaging which has been developed through dynamic interactions with digital media. Besides, pupils agree that it is easy to become skilful in using technology. This result is consistent with the findings of Altameemi and Al-Slehat (2021) which showed that the students' use of e-learning systems did not depend on academic qualifications or gender. Most of the pupils are IT literate and can be guided easily by teachers to use technology during reading lessons. However, the results of a study conducted by Hasin and Nasir (2021) signified that some pupils and teachers need technological training to be competent users of technology in classrooms.

Attitude towards the Use of Technology

The findings of this study also show pupils' attitudes towards the use of technology in reading classrooms. The increased enjoyment that students experience in reading classrooms is significantly associated with the use of technology. This is in line with the findings of a study which revealed that the utilisation of technological tools like social media, web platforms, and multimedia has fostered the development of self-directed learning, enhanced the quality of the learning experience and improved learner engagement (Rahman et al., 2020). Likewise, Rou and Yunus (2020) reported that the technological tool, the Seesaw platform has gained Malaysian primary school pupils' motivation and engagement to be present on a reading task as their interest in accomplishing reading tasks is aroused. Pupils are also being positive towards the use of technology in reading classrooms. The findings of this study are synonymous with Baba and Affendi (2020) where Malaysian students had better reading habits and an overall positive attitude towards reading when the students were exposed to digital materials as compared to printed texts due to students' preference towards technology and availability.

Behavioural Intention to Use Technology

Apart from that, the questionnaire results show that pupils have a positive behavioral intention to use technology in reading classrooms. Pupils felt confident in using technology for reading lessons because they were well-versed in using technology. Previous research by Pandian et al. (2020) corroborated this study's findings that Malaysian students were confident in their abilities and aware of their digital media skills. Their competence in using technology, sufficient technological knowledge and problem-solving skills when working with digital devices are contributors to their confidence in using technology. Pupils also agreed that more technology should be used in reading classrooms. Students felt encouraged to learn due to the integration of technology although technology inculcation has its barriers (Ghory & Ghafory, 2021). Equivalently, Halim, Hashim and Yunus (2020) disclosed that many opportunities arise and the

learning process is enhanced with the integration of technology in language classrooms as Malaysian students are more motivated by the presence of technology and are generally technologically savvy.

Conclusion

This research focused on pupils' perceptions towards the use of technology in reading classrooms, specifically on Year 6 primary school pupils in a school. The highest and lowest mean reported imply that the overall pupils' perceptions towards technology in the reading classroom are highly positive. This research has shown that pupils' positive perspectives towards the use of technology emerge from the awareness of technology's impacts and confidence in using technology. However, the study was carried out only for Year 6 pupils from a school which indicates that the results of survey yielded positive for this particular group of respondents. Including more research participants would produce higher accuracy of the results. Nonetheless, the findings of this study aid teachers in developing an understanding of the impact of technology in reading classrooms from the perspective of learners who are active participants in the learning process. Their perceived usefulness, ease of use, attitude towards using technology and behavioural intention to use technology shed light on how pupils discern technology as a tool for improving their reading abilities. Additionally, the results benefit educators in exploring the appropriate technological tools and strategies to maximise language learning, particularly in reading classrooms. Perceptions and satisfaction of learners are vital and are considered favourable to the success of learning (Hromova, 2019). Hence, the results of this study are evidence to stakeholders, academic institutions, administrators and schools regarding the impact of technology on pupils' language development from the pupils' perspectives. Technical support should encourage teachers to integrate technology into reading lessons. Therefore, further research should be conducted on the impacts of using technology in reading classrooms from the perspective of pupils to collect important information on the influence of technology on language learning.

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Appendices
Appendix A
(Perceived usefulness)

Table 2. *Perceived usefulness (PU)*

No	Items	Never True of me	Generally Not True of Me	Somewhat True of me	Generally True of me	Almost Always True of me	Mean	SD
1.	Technology improves my reading skills.	2 (2.9)	2 (2.9)	21 (30.0)	20 (28.6)	25 (35.7)	3.91	1.018
2.	Technology helps me score better.	5 (7.1)	5 (7.1)	19 (27.1)	27 (38.6)	14 (20.0)	3.57	1.111
3.	Technology would make reading lessons easier.	2 (2.9)	7 (10.0)	15 (21.4)	20 (28.6)	26 (37.1)	3.87	1.115
4.	I find the integration of technology makes reading lessons more effective.	4 (5.7)	4 (5.7)	26 (37.1)	13 (18.6)	23 (32.9)	3.67	1.164
5.	I find the integration of technology useful for reading lessons.	2 (2.9)	11 (15.7)	24 (34.3)	15 (21.4)	18 (25.7)	3.51	1.126

Appendix B
(Perceived ease of use)

Table 3. *Perceived ease of use (PEU)*

No	Items	Never True of me	Generally Not True of Me	Somewhat True of me	Generally True of me	Almost Always True of me	Mean	SD

No	Items						Mean	SD
1.	I find technology easy to use for reading lessons.	2 (2.9)	5 (7.1)	20 (28.6)	18 (25.7)	25 (35.7)	3.84	0.973
2.	Learning how to use technology is easy for me.	0	5 (7.1)	18 (25.7)	21 (30.0)	26 (37.1)	3.97	1.006
3.	I find it easy to use technology to look for information during reading lessons.	0	5 (7.1)	13 (18.6)	12 (17.1)	40 (57.1)	4.24	1.021
4.	It is easy to become skillful in using technology.	0	7 (10.0)	13 (18.6)	16 (22.9)	34 (48.6)	4.10	0.976

Appendix C
(Attitude towards technology)

Table 4. *Attitude (AT)*

No	Items	Never True of me	Generally Not True of Me	Somewhat True of me	Generally True of me	Almost Always True of me	Mean	SD
1.	Acquiring reading skills using technology is a good idea.	0	4 (5.7)	21 (30.0)	32 (45.7)	13 (18.6)	3.77	0.820
2.	I enjoy using technology in reading classrooms.	0	2 (2.9)	17 (24.3)	13 (18.6)	38 (54.3)	4.24	0.924
3.	I believe that the use of technology helps me to be more engaged during reading lessons.	2 (2.9)	2 (2.9)	20 (28.6)	33 (47.1)	13 (18.6)	3.76	0.892
4.	I am positive towards the use of technology in reading classrooms.	0	3 (4.3)	17 (24.3)	18 (25.7)	32 (45.7)	4.13	0.931

Appendix D
(Behavioural Intention)

Table 5. *Behavioural Intention (BI)*

No	Items	Never True of me	Generally Not True of Me	Somewhat True of me	Generally True of me	Almost Always True of me	Mean	SD

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1.	I intend to use more technology in reading classrooms.	0	7 (10.0)	9 (12.9)	27 (38.6)	27 (38.6)	4.06	0.961
2.	I feel confident in using technology in reading classrooms.	0	3 (4.3)	9 (12.9)	15 (21.4)	43 (61.4)	4.40	0.875
3.	I intend to use technology repetitively during reading lessons.	1 (1.4)	3 (4.3)	17 (24.3)	35 (50.0)	14 (20.0)	3.83	0.851