# E-BOOKS AS A TOOL TO IMPROVE READING COMPREHENSION AMONG YEAR 4 PRIMARY ESL STUDENTS

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**Abstract:** In Malaysian primary ESL classrooms, students have many different texts to read. Through reading, they acquire much of their knowledge and understanding of the different subject areas, and reading often forms the basis of follow-up work such as class discussions or homework questions. Through the researcher's experiences and observations, many students have difficulties making sense of the reading texts that are too difficult for them. Students were struggling to comprehend the reading texts from the printed textbooks. Thus, this paper is written to investigate the effectiveness of using E-books to improve reading comprehension among ESL primary school students. Students' perceptions of using E-books to improve reading comprehension are also further explored in this paper. The total of 50 students from Year 4 in one of the primary schools in Perak participated in this study. The participants were divided into the Control Group and the Experimental Group. They took the pre-test, and posttest to identify the differences of scores obtained after reading the short story and graphic novel. In addition, questionnaire was distributed to the 25 students from the Experimental Group after the test. This research found that there is a significant difference in scores between students who use printed books and E-books during reading sessions whereby students who use E-books score higher marks with a value (t (24) = -2.376, p = 0.026), p < 0.05. Despite the improvement shown after utilising E-books, more than half of the students stated that they are less interested to read using E-books than printed books. Nonetheless, teachers should understand the need to inculcate students with ICT knowledge is crucial in moving forward to the digitalization of education. This research will also help students to understand the benefits that E-books can give for them.

Keywords: digital reading, E-books, ESL students, reading comprehension, technology

# INTRODUCTION

In this era of technology, the English language is being vastly used among citizens of Malaysia and it is even introduced to the preschool level as early as 4 to 6 years old (M Salleh, M Lotfie, Md. Zamin, Biase and Kawaguchi, 2020). English is considered crucial for Malaysian citizens as it is considered as the second language (Hashim, 2020 as cited in M. Salleh, 2020). In schools, English is taught to enhance language proficiency among Malaysian students to prepare them with a sense of competitiveness and as a means to explore new knowledge at national and international levels.

Among the skills that students need to master in acquiring the English language is reading skills. According to Roe, Smith and Kolodziej (2019), learning to read takes effort, and children who are unable to see the value of reading in their personal activities will be less likely to exert this effort than those who do see the benefits (p.3). They added that "every aspect of life involves reading and that reading situations are inescapable". McDonough, Shaw and Masuhara (2013) stated that in many instances around the world, we may argue that reading is the most important language skill, whereby students have to read English materials for their own specialist subject (p.110). According to Krashen (2004, as cited in McDonough et al, 2013), from a language acquisition point of view, reading can be a major source of comprehensible input. However, Stahl and McKenna (2013) believed that it is not an easy job to assess students' comprehension because the processes that students use to comprehend a text can only be measured indirectly with evidence that is reflected through some other ability such as oral language or writing.

In line with globalization and advancement in information and communications technology (ICT), knowledge is largely obtainable with greater speed than ever for students to acquire. Ahmad et al. (2019) argued that teachers need to cater to students' needs in learning as students nowadays who are categorized as Generation Z and later, Generation Alpha are born into an era of unprecedented technological advancements. They further stated that when 'there are no efforts done to bridge the gap between the socially and technologically adept millennials of the current generation and the stagnating traditional methods of teaching and learning, educators at all levels will find it tougher to maintain productive teaching and learning experiences in the classroom' (Ahmad et al. 2019). Vygotsky (1978) stated that effective learning which comes from active students' participation can ultimately shape their language development. Yusof (2021) revealed that the rise of information and technology has extensively changes the trends and behaviors of the student's reading habits, which slowly moving away from printed books to online source materials. In order to maintain students' interest in reading. E-books is chosen as the intervention strategy in improving reading comprehension since students nowadays are accustomed to the use of technological tools in learning and discovering their own learning styles.

# **BACKGROUND OF THE STUDY**

Concerning the ways students learn nowadays, most of them learn to acquire the language through technology-based tools. The decreasing effectiveness of traditional language teaching methods to teach reading skills in ESL classrooms requires teachers to shift to the implementation of more interactive learning tools in order to cater to students' needs. Although there are not many current types of research conducted on the use of E-Books to improve reading comprehension among primary school students, similar studies on technology-based tools and multimedia-based learning such as digital books have shown their significance in children's language learning development. Research on the use of digital books has grown over

the past two decades into a diverse area with a focus on qualitative or quantitative research techniques and books produced commercially or by researchers (Kucirkova, 2019).

Moreover, an increase in acceptance of the use of digital reading text since the devices have features that enhance learning needs (Kwee, 2019). Students in this era are more prone to read on screens than on printed materials which makes E-books suitable to increase their motivation to read comprehensively. E-books allow students to interact with the reading materials through the features such as videos, sounds, and animations. This makes their learning experience more meaningful as compared to printed reading materials. Therefore, this study seeks to explore the usefulness of incorporating E-books to improve primary school students reading comprehension.

# PROBLEM STATEMENT

Every day in school, students have many different texts to read. It is through reading that they acquire much of their knowledge and understanding of the different subject areas, and reading often forms the basis of follow-up work such as class discussions or homework questions. Therefore, it is essential that students are guided as much as possible to understand what they read. Through the researcher's experiences and observations, many students have difficulties making sense of the reading texts that are too difficult for them. According to Mohammad and Hasbi (2021), countries that use English as a second language (ESL) sometimes have difficulties in reading and comprehension. A probable cause to this problem is due to lack of students' interest in reading tangible reading texts. Based on the researcher's observations, students were struggling to comprehend the reading texts from the printed textbooks. Hence, the inability of ESL learners to understand the meaning of the words in English would make the reading experience tedious and demotivating.

Zulkifli et al. (2021) stated that the reading habits of Malaysian students are facing issues of deterioration. The findings of Zulkifli et al. (2021) suggested that the development of students' reading habits faces issues related to current reading styles which are students are more inclined to read on various platforms such as digital mediums as compared to traditional reading materials. Following this issue, the changes in reading habits and reading behaviors require teachers to support students to develop reading habits, especially with current technological developments. Recently, the Ministry of Education's (MOE) new Digital Education Policy, launched by Education Minister Fadhlina Sidek, aims to transform the digital education landscape in order to produce a digitally literate generation that is competitive. This is achieved through improving the knowledge, skills and values of students, educators and educational leaders and making provisions for quality infrastructure, infostructure and content in an integrated and cohesive manner from preschool through to post-secondary education (Ministry of Education Malaysia, 2023). As the main focus is to digitalised education, teachers need to equip themselves with the technological skills for them to plan and carry out lessons that are able to cater to the students' needs.

A language classroom with a variety of teaching techniques is said to be effective in creating an encouraging learning environment (Azar & Tanggaraju, 2020). According to constructivist theory, students' learning should be authentic, and that learning needs to meet real-life experiences (Ciampa, 2012). Miller (2009) argues that teachers have an essential role in helping students to prosper and maintain a positive attitude toward learning and to motivate a love of reading, using interesting books that the children want to see, hear, and hold. Thus, this research seeks to explore the use of E-books to improve reading comprehension among primary school students and to identify their perceptions on the use of E-books in improving their reading comprehension.

### LITERATURE REVIEW

### **Technology Acceptance Model (TAM)**

The theory identified and used in this study is based on the Technology Acceptance Model (TAM) which was proposed by Davis (1989). The consideration of utilising the theory is grounded by the recent study that suggests the application of TAM in educational technology acceptance has proved its effectiveness as compared with the other theoretical models (Al-Qaysi et al. 2018, as cited in Salloum et al. 2019). In the context of ESL classroom, TAM highlights the two factors which determines whether the technological advancement will be accepted by the learners through 1) perceived usefulness, and 2) perceived ease of use.

According to Davis (1989), perceived usefulness means "the degree to which a person believes that using a particular system would enhance his or her job performance" (p.320), whereas perceived ease of use means "the degree to which a person believes that using a particular system would be free of effort" (p.320). Nikou (2021) emphasized the link between perceived usefulness and perceived ease of use with satisfaction which may impact the continuance intention to use technology in the teaching and learning process. Al Adwan et al. (2020) stated that when learners deemed a technology as being easy to use, the chances of learners to adopt and use the technology is high. The use of E-books to improve reading comprehension will make the learners to consider its ease of use as it is convenient, easily accessible and involves almost to no effort to obtain them. The same goes to the usefulness of E-books to improve learners' reading comprehension in which learners will perceive them as effective tools in language acquisition. For this reason, TAM is incorporated in this study to investigate how Year 4 primary school students perceived the use of E-books to help improve their English reading comprehension.

# **Vygotsky Zone of Proximal Development**

The concept of the zone of proximal development, which was developed by social constructivist Lev Vygotsky (1896 - 1934) has become well-known in the education field. Vygotsky (1978) believed the course of learning among children heavily revolves around social interaction and the presence of an expert. During the process of learning, a skillful person who has a better understanding can assist the learners to develop knowledge through observation and practice. In the context of this study, the teachers act as a major role to encourage students to learn and improve their reading comprehension. The teachers will guide students into the zone of proximal development to ensure they have a better understanding of the reading text that they read. By referring to the concept of scaffolding, the integration of E-books in reading comprehension lessons can cater to students' needs in learning in a more technologically diverse and advanced process. According to Pardede (2019), the availability of digital sources offering a huge variety of information can be essentially valuable for ESL learners. Technological advancement nowadays has brought many changes towards the ways students learn. Although much of the learning is done by the students themselves, the teachers provide the necessary guidance and support for students to fully understand on what they need to achieve using E-books. Thus, the researcher refers to this theory to conduct the research using E-books to 'scaffold' the students in improving their reading comprehension.

#### E-books

According to Jitender (2017), an E-book is an electronic version of printed book which can be read on a computer, a smartphone, tablet or any such device. Wahl (2018) defined E-books as

non-editable, reflowable book that is converted to a digital format to be read on any digital device such as computer screens or mobile devices. The term E-books can also be interchangeable as 'digital reading' since past studies also refer to E-books as digital reading. Baharuddin and Hashim (2020) argued that there is no standard format for this digital reading as long as readers can read the online text comprehensively. Nowadays, it is easier to obtain E-books as many applications such as Kindle and Amazon are providing electronic reading materials online with just a click away. E-books are more convenient to readers in terms of the weight and accessibility. Readers can get ten books in one device without the hassle of carrying them everywhere whereas for printed books, readers may find it difficult to carry as they are heavy. Moreover, Dani (2018) stated that since E-books are more engaging than regular printed books, as it contains illustrations and interactive activities, the probability for readers to read E-books are high.

#### Printed books and the shift to E-books

Sanches et al. (2021) characterized printed books as being an experience of physical handling, ease of reading and sensory pleasure, but with the disadvantage of less availability of copies and less speed of updating content. Obaidullah and Rahman (2018) stated that students nowadays spend more time on digital devices to surf the internet and social media than on reading printed books. The findings in their study indicated that the growing dependence on technology and its surrogates is the reason why students are less interested in reading conventional books (Obaidullah & Rahman, 2018). Based on Hassan and Dweik's (2021) findings, students who are young Arab EFL learners agreed that they face reading comprehension problems because the textbook content was boring. Integrating E-books in the lesson could help foster motivation among these students to read and lead to the improvement of reading comprehension since young generations opt to learn using digital tools. A recent study conducted by Cuinas and Vailati (2022) suggested that students are more subjected to use E-books rather than printed books, reinforcing the facts that the digital format of the reading text appears to be more acceptable. Due to the familiarity of technological advancement, younger generations are keen to read in digital format. This situation escalated when the world, including Malaysia, was hit by Covid-19 pandemic which forced education to be shifted to online learning in order to mitigate the impact of school closure. As a result, students became more familiar with the integration of technology in learning process. Students sees the practicality of using E-books and the fact that E-books permit them to access their study material in an inexpensive way (Cuinas & Vailanti, 2022).

# **Reading Comprehension and Motivation**

Incorporating E-books in reading lessons can help improve students' reading comprehension as it drives their motivation to learn and acquire the skill. Kusdemir and Bulut (2018) conducted a study on the relationship between elementary school students' reading comprehension and reading motivation. The findings revealed that the increase in the students' reading motivation positively and significantly affects their level of reading comprehension. Motivation encompasses the engagement model of reading development, which proposed that one way to improve reading comprehension is to be engaged with the reading text (Guthrie &Wingfield, 2000). Thus, one of the ways to foster reading motivation among students is to select suitable reading materials. A study was conducted by Ker-hsin and Razali (2022) on the roles of extensive reading to increase three students' motivation to read. The findings suggested that students' motivation to read can be developed and sustained when they believe in the value of extensive reading. Cahyati and Abdulrahman (2020) conducted a study on students' motivation

to read using fanfiction books. The findings revealed that not only students have improved their reading skills exponentially, but they could also see improvements in their writing and vocabulary. Based on these two types of research, students' engagement in reading increases due to their high level of motivation.

Furthermore, past studies have suggested that young learners who are accustomed to utilising digital devices prefer and are inclined to increase motivation to engage in digital reading (Halamish & Elbaz, 2020). Since motivation acts as a crucial role in developing reading skills among young learners (Kaban & Karadeniz, 2021), Park and Lee (2021) argue that the positive perceptions of young students toward digital reading motivate them to read E-books and advocate reading comprehension skills. Based on the findings of these past studies, students' motivation in reading can greatly affect their reading comprehension. It can also be concluded that students' motivation to read can be developed when they are interested in reading materials. Therefore, the aim of this study is to investigate whether students' reading comprehension could be improved in the relation to their motivation to read using E-books.

### Reading Comprehension Problems among ESL Students

Breiseth (2019) stated that comprehension is the goal of reading, but it can be the most difficult skill to master, especially for English language learners. Often, students have trouble acquiring the language because they were unable to comprehend the reading text they are using. Reading lessons usually entail comprehension exercises either orally or in written form to measure their understanding of the texts they read. However, problems occur when students answer the comprehension questions incorrectly which brings to meaning that they fail to understand the reading texts. As a result, the intervention used in this study, which is E-books is used as it is a technological tool to inculcate students' reading habits which promotes reading comprehension.

### **E-books for Reading Comprehension in ESL Classroom**

Sari and Antasari (2019) discovered that digital textbook has contributed positively to the learners' English achievement. This was seen from the better performance of the experimental group who underwent reading interventions using digital textbooks. Similarly, Baharuddin and Hashim's (2020) findings from the study suggested most of the primary school students show agreement that digital reading (E-books) help them in ESL reading lessons since it provides them a better learning experience. For instance, besides being involved in interactive reading lessons, students can find the meaning of difficult words they encountered through online dictionaries by browsing through another tab. The inability for students to comprehend the difficult words in the reading text will result to the deterioration of motivation in reading. Nonetheless, with reference from the findings, E-books can help facilitate students' reading comprehension as the provided customization tools are not presentable in printed text, thus making digital reading a more supporting learning media to 21st century learning (Baharuddin & Hashim, 2020).

Likewise, Kaman and Ertem (2018) found a higher reading comprehension level in Turkish EFL primary school students after they had read from digital reading devices compared to reading on paper. Park and Lee (2021) conducted a study among EFL elementary school students in South Korea. They found that the precise reading comprehension level increased significantly in the digital reading group compared to the print reading and textbook-based groups. Furthermore, study conducted by Al-Jarf (2021) showed that students who are exposed to extensive collaborative E-books reading have improved their reading performance. They further stated that they enjoyed E-books reading which has helped them to read faster,

learn more vocabulary, and understand the content of the material read better. These findings revealed the potential of E-books as a new reading material for increasing reading comprehension among school children.

Contrary to these previously published studies, Kazazoglu (2020) discovered that students who prefer reading digital texts did not obtain good grades on reading comprehension tests. This suggests that high reading interest and motivation may not determine their comprehension achievement. However, a possible reason that this occurred was due to the inappropriate reading strategies used during the reading lessons. Pardede (2019) stated that a reader can fail to read web texts if he is not familiar with the digital reading tools and has not properly developed unique techniques. Since technology-mediated language teaching strategies are considerably new to the Malaysian education system, teachers are still coping in learning to use digital tools in classrooms. Nonetheless, teachers are obliged to acquire the necessary technological skills as a response to MOE's aspiration for the 21st-century learning. A reading comprehension lesson that entails good reading strategies supplemented with the integration of technological advancement in the classroom can help increase students' performance in reading comprehension. In this study, the researcher will not focus on the teaching strategies to develop reading comprehension, but more to what extent does the effects of E-books itself have on students and how would students perceive the utilization of eBooks to improve their reading comprehension.

#### METHODOLOGY

# **Research Design**

This study utilised the quantitative data collection technique. Since the research that was conducted by the researcher was educational research in a school setting, it is not probable for the researcher to conduct a true experiment. Instead, the researcher assigned subjects to groups based on non-random criteria. Therefore, this research incorporated a quasi-experimental design as the research design. Although this design does not provide full control, the researcher still incorporated this design as this type of study is suitable when more efficient probes are unavailable (Harding, 2013). Non-randomised control group and experimental group, and pretest-post-test design were integrated by the researcher in this study.

In the beginning, both the Control Group and Experimental Group were given printed reading materials to read. The researcher conducted a pre-test in which the subjects are required to answer comprehension questions that are related to the reading text they read. After conducting several interventions, both the Control Group and Experimental Group took the post-test in a form of Multiple-Choice Questions (MCQ) and their scores will be analysed to investigate whether E-books could help improve students' reading comprehension. A set of questionnaires were also given to the Experimental Group after the interventions to investigate student' perceptions of the use of E-books to improve their reading comprehension.

### **Sampling**

The subjects were selected among 50 Malay students from a national primary school located in the town of Tanjung Malim, Perak. This school was chosen since the researcher is teaching in the school. Therefore, it is easier for the researcher to conduct the study. Convenience sampling method was employed in this study because participants are willing and available to be studied (Creswell, 2012). According to Ilker Etikan et al (2016, as cited in Maniam, 2020), convenient sampling is a type of non-probability sampling in which participants are chosen

because mainly they are 'convenient' sources of data for researcher. This study was carried out among Year 4 students from the classes that the researcher is teaching. They were chosen based on their Year 4 semester 1 formative assessment which is also known as Class-Based Assessment (CBA). Based on the assessment, it is expected that their level of English language proficiency is almost equal.

#### **Instruments**

The materials that were utilised in this study were from the prescribed Year 4 literature component textbooks. The textbooks are a short story book titled 'The King of Kites and a graphic novel titled 'The Jungle Book. These two textbooks are categorised as narrative books and the reason the researcher chose these textbooks are because children are more interested to read story books. Children instinctively love books and stories as they are introduced to wonderful ideas, places, and creatures they haven't before encountered (Kumon, 2022). The reading texts were provided in a form of printed textbooks which the students have already received at the beginning of the school year and in a form of E-books. The use of E-books was shown by integrating an LCD projector, laptop, and the use of iPad. Besides that, the pre-test and post-test were employed in the study. Both tests were constructed in a form of Multiple-Choice Questions which consist of 20 questions each. Besides, a set of questionnaires was also distributed to the pupils in the Experimental Group in the final stage of the data collection process to answer the second research question which is "What are students' attitudes regarding the use of E-books for comprehending texts?". The researcher adapted the questionnaire from Manalu (2019) and Leonard (2017) which consisted of 10 items of questions. The questions were adapted to suit the students' level of proficiency.

#### **Data Collection Procedure**

Their proficiency levels were evaluated through the formative assessment, the Classroom-Based Assessment which was held in August 2023. The pupils were divided into two groups, Group A called the Control Group and Group B called the Experimental Group. A pre-test was conducted for both groups after the first lesson. The pre-test included a set of 20 multiple-choice questions based on the literary short story book titled 'The King of Kites'. The researcher collected the test papers, marked and recorded them as pre-test scores. The pre-test scores were later tabulated and a pair of t-tests were conducted to confirm that both members of the groups have equal proficiency levels.

Then, twelve lessons over 60-minute period were conducted for both groups during the treatment. The Control Group and Experimental Group were taught reading comprehensions like the usual teaching and learning activities. The researcher first explained the new words students would encounter before the reading activities begin. Both groups read the same text. However, the Control Group used the printed version of the reading text whereas the Experimental Group read the reading text through an E-book which was projected through an LCD projector. While the reading session occurred, the researcher intervened to ask WH-Questions orally on both groups to check on their understanding. As for the Experimental Group, the researcher went the extra mile to open a few more tabs such as dictionaries and images to show to the students. They explored the characters, and settings and searched for meanings of unfamiliar words they encountered. After each lesson, students were given comprehension questions as exercises.

Finally, the students from both groups were given a post-test. Later, the researcher collected the post-test papers and marked them. The results of both groups were compared for data analysis to see whether there is a significant difference between the use of printed reading text and E-Books through the scores. Furthermore, students from the Experimental Group answered the questionnaires to find out their attitudes towards using E-books during the reading lesson and whether it brings any difference to their reading comprehension.

# **Data Analysis Method**

Data analysis is a process of gathering, modeling, and transforming data to highlight useful information, suggesting conclusions, and support decision-making (Maniam, 2022). The researcher uses Statistical Package for the Social Sciences (SPSS) version 23 to analyse the students' performances to determine whether there will be any

significant differences in their reading comprehension scores before and after treatment. Both the results from the pre-test and post-test were collected and analysed into descriptive statistics analysis consisting of percentage and frequency counts. Frequency distribution tables are used to present the data statistically. The data collected were recorded in percentages form. The results are further analysed and compared. To test the differences between the result of the post-test of both groups of pupils, the t-test score was computed.

### FINDINGS AND DISCUSSION

### **Demography of Respondents**

Table 1. Demographic Data of Respondents

	Frequency	Percentage
Control group (n=25)	-	
Male	15	60.0
Female	10	40.0
Experimental group (n=25)		
Male	11	44.0
Female	14	56.0

The distribution of respondents according to the Control Group shows that a total of 15 participants (60.0%) are male students, while another 10 participants (40.0%) are female students. The distribution of respondents according to the Experimental Group shows that 11 participants (44.0%) are male students, while 14 participants (56.0%) are female students. Overall, a total of 26 (55.0%) of the students in this study were male students, while 24 (48.0%) were female students.

# **Normality Analysis**

Table 2: Normality Analysis

Variables	Skewness	Kurtosis	
Pre-test	460	-1.043	
Post-test	.043	-1.335	

Based on the statistical analysis in Table 2, it is shown that the variables in the study are normally distributed with a mean test result of between  $\pm$  2 standard deviations. The value of skewness and kurtosis for the pre-test is -0.460 and -1.043. Then, the value of skewness and kurtosis for the post-test is 0.043 and -1.335. The skewness and Kurtosis readings suggested that the data are normally distributed, which is a significant normality for pre-test and post-test by using E-Books to comprehend reading texts among primary ESL. Therefore, the data in this study are suitable for further analysis.

#### **Results of Data Analysis**

### **Comparative Analysis**

Table 3: Comparison Between the Results of Pre-test on the Control and Experimental Group

Pre-test	Group	N	Mean	SD	t	df	Sig. P
Using	Control	25	54.20	12.220	-1.229	48	.225
E-Books	Experimental	25	58.00	9.465			

Based on the results of the statistical test data as displayed in Table 3, it shows that there is no significant difference in the pre-test scores between the Control Group and Experimental Group with a value (t (48) = -1.229, p = 0.225), p > 0.05.

Table 4. Comparison Between the Results of Post-test on the Control and Experimental Group

Pos-test	Group	N	Mean	SD	t	df	Sig. P
Using	Control	25	54.00	18.708	-2.358	48	.023
E-Books	Experimental	25	66.20	17.870			

Based on the results of the statistical test data as shown in Table 4, there is a significant difference in the post-test score between the Control Group and the Experimental Group. This is evidently shown based on the post-test with a value (t (48)) = -2.358, p = 0.023), p < 0.05. This finding shows that the score of using E-Books on the post-test among the Experimental Group (mean = 66.20, SD = 17.870) is higher than the Control Group (mean = 54.00, SD = 18.708).

Table 5: Paired Samples T-Test for Pre-test and Post-test among the Experimental Group in Using E-Books To Help Primary ESL Pupils To Comprehend Reading Text

Experimental group	Test	N	Mean	SD	t	df	Sig. P
Using E-Books	Pre Post	25 25	58.00 66.20	9.465 17.870	-2.376	24	.026

Based on the findings of the statistical test data as displayed in Table 5, it shows that there is a significant difference between the pre and post-test scores in the Experimental Group with a value (t (24) = -2.376, p = 0.026), p < 0.05. This finding shows that the score using E-Books on the Experimental Group in the post-test (mean = 66.20, SD = 17.870) is higher than the pretest (mean = 58.00, SD = 9.465).

**Table 6.** Perception of Experimental Group on The Use E-Books to Improve Their Reading Comprehension

Q1	I'm more motivated to read using E-books.	1.0	
		10	15
	_	(40.0)	(60.0)
Q2	I'm more interested to read using E-books	6	19
	than printed books.	(24.0)	(76.0)
Q3	I'm more comfortable in reading using	10	15
	E-books than printed books.	(40.0)	(60.0)
Q4	I'm more excited to read using E-books	21	4
	because the features are interesting.	(84.0)	(16.0)
Q5	I will use E-books more often for school	4	21
	work and tasks.	(16.0)	(84.0)
Q6	I believe that reading E-books is more	15	10
	effective to improve my comprehension.	(60.0)	(40.0)
Q7	I can easily comprehend the reading text	13	12
	using E-books.	(52.0)	(48.0)
Q8	I think E-books are easy to access on the	14	11
	web.	(56.0)	(44.0)
Q9	I believe that E-books are user friendly and	18	7
	not sophisticated.	(72.0)	(28.0)
Q10	I can use E-books easily after I tried them	12	13
	with my teacher.	(48.0)	(52.0)

Table 6 shows the frequency score and percentage for each item of perception on the use of E-books to improve reading comprehension among the Experimental Group. Based on the findings of this study, it can be seen that students positively agree that they are more excited to read using E-books because the features are interesting. This is indicated in Item 4 with 21 students and the highest percentage of (84.00%). Besides, by agreeing to the statement in Item 9, students believe that E-books are user-friendly and not sophisticated. Their agreement is shown through the number of 18 students and the percentage of (72.0%).

Based on Item 6, with 15 students and a percentage of (60.0%), the students believe that reading E-books is more effective to improve their comprehension. With a moderate percentage of (56.0%) in Item 8, 14 students believe that it is easy to access E-books through the web. Moreover, the students show moderately positive feedback towards the statements in Item 7 and Item 12. With 13 students and a percentage of (52.0%) for both items, almost half of the students stated that they can easily comprehend the reading text using E-books and they have a strong internet connection at home to download and read E-books.

Nonetheless, more than half of the students disagree that they can use E-books easily after they tried them with the teacher. This is shown in Item 10 with 12 students and a percentage of (48.0%). Moreover, with 10 students and a percentage of (40.0%), most of the students disagree that they are more motivated to read using E-books (Item 1) and are more comfortable reading using E-books than printed books (Item 3). Based on the low frequency of 6 students and a percentage of (24.0%), most students disagree that they are more interested to read using E-books than printed books (Item 2). Lastly, Item 5 shows that only 4 students agree with the statement with the lowest percentage which is (16.0%). This indicates that students highly disagree that they will use E-books more often for schoolwork and tasks.

### **DISCUSSION**

In this era where globalization is rapidly evolving, the need to integrate technology and digital tools in the classroom is inevitable. As a trend to accept the transformation of education to be on par with the 21st-century learning environment, the purpose of the study was to see whether E-books could help improve reading comprehension among ESL primary school students. Agreeably, the analysis of the data shows that students' reading comprehension can be improved with the use of E-books. Based on the post-test results, there is a significant difference in scores between students who use printed books and E-books during reading sessions. Students who read using E-books scored higher than students who read printed books. This conforms with the findings from Santoso et al (2018) who stated that E-books has helped to improve students' learning outcome, which in this study, focuses on improving reading comprehension.

Based on the findings, it is proven that students' reading comprehension has improved due to the implementation of E-books as a technological tool in reading lessons. E-books provide new learning experiences for students to learn and read using technology tools instead of conventional printed books. The finding of this study coincides with Baharuddin and Hashim's (2020) who believe that E-books provide a better learning experience for students to increase their reading comprehension during a reading lesson. Although there is only a slight difference between the scores, the results show that teachers can make full use of using E-books as an intervention to further improve students' reading comprehension during English reading lessons.

This study is also aimed to investigate students' perceptions of the use of E-books to improve their reading comprehension. It was found that students gave positive feedback towards the use of E-books for their reading comprehension with the value (Mean = 7.84, SD = 2.392). According to the responses, most of the students stated they are excited to read using E-books because of the features E-books provide. Undoubtedly, students nowadays are born in a high-tech environment, and they embrace technology more than the previous generations may have. With regards to this study, the technological features contained in E-books make them more familiar with the digital reading tool. Visual graphics, audio, and customization tools are some of the features that could help students to improve their comprehension. Therefore, prior to the belief of Baharuddin and Hashim (2020), who stated that the adjustable features in E-books that are not present in printed books, can be the reason to confirm that E-books can help facilitate students' reading comprehension.

After the intervention, the students also believe that E-books are user-friendly and not sophisticated. This was claimed after they tried using E-books for reading comprehension. Regardless, the students can explore and integrate E-books as part of their reading activities to improve reading comprehension with guidance from their teachers. This is in alignment with Vygotsky's (1978) belief that children's course of learning heavily revolves around the presence of an expert.

Nonetheless, the result shows that more than half of the students stated that they are less interested to read using E-books than printed books. The students still preferred reading using printed books. Although they spend most of their time with gadgets and digital devices, they still believe that printed books are more convenient. This contradicts the findings of Obaidullah and Rahman (2018), Hassan and Dweik (2021), and Cuinas and Vailanti (2022). Their statement suggested that technology has led to students becoming less interested in reading conventional books. With reference to the results of the questionnaire, the reason for this preference is that they are less motivated to read using E-books and they think that they are uncomfortable with handling them. However, since the students who underwent intervention using E-books achieved a higher score than the other group, this brings to question whether

motivation really plays a part in determining their improvement in reading comprehension.

### **CONCLUSION**

In conclusion, reaching a certain level of mastery in reading comprehension is not easy. It needs exceptional acquisition of the English language, acquiring a high number of vocabularies, and enthusiasm to be immersed in reading materials. With so much access to digital reading materials, teachers, students, and school administrators should explore the different types of reading materials offered. Hence, although there has been considerable extensive research on the use of E-books, evidence to prove that E-books is indeed efficient to be integrated in reading activities to improve reading comprehension among ESL students is still questionable.

# RECOMMENDATION

Extensive research can be conducted with different states or a national sample to include students from various ethnic groups throughout the country. Also, it would be intriguing to conduct research on this topic among the indigenous, as they have limited access to technology and poor ICT knowledge. The findings of the integration of E-books for reading comprehension can bring a significant impact in ESL context. It would also certainly improve the reliability of the research.

Moreover, a study on teachers' perspective on the use of E-books could also be carried out to measure their readiness to integrate the digital tool in reading lessons. Looking at the advantages and disadvantages of utilizing E-books from the teachers' perspectives could provide school administrators and the Ministry of Education (MOE) with a broader idea of mitigating the drawbacks of integrating ICT technology in the English language classroom. Apart from that, workshops and training on the strategies to use digital texts should be conducted for teachers who are ICT illiterate. Due to the MOE's aspiration to digitalize education, reading through digital texts is unavoidable. Hence, to inspire ESL teachers in encouraging students to read using digital texts or E-books, additional research should be conducted.

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