



The Use of E-book to Improve Reading Comprehension among Year 4 Pupils

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o-ISSN: 2502-6909 p-ISSN: 2502-9207 Vol. 3, No. 1, May 2018 URL: https://doi.org/10.31327/jee.v3i1.477

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Received	:	5 April 2018
Reviewed	:	14 April 2018
Published	:	11 May 2018

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 Suggestion for the Citation and Bibliography

 Citation in text:

 Yee & Zainuddin (2018)

 Bibliography:

 Yee, B. C. & Zainuddin, N. S. (2018). The Use of E-book to Improve Reading Comprehension among Year 4

 Pupils. Journal of English Education, 3(1, May), 23-32.

Abstract

This is an Action Research of using the Story Jumper as an E-book to improve the reading comprehension among Year 4 pupils in one of the primary schools in Malaysia. The participants involved were twenty pupils consisting of seven males and thirteen females. Three data collection methods employed were pre-test and post-test, pupils' work and teacher's reflective journal. The findings showed that the use of E-book had increased the level of understanding in reading comprehension among the research participants. The mean for the pre-test and post-test had increased from 45.83 to 93.33. The pupils' work indicated positive improvements in terms of their level of understanding and responses in reading. It was also found from the reflective journal that the research participants had participated actively in the learning process and their level of motivation was also increased. The implication is to use E-book in the teaching of reading skills among the primary school learners.

Keywords: story jumper, e-book, reading comprehension

A. Introduction

In Malaysia, the Standard Curriculum for Primary School (KSSR) has been implemented since 2011. The content of KSSR is to expose pupils to the Higher Order Thinking Skills (HOTS) as well as to produce pupils with high intelligence, competence and problem solving skills.

Other than that, KSSR also emphasises on 21st century learner that focuses on students' involvement. Students' participation is vital in this curriculum while teachers act as the facilitators.

Though English is taught as a second language in Malaysia, it is a dominant language used in Information, Communication, and Technology (ICT). It is important for pupils to master it to have access to information that is available on Internet. When the pupils access information, they need to employ their reading skill. Reading is a lifelong skill for the pupils to use both at school and their entire life. By having the ability to read, pupils can understand well the ideas or meaning of the text they read directly or indirectly. According to Kingsley (2009), teachers have the responsibility to instruct the students how to read and how to derive meaning from the written word. Therefore, it is the aim of this study to focus on the use of ICT specifically e-book to improve reading comprehension among the pupils.

Problems of Reading Comprehension in the Classroom

Reading comprehension in English is one of the important keys for the pupils to perform better in learning. According to Breiseth (2016), comprehension is the goal of reading, but it can be the most difficult skill to master, especially for English language learners. Comprehension always attends to what is coded or written in the text, but it also depends upon the reader's background experiences, purposes, feelings, and needs of the moment. The same thing goes to the pupils in which they also need to understand the text given.

Based on my (second author) past teaching experiences as a teacher trainee, I identified my pupils' problems in reading comprehension. I managed to observe the English teacher's lesson once with the pupils in order to look at their level of proficiency in English. Throughout the lesson, I noticed that some of the pupils were quiet. They did not respond when the teacher asked simple question such as "*Where is Jagjit going to buy the present?*" I also found that some of them did not know how to complete the task given by the teacher.

When I started to teach these pupils, I found that they were not able to answer the reading text that they had read when I asked them in oral and written form. They often kept quiet whenever I asked them simple oral questions such as "Who are Amir's siblings?", "Whose goat was lost?" and so on. I had to explain a few times in order to make them understand. From the reading texts that I had given, they often asked for the meanings of any difficult words such as "log", "chieftain" and so on. This means that they could not comprehend the text well.

In addition, I had to simplify my instructions given to the pupils because they only knew few English words. For example, when I asked, "Who are Amir's siblings?" The pupils could not answer my question as they did not know the meaning of "siblings", I have to tell them the meaning is "brothers and sisters", then only they could answer my question. Pupils easily lost focus when they did not understand the words used. The lesson was difficult to conduct since I was the only one who asked questions and explained the meaning. Sometimes, I even have to give them the answers. I did all the talking by myself.

The content standard of reading lesson for KSSR primary Year 4 is, "by the end of the lesson, pupils should be able to read and understand phrases and sentences, which is through linear or non-linear text." The level of the targeted pupils could not achieve this aim. This happens because these pupils are not exposed to use English in their daily life as English is not their first language. They were from rural area and they mostly did not communicate with people around them by using English language. The language seemed to be strange to them as English was neither their mother tongue nor their first language. They could not understand most of the information given to them.

According to Perfetti, Ben & Delaney (1988), children with poor reading skills would definitely have difficulty in comprehending what they read. I should not have been surprised that my pupils had problems in reading comprehension as they did not only have poor reading skills, they were also rather weak in English. Concisely, the main problem that I wanted to focus would be reading comprehension.

Therefore, I resorted to a strategy which was by using E-book to help and improve their reading comprehension. The two research questions formulated for this study were (1) how does e-book strategy improve the pupils in reading comprehension? and (2) how does e-book strategy motivate the pupils in learning?

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B. Literature review

1. Vygotsky's ZPD and Scaffolding

According to Vygotsky (1978), the zone of proximal development (ZPD) has been defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers". It shows that children are able to achieve more with the assistance of others rather than completing the work alone. By providing guidance to the pupils, I could help them to be more skilful. Bruner (1975) also stated that children can learn a great deal about literacy from having books read to them, with adults providing a 'scaffold' where the adult supports the child's current abilities and provides help to move on to the next stage. This clearly shows that the strategy that I planned to conduct by providing teacher's guidance would be able to help the pupils.

McLeod (2010) also stated if teachers can understand their students' intellectual capacities they may be able to meet the specific learning needs more appropriately and bridge their learning gaps by using ZPD. As their teacher, by using scaffolding technique, I taught them reading by using E-book. First, I had provided the reading text without any vocabulary list that could help them. I just explained orally to them. Then, I added a list of vocabularies and graphics to help them. Later, these pupils could read the texts on their own. This shows the pupils were able to do the reading tasks after assistance or scaffolding was given to them.

Ihsan (2010) supported that electronic storybooks are mainly designed to integrate text, graphics, animations, music and other multimedia components in order to bring support to the storyline. It has significantly improved the potential for adding animations for the readers. By teaching the pupils from the easiest level to the most difficult level using E-books with the integration of text and graphics, they would be able to show greater understanding on reading. Surrounded with scaffolding learning environment, digital texts which are through E-book provide support to the pupils with diverse learning needs. Recognition the active position of the learner in scaffolding is highly important as it is an essential part of teaching in the ZPD and is a condition of becoming an independent learner in the future (Verekina, 2008). To achieve this, the software of Story Jumper is used to design the E-book as it could be accessed anytime by the pupils themselves so that they could learn independently.

2. 21st Century Learning in the Classroom

According to Beimers (2014), twenty-first century students do not learn the same way as their teachers did when they were students. However, most schools nowadays remain to teach without considering the needs of the 21st century learners. The same thing goes to the reading lesson where the pupils need some new approaches that fulfil their needs. Teachers can ensure that the content and language used in the book are appropriate according to their level.

Short (2010) also stated that the youth of today are surrounded by computers, the Internet, mobile devices and other tech products, which could capture their attention. This indicates that pupils that live in the 21st century are attracted more to technology so I used a strategy that is related to technology. The technique that I used is E-book which allows the two-way interaction between the teacher and pupils. I believe by using this E-book strategy, my pupils will be able to improve their reading comprehension as it can be done with teacher guiding the pupils in reading.

Moreover, an E-book can be an effective tool that can gain students' interest and motivate them to complete the task at hand" (Reid, 2016). My strategy could attract the pupils' attention with the intention of improving their reading comprehension skill. Pupils could read the text on the screen and when they focused on the lesson, they indirectly improved their understanding. I also added some pictures and vocabularies for the pupils to refer.

In the E-book, there were a few reading comprehension questions and the levels of the questions were set up according to Bloom's Taxonomy. There were six levels in Bloom's Taxonomy. It started form knowledge, comprehension, application, analysis, synthesis and the last stage was evaluation (Bloom, 1956). The questions were created to test the pupils' level of understanding. It was from the lower order thinking skills to higher order thinking skills. In every exercise that I had prepared for the pupils, the first question was based on knowledge

Yee, B. C. & Zainuddin, N. S. (2018). The Use of E-book to Improve Reading Comprehension among Year 4 Pupils. *Journal of English Education*, *3*(1, May), 23-32. level. This is the lowest level of questions and requires pupils to recall information. Knowledge questions usually require them to identify information in basically the same form it was presented. For example, the question (Appendix A) was about: "Where are orang-utans found?" Then, another question which was based on the highest level of Bloom's Taxonomy required the pupils to evaluate what they should answer for the question: "The orang-utans biggest danger is from?" For this question, they should be able to relate and understand all of the content from the reading text and evaluate the best answer for the question as it could not be found from the text directly.

In addition, I could use this Bloom Taxonomy to cater for the content of KSSR which is to expose the pupils to the Higher Order Thinking Skills (HOTS) as I could design a wide range of questions - from low-level thinking questions to high-level thinking questions. Most importantly, the research participants would be able to read and think based on the types of questions they received from the teacher.

Grimshaw, Dungworth, McKnight & Morris (2007) investigated the differences in children's reading comprehension and enjoyment of storybooks in print and electronic version of the same passage. Though they found there was no difference in children's' reading comprehension or enjoyment of reading based on the different mediums, however, children who read the electronic version of the text made significantly more use of the dictionary than those who read the print version. This shows that children are motivated to learn when they read the E-book. Grimshaw, et al. (2007) also found the children who were in the electronic text plus narration group did significantly better in reading comprehension. This shows that the use of E-book could help pupils to improve their reading comprehension.

C. Methodology

1. Research design

The action research model that I used in this research was based on Kemmis & McTaggart's model (1988). This model is suitable for my research as the process involved in the cycle is clear in every step. The figure below shows the flow of the four steps in my research.

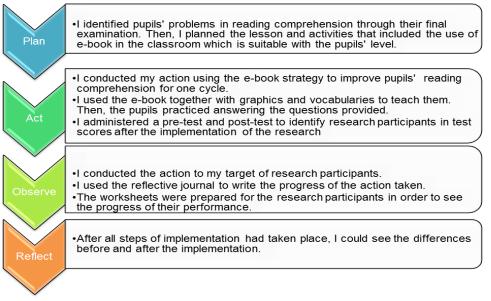


Figure 1 The Four Steps in Action Research Cycle

2. Participants

This research took place in a Year 4 classroom from a primary school located in Batu Pahat, Johor, Malaysia. This class consisted of 20 pupils with seven of them were males and another thirteen were females. These participants were chosen because their performances in reading comprehension were quite weak. Their levels of proficiency were ranged from low to intermediate level.

These pupils did not have enough chance to speak or use the language outside of the classroom. Since these participants shared the same socioeconomic background as most of their family worked as gardeners, self-employed workers and other low income occupations (See

Yee, B. C. & Zainuddin, N. S. (2018). The Use of E-book to Improve Reading Comprehension among Year 4 Pupils. *Journal of English Education*, *3*(1, May), 23-32. Figure 2), they were not exposed much to English environment. They did not speak English at home and they only speak English in the classroom.

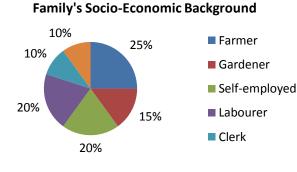


Figure 2 Pupils' Family Background

3. The Technique of Data Collection

In this action research, I used the E-book as a strategy to improve the participants' reading comprehension. It was carried out for three sessions with the participants. The lesson plan and activities that included the use of E-book in the classroom were planned based on their proficiency level. I designed the E-book using the software from Story Jumper as it could be accessed online for free and the pupils could access it freely outside the class time. Before I carried out my intervention, I distributed a pre-test to them.

Then, during the first week of implementation, I taught the participants reading by using the E-book. During the presentation stage, I introduced the E-book to them. I explained to them some difficult vocabularies to help them understand the text when reading it. I chose pupils randomly to read the texts. As I just showed the E-book without the vocabulary list and the graphics relevant to the topic, their responses were not exciting. Some of the pupils did not focus at first but slowly they paid attention during the reading session.

Moving on to the second week of implementation, I included some graphics in the e-book to attract their attention. I added other elements such as vocabulary lists, pictures and so forth to the E-book. Now, the participants' responses were different compared to the first time when they saw the E-book. I found that the pupils in the class felt more motivated to learn when I explained to them the difficult words.

During the third week, after I had taught them clearly about the topic, I asked them to do the reading comprehension on their own and they could answer the questions correctly. The posttest took place after I had completed the three weeks of implementation. The research participants could answer all the exercises and tests that I had prepared earlier.

Throughout the implementation of using the E-book, I gave the pupils worksheets to do so that I could see the progress of their performance in reading comprehension. I also observed the pupils' behaviours and actions in the classroom. All of their progress and changes throughout the process were recorded in the reflective journal.

4. Instruments

In this research, I used three instruments for data collection methods. They were pre-test, post-test, pupils' work and reflective journal. In order to increase the validity and reliability of my research, I used triangulation method in comparing the data collected for the three instruments. Triangulation may include multiple methods of data collection and data analysis, but does not suggest a fix method for all the researches. All of the instruments that were used in this action research had been checked and verified by experts with the knowledge of the area in English and they were my supervisor (first author) and my mentor who was the English teacher in that school. Therefore, the data from the pre-test and post-test, pupils' work as well as reflective journal had been analysed together to validate the research findings.

5. Data Analysis and Interpretation

In this section, the data collected using the tests were analysed quantitatively while the pupils' work and teacher's reflective journal were analysed qualitatively. Their results were discussed below.

(a) Pre-test and Post-test

The test consisted of 10 questions which were close-ended and open-ended items. There were eight multiple choice questions and two structured questions. The level of the questions provided was suitable for the pupils' level as it consisted of lower order thinking skills and high order thinking skills questions. The table below shows the results of pre-test and post-test.

Table 1 Results of Pre-test and Post-test				
	Pre-test	Post-test		
Mean	45.83	93.33		
Standard Deviation	9.17	8.16		

The comparison of mean scores revealed that the post-test (93.33) was higher than the pretest (45.83). The bar graph below shows the results of the mean scores for the two tests.

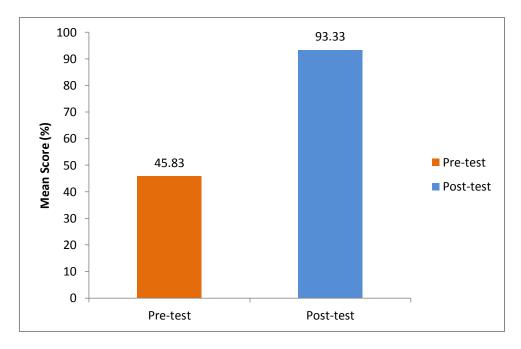


Figure 3 The Mean Scores of the Pre-test and Post-test

Figure 3 indicated an increase of 47.50% between the two tests. The mean of the pre-test was 45.83% and post-test 93.33 while the difference of the mean was 47.50. In terms of standard deviation for the pre-test, it was 9.17 and after the implementation of the strategy, the SD was 8.16. The difference of the SD was 1.01. These results showed the improvement of the participants in reading comprehension.

(b) Pupils' work

Three worksheets were given during the implementation and the participants showed their progress each time they did the worksheets. Three samples of a participant's worksheets were discussed to find out his progress in reading comprehension.

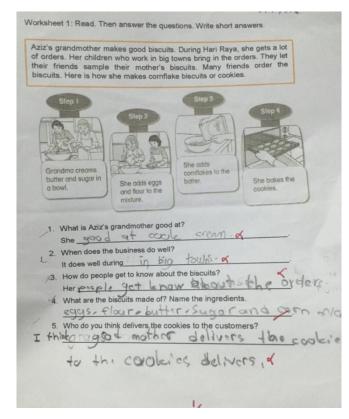
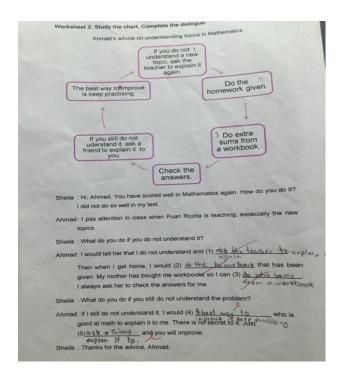


Figure 4 Sample of Answers for Worksheet 1

Figure 4 shows one of the samples answer by the participant during the first stage of the implementation. In the beginning, this participant did not want to answer the reading exercise that I had provided. I found that he was not interested in the lesson. When I gave the instructions, he was lost. He did not understand any single word that I said. He asked me to translate every single word to him. However, when I tried to explain slowly by using the E-book again, he slowly listened to me and tried to comprehend the text. Even though he could answer only one question correctly, it showed that he understood what the question was about as it requested his low order thinking skills to answer the question. He could extract the information directly from the text and wrote the answer correctly in the space provided.



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Figure 5 Sample of Answers for Worksheet 2

From Figure 5, I could see the difference of marks shown by the same participant. At this stage which was carried out during the second week of implementation, he did show some improvement. During the teaching and learning process, he had shown his interest in reading lesson when I showed them the E-book. He managed to answer three questions correctly and improve his comprehension in reading texts. The worksheet required him to transfer information. It tested his level of knowledge and comprehension (Bloom, 1956).

1. Lives in arinforest of Mataysia. and Indonesia. 2. Feeds mainly on fruit but also eats small insect and birds' eggs may live in groups, me, for they soon go their 7-8 years. 6. Orang-Utans have a few natural enemies 7. Their homes are being destroyed because the trees in which they lives are being at

Figure 6. Sample of Answers for Worksheet 3

From Figure 6, the participant got all answers correctly. At this stage which was during the third week of implementation, he did show a lot of improvement. During teaching and learning process, he had shown his interest in reading class as he wanted to participate when I showed the E-book to the pupils. The motivation and excitement in learning had helped him to perform well in reading comprehension.

(c) Teacher's Reflective Journal

From the reflective journals I had written, I identified three themes emerged which were pupils' motivation and pupils' performance.

The first theme was pupils' motivation. They listened to my explanation during the implementation of the E-book. Before I showed the E-book, I found that my pupils were not interested to the lesson at all. However, after showing them the E-book, some of the pupils were excited to learn.

"These pupils showed some interest when they looked at the screen. Some of the pupils asked me, "Teacher, what book is this? I never read a book like this." (Journal Entry 1)

After I explained to them, they got to know the book and the content of the topic. There was one of the pupils who volunteered to help me read the book before I asked them to do it. This shows the use of E-book had motivated them to read.

The next theme emerged was pupils' performance in reading comprehension. I found out that even though the worksheets given to them were suitable with their levels, I needed to improve my questions so that it would not be too difficult for them. In relation to the theme, I think that the pupils' score were good enough for their level as expected.

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"The pupils' score for the worksheets have increased. Even though there was increase of scores among the weak pupils, but it still could be improved when they can learn as better as the good pupils did." (Journal Entry 3)

Besides improving their performance, the E-book had also motivated the pupils to learn as found:

"Most of the pupils have answered the worksheets independently and enjoyed the learning process compared to the first week of implementation of the strategy." (Journal Entry 2)

Based on the analysis of the pupils' work and reflective journal, the participants' behaviour and responses towards the use of E-book was very encouraging. Thus, it can be concluded that the implementation of the E-book had improved their performance in reading comprehension and motivated them to read.

D. Findings and Discussion

The research findings were written based on the two research questions. All of the data were collected based on three data collection methods through pre-test and post-test, pupils' work and reflective journal.

1. How Does E-book Strategy Improve the Pupils in Reading Comprehension?

From this research question, it helped me to identify how useful this strategy is to improve the pupils in reading comprehension. From the results of pre-test and post-test, we could see a great improvement in the mean scores in which the pre-test mean increased from 45.83 to 93.3 in the post-test.

Based on the pupils' work that I had given, the participants showed progress in every worksheet that I distributed. From the first implementation until the third implementation, the pupils had showed they could write more correct answers for reading comprehension in the third worksheet when compared to the first worksheet.

Therefore, by using this strategy, it showed that E-book was definitely effective in helping the pupils to comprehend the reading text.

According to Gilakjani (2012) stated that the studies have shown that computer based multimedia can improve pupils' learning and retention of materials which are presented in class compared to study materials that do not incorporate the use of multimedia. In relation to the strategy that I had used in my action research, this strategy definitely helped the participants to understand reading in the learning process if compared to their learning style before the implementation had taken place.

2. How Does E-book Strategy Motivate the Pupils in Learning?

During the teaching and learning process, the pupils' attention on my strategy was encouraging and active. In every lesson, they had reacted positively towards my use of E-book. When I explained the story to them using E-book, they listened attentively. In addition, these participants took part actively and discussed the answers with their friends if they did not understand. They displayed high levels of enthusiasm throughout the process of implementation. According to Beimers (2014), interactive E-book can have a very positive impact on students' interest. Therefore, this shows that when they paid attention and took part actively in the classroom, they were motivated to read and thus it improved their reading comprehension.

E. Conclusion

In conclusion, using the E-book to improve the pupils' comprehension in reading is a good strategy. This strategy is completely different from the traditional ways of teaching such as the "chalk and talk" method. The pupils have different kind of learning environment in which they are able to focus on the lesson by looking at the E-book. As the pupils are studying in the 21st century learning environment, they would prefer to learn using technology. According to Huang, Liang, Su, & Chen (2012), the younger generation has grown up and is familiar with new technology; they are likely to have different expectations and behaviours towards it. They can

refer to the E-book that consists of graphics, list of vocabularies and so forth. These elements can trigger their interests in order to help them comprehend the input better and they are no longer feeling bored in the class.

A recommendation that can be made to the strategy is to add an element of game in the Ebook to make the activity more interesting. It does not take a lot of teacher's time in preparing the E-book. The pupils in the classroom will enjoy the lesson and could understand the contents easily.

Besides, the E-book can be used as a remedial tool for pupils with learning disabilities. The contents in the E-book can be changed according to the pupils' needs. It is suggested that the teacher alters the words in the E-book and match it with their pupils' level. In this way, the strategy can be used for both reinforcement and remedial purposes.

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