The Use of Story Map in Improving the Year Four Pupils' Ability in Reading Comprehension

Abstract

This is an action research on improving reading comprehension through story map among Year 4 pupils in one of the primary schools in Malaysia. My pupils were unable to answer WH-questions of the narrative texts. The research aimed to use story map to improve pupils' reading comprehension and improve my teaching practices in reading comprehension. I am the researcher with 24 pupils, 12 males and 12 females. I utilized three data collection methods: pre-reading comprehension test and post-reading comprehension test, pupils' work and teacher's reflective journal. I introduced story map through demonstration. Then the participants completed the story through literary elements identification based on the narrative texts. Findings showed that story map helped to improve pupils' reading comprehension by identifying literary elements and relating the literary elements with the comprehension questions. The story map gave positive impact to reading comprehension. The research has impacted the teaching and learning environment, pupils' learning, and my teaching practices. I found out that story map was a useful method in attracting pupils' attention and teaching literary elements. Furthermore, I was developed to be a reflective teacher in terms of strengths and weaknesses of the teaching and learning process. Story map can be an effective tool in improving reading comprehension among pupils. In addition, a more interactive story map which incorporates Information and Communication Technology (ICT) may also be employed in further research.

Keywords: story map, reading comprehension, narrative texts

A. Introduction

English is taught as a second language which is compulsory to be studied by all pupils from primary level throughout Malaysia (Hiew, 2012). This is because English is an international language which is used widely by many countries (Parimal, 2013). Therefore, the aim of English
education is to produce individuals to face the real world (Harjander, 2014). This is because English is important when travelling and working with overseas citizens. Based on Curriculum Development Division (2011), the English language curriculum was designed to help pupils to acquire the basic language skills which were listening, speaking, reading, and writing. Thus, they could have effective communication in various contexts that suit with their level of development. This meant that pupils should be able to communicate with others either spoken or written English after 6 years of schooling. Zare & Moomala (2013) stated that reading is an activity in which there is an interaction between the reader and the author through the text. For example, pupils might be asked to predict the endings, make a summary or identify the main ideas from the reading text.

Based on my teaching experience, I found out that most of the pupils faced difficulties in comprehending the narrative text during the reading lesson. They did not know how to answer the comprehension questions as they were unable to identify the main ideas from the text. Furthermore, they were uninterested in the reading lesson. As a result, it interfered with the teaching and learning process because they disturbed others during the lesson. I was keen in helping pupils to improve their reading comprehension. This was because reading was vital to participate actively in this civilized world (Seyed, 2010). For example, pupils were always updated to news all over the world through reading newspaper. Thus, they could expand world knowledge. Pupils could also understand the content of the text and able to transfer the knowledge into speech and written form.

B. Literature Review

1. Jean Piaget's Constructivism Theory and Vygotsky's Sociocultural Theory

This study could be linked with Jean Piaget's Constructivism Theory. Pupils' prior knowledge might be stimulated in order to link the reading text with their prior knowledge through the implementation of story map (Graney, 1992; Kang, 2004 as cited in Manoli & Papadopoulou, 2012). This is because pupils' previous knowledge was needed in the process of knowledge construction based on Jean's Piaget Constructivism Theory (Bhattacharjee, 2015). Scaffolding was also applied in this research. It was a teaching strategy which was initiated by Lev Vygotsky's Sociocultural Theory in 1978 (Samana, 2013). She also stated that scaffolding referred to the help that was provided by more capable person to less capable person through introducing the concept of zone of proximal development. I as the teacher and the researcher helped pupils throughout this research. I provided more guidance to the weaker pupils, so that they might be able to follow the lessons. Moreover, pupils were divided into groups when they were assigned to complete the story map. Hence, the more able pupils could help the less able pupils in groups.

2. Story Map

The focus of my action research was twofold which was to use story map to enhance pupils' reading comprehension and to improve my teaching practice. Reading comprehension was very challenging by considering the pupils' English proficiency level. I observed that the pupils were unable to identify the main ideas of the text when they were asked to answer the questions. They did not know how to find the answers and extract them from the text. They also had low interest and motivation in the reading lessons.

In order to help pupils to improve reading comprehension and motivate pupils in the reading lessons, I decided to utilize story map as the action in assisting pupils' comprehension in reading narrative texts. Story map was a graphic organizer that records the main information such as characters, setting, and plot of narrative texts (Manoli & Papadopoulou, 2012). Therefore, it helps pupils to answer the reading comprehension questions because the main ideas are included in it. It also helps pupils to focus on the story structure when searching for the literary elements (Amer, 2012). It was a teaching aid which helped in identifying literary elements and recording information in an organized manner (Hannay, 2015). Thus, it helps pupils to understand the narrative texts better by categorizing the important ideas in the story map.

3. Kurt Lewin's Action Research Model

The action research was conducted through a systematic procedure as proposed by Kurt Lewin's action research model in 1946 (Goh, 2012). It comprises five steps which starts with observe, reflect, act, evaluate and modify. First of all, I identified an initial idea by observing my pupils' behaviors and performance during the reading lesson. The reflection was done after the
observation in order to identify the reading comprehension issue in the class. I also thought of the causes for the poor reading comprehension performance among pupils and the ways of helping to improve the teaching and learning practices. During the stage of act, I carried out the action which was story map according to the schedule and procedures planned. The story map was introduced in the reading lessons throughout four weeks. I also collected the data with the mean and standard deviation of pre-reading comprehension test and post-reading comprehension test, pupils’ work and reflective journal during the action. The evaluation of the implementation of the story map in enhancing pupils’ reading comprehension was done through a few methods such as pre-reading comprehension test and post-reading comprehension test, pupils’ work as well as reflective journal. The modification was also taken after the evaluation. The difficulty level of the text was modified when the implementation of action did not suit pupils’ level and did not provide a good result in pupils’ reading comprehension.

C. Methodology

1. Research Design

In order to help pupils to improve reading comprehension and motivate pupils in the reading lessons, I conducted an action research on it. Action research is “a systematic inquiry, made public and detailed records are kept” (Goh, 2012, p. 2). It is carried out by teachers in order to collect information in school (Creswell, 2012). For example, teachers could conduct action research to find information about an issue and improve it in the teaching and learning process. According to Mills (2014), there are four stages which are identifying an area of focus, collecting data, analyzing and interpreting data as well as developing an action plan involved when conducting an action research. Thus, the research could be conducted systematically and smoothly as it consists of four stages to be followed.

The implementation of story map was carried out for four weeks. Firstly, the pre-reading comprehension test was conducted before I introduced the action. During each action, set induction was conducted in an interesting way through the use of video clips. I introduced vocabulary to pupils before they were exposed to the narrative texts. Then, the narrative texts were presented during the while-reading stage. I also explained the texts to pupils in order to provide comprehensible input. Pupils’ understanding was checked through the question and answer session. Next, the story map was introduced to pupils after they read the narrative text during the while-reading stage. I explained and demonstrated the use of story map, so that they knew the task assigned better. Pupils were given a story map in which they had to fill in the literary elements such as characters, setting, events, moral value, problem, and resolution based on the text given in groups. After that, the reading comprehension worksheet was given in order to check pupils’ understanding towards the text after the use of the story map. Pupils were assigned to answer the questions individually based on the text taught. Lastly, the post-reading comprehension test was given after the fourth week of the action.

2. Participants

The research was conducted during my third phase of practicum in SJK(C) Hwa Nan which was located in Batu Pahat, Johor, Malaysia. This research was conducted in Year 4B. I was the researcher with 24 pupils in the class, of which 12 were male and 12 were female pupils who were involved in this research. They were aged 10 years old.

23 of the pupils were from Chinese family background and 1 pupil was a Malay. Most of the pupils were coming from moderate family background. This was because both of their parents were working and lack of time to accompany them. Most of them were sent to the tuition class and their homework was done with the guidance of their tuition teacher rather than their parents.

Pupils in this class were of mixed ability and their proficiency levels of English were low. Their English examination results were ranged from 0 to 78. Most of the pupils scored below 40. Besides, there were 3 types of learning styles which were visual, auditory and kinesthetic learning styles possessed by the pupils. Based on my observation, most of the pupils preferred kinesthetic learning style. They liked to move around and do hands-on activities rather than listening and reading from the textbook.

Some pupils’ behavior was lacking in the teaching and learning process. Some of them performed the disruptive behaviors during the English lessons. They made noise when they were given a task to be completed. Furthermore, several pupils’ attitude in learning was inappropriate. They did not show their interests and motivation in learning English. They
thought that English was a difficult subject to be learned. This was because they were influenced by their first language. Therefore, they did not have own initiative to improve their English proficiency level.

Initial data collection was conducted to identify the reading comprehension issue among Year 4 pupils. I checked pupils’ work and did document analysis using pupils’ examination paper. I found out that pupils were unable to answer the reading comprehension questions correctly. Thus, they were facing the reading comprehension difficulties as they were not exposed to contextual clues. They simply copied a few words or a sentence from the text as their answers. For example, one of the pupils wrote “He saw many tall buildings on both sides of a big river and many boats in the river.” for the question “Where did the pedlar live?” Moreover, the pupils’ examination paper proved that pupils were weak in the reading section. They were weak in answering the WH-questions although the answers were stated in the text.

3. Data Collection Methods and Instruments

In this action research, I used both quantitative and qualitative methods to collect data. There were three data sources selected as the data collection methods in this research. The chosen methods were pre-reading comprehension test and post-reading comprehension test, pupils’ work and reflective journal. The data collection methods were used to provide important insight into the use of story map as the means to improve pupils’ reading comprehension.

a) Pre-reading comprehension test and post-reading comprehension test

One of the data collection methods was pre-reading comprehension test and post-reading comprehension test. The pre-reading comprehension test was applied before the implementation of the story map. The aim of this test was to find out the pupils’ preparedness before the action. The results of the pre-reading comprehension test were used to be compared to the results achieved by pupils in the post-reading comprehension test. Hence, pupils’ progress could be easily identified. On the other hand, the post-reading comprehension test was also given after the implementation of the story map in order to evaluate the use of story map in pupils’ reading comprehension abilities. The usefulness of the story map could be identified through the results of the post-reading comprehension test. Moreover, the results of the pre-reading comprehension test and post-reading comprehension test were illustrated in the form of bar chart, so that it gave a clearer view on the changes of pupils’ achievement. The instrument for this data collection method was two sets of question paper. There were 10 questions on the story of “Jack and the Beanstalk”. Pupils were given 45 minutes to complete the question paper.

b) Pupils’ work

In addition, pupils’ work was chosen as a data collection method. It was a solid evidence of pupils’ learning (Goh, 2012). It helped to show pupils’ progress and achievement from each lesson. Teacher could compare pupils’ answer from the first lesson until the forth lesson. Based on Goh (2012), the developments of the pupils’ understanding could be determined quite clearly through the evidences of pupils’ work. Teacher could also identify the questions which most of the pupils were unable to answer correctly. Hence, teacher might pay more attention on those questions which most of the pupils faced difficulties. The reading comprehension worksheets were the instrument for this data collection method. The pupils’ works were marked based on key answers rather than grammar and sentence structure. This means the marks were given when pupils wrote the key words although they did not write them in the full sentence or use incorrect grammar.

c) Reflective journal

Reflective journal was also selected to be used as one of the data collection methods. According to Goh (2012), the reflective practice was very important for the action research. This was because the reflective journal was the record of the researcher’s inner voice before, during and after the action was carried out. Besides, it provided a record for teachers to narrate the events of the classrooms from their perspectives (Mills, 2014). The reflective journals were written after every lesson of action. This helped me to reflect my own teaching strategies, feelings, strengths and weaknesses, so that I might improve my teaching and learning practices based on the reflection made. The journal entries were the instrument for this data collection method.
4. Technique of Data Analysis

There were two ways of analyzing the collected data namely qualitative and quantitative analysis. I marked research participants' pre-reading comprehension test and post-reading comprehension test and tabulated the scores into percentages and tables. On the other hand, teacher's reflective journal entries and pupils' work were analyzed and interpreted as qualitative data in the form of words.

D. Findings and Discussion

1. Findings

In addition, Goh (2012) implied that data triangulation was conducted in order to validate the findings by using several data collection methods. Methodological triangulation and data-analysis triangulation were applied in this research. Methodological triangulation was the use of various quantitative and qualitative data collection methods, analysis and interpretation which were aimed to reduce the limitations and prejudices that can be found from each method. In this research, the pre-reading comprehension test and post-reading comprehension test provided the quantitative data whereas the pupils' work and the reflective journal delivered the qualitative data. On the other hand, data-analysis triangulation was analysis of data through the combination of two or more methods. Therefore, I triangulated the results which were obtained from each method which are pre-reading comprehension test and post-reading comprehension test, pupils' work as well as reflective journal in order to support and reduce biases in this research.

The data of this research could be categorized into two types which were quantitative and qualitative data. The quantitative data analysis was used for the pre-reading comprehension test and post-reading comprehension test. From the data which was portrayed in Table 1 as shown below the mean increased from 10.63 to 24.38 which indicated that the average research participants scored better in the post-reading comprehension test. In addition, the standard deviation raised from 11.16 to 18.60, which implied that the scores which attained by the research participants were grouped together in the pre-reading comprehension test whereas the scores in the post-reading comprehension test were more dispersed.

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
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<tbody>
<tr>
<td>Pre-reading comprehension test</td>
<td>10.63</td>
<td>11.16</td>
</tr>
<tr>
<td>Post-reading comprehension test</td>
<td>24.38</td>
<td>18.60</td>
</tr>
</tbody>
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On the other hand, the pupils' work provided qualitative data. RP8 was able to answer the question of characters only in the first action. For example, she wrote the sentence "The main characters in the story were Sang Kancil and Sang Harimau." for the question "Who were the main characters in the story?" This demonstrated she had limited understanding towards the story.

Furthermore, in the second action, she showed progress in identifying the character and the setting of the story. For instance, she wrote "The story take place in Sarawak." for the question "Where did the story take place?" This meant that she demonstrated her understanding towards the word "where" referred to the place. Although there was a grammar mistake, her answer was still correct. This was because the focus was on the key answer rather than the grammar aspect.

She also performed good results in the third action. She showed better understanding towards the story. She was able to answer three questions compared to the first and second action. For instance, she answered "Li Peng and Li Huang cheat their father because they wanted farm." for the question "Why did Li Peng and Li Huang cheat their father?" She knew that "why" indicated the reason of cheated their father. However, she still repeated the same grammar mistake. She wrote in present tense.

In the fourth action, she was able to answer the questions regarding the characters, setting, and plot. For example, "The woodcutters helped to rescue Little Red Riding Hood and Grandma." This presented that pupils understood that "who" was a key word to indicate people in story.

Besides, I scrutinized my reflective journal entries and labeled the phrases or sentences under the themes of the use of the story map, the pupils' involvement, and the improvement of the teaching practice.

a) The use of story map

The use of the story map was identified as one of the themes. According to quote below, pupils were eager to participate in the activity during the first action. This was because pupils...
were never exposed to the story map before. They were also impressed with the story maps made by me. The story maps were big and colorful, therefore the pupils were interested in involving themselves in the activity.

“Story map helped to attract pupils’ attention.”  - Reflective Journal Entry 1

As shown by quote below, the pupils were able to identify the literary elements which they needed to fill in the story map. They were also able to relate the literary elements with the comprehension questions. Thus, they performed better from the first action until the fourth action.

“... helped in answering reading comprehension questions ... ”  - Reflective Journal Entry 2

b) Pupils’ involvement

Besides, the theme of pupils’ involvement emerged in the journal entries. Based on the quote below, it showed that the pupils seemed interested with the use of story map in the teaching and learning process. Therefore, they were keen to contribute ideas in order to complete the story map in groups. They also worked together to help the weaker pupils during the activity of completing the story maps.

“Pupils took part actively in completing the story maps. They discussed and cooperated in groups.”  - Reflective Journal Entry 4

c) The improvement of the teaching practice

The improvement of the teaching practice could also be categorized through the journal entries. According to quote below, this was because pupils prefer to do hands-on activities rather than listening to the teacher throughout the lesson. Therefore, the pupils were interested in participating the activity of the story map.

“Interactive and fun teaching was created through the use of story map.”  - Reflective Journal Entry 3

The quote below showed that the cooperative learning took place as pupils discussed and learned from one another in the activity. This was because the activity of story map was a group activity. Thus, they worked together in order to complete the activity assigned to them.

“The cooperative learning was created in the lesson.”  - Reflective Journal Entry 4

2. Discussion

Research Question 1:
How does story map help Year 4 pupils in improving reading comprehension?

Overall, the story map has a positive impact on the pupils’ reading comprehension. The positive impact of the story map was shown through the pre-reading comprehension test and post-reading comprehension test as well as pupils’ work. Firstly, the mean of the pre-reading comprehension test and post-reading comprehension test increased from 10.63 to 24.38 while the standard deviation of the pre-reading comprehension test and post-reading comprehension test increased from 11.16 to 18.60. This meant that the majority of participants scored higher in the post-reading comprehension test. This proved that the story map was a useful method to aid pupils in identifying the main idea in the narrative texts although there was a slight improvement among pupils.

In addition, pupils showed positive progress in their work. They exhibited a gradual improvement from the first action to the fourth action. They were able to answer the comprehension questions with a better understanding towards the texts. This was because they were able to comprehend the texts through the use of story map. They were able to identify the literary elements before they answered the reading comprehension questions.
Furthermore, pupils were able to answer the comprehension questions by relating them with the literary elements. The types of the questions act as clue for pupils to relate the questions with the literary elements. For instance, “who” indicates characters, “where” indicates the setting and “why” indicates the reason of the action. Thus, this shows that the use of story map aids pupils in the reading comprehension.

The literary elements such as characters, setting and moral value which are comprised in the story map helped pupils to identify the main idea of the narrative texts. It helped pupils to focus on the story structure. With the repeated practices given among the participants, it trained pupils to be familiar with the literary elements and the types of comprehension questions. They learned from their previous work based on the teacher’s assessment.

However, the effect of the story map seemed to be varied according to the pupils’ comprehension abilities on different questions. Some of the pupils showed a great improvement in the post-reading comprehension test whereas there were two pupils who did not show any improvement. The weaker pupils encountered difficulties in answering questions which required their higher order thinking skills. This was because they were unable to find the answers from the texts.

Besides, the performance of the pupils differs because of the difficulty and the length of the texts. This was because pupils lost interest in reading the texts and the vocabulary of the texts was difficult. They were unable to identify the literary elements and answer the reading comprehension questions as they did not comprehend the texts.

**Research Question 2:**
**How does story map help in improving my teaching practice in reading comprehension?**

In general, the data collected from the pupils’ work and reflective journal showed some significant findings to prove that the story map helped in improving my teaching practice in reading comprehension.

Pupils developed progress in their work. They were able to show improvement through the answers of the reading comprehension questions. Definitely, my teaching practice is enhanced as the pupils improved in their reading comprehension through the use of story map. I have found an effective method in helping pupils to improve their reading comprehension in narrative texts. This was because the use of picture cards which I utilized in the previous teaching and learning process did not show positive results in enhancing pupils’ reading comprehension.

Besides, based on the analysis of reflective journal entries, the story map is a good means to be applied in attracting pupils’ attention. Pupils were curious when the story map was first introduced to them. This was because teachers seldom conducted activity in order to focus on the story structure. Teachers usually asked pupils to answer the reading comprehension questions after reading the texts. Thus, it is a good way for pupils to summarize the main ideas of texts which aid them in answering the questions.

Furthermore, the story map helps in creating interactive teaching. The story map was able to stimulate pupils’ interest and motivation in learning. Pupils were able to do hands-on activities rather than listening to teachers. This was because they have limited attention span. Therefore, they should be given opportunities to participate in the teaching and learning activities. Pupils took part actively in contributing and discussing with their friends through the use of story map. This indirectly helped to create a fun learning environment.

In addition, cooperative learning was created through the use of story map in the teaching and learning process. Pupils discussed and cooperated in filling the story map. Hence, the pupils were able to complete it on time. The lessons were carried out smoothly. Pupils were also able to learn from their friends as the scaffolding theory was applied in this research. Therefore, they did not face much problem in answering the comprehension questions.

**E. Reflection**

I have improved in my teaching practice through carrying out action research. I found out that the story map was an effective method in attracting pupils’ attention and teaching literary elements based on my reflective journal entries and pupils’ work. The story map enabled the pupils to categorize the main elements of the texts (Li, 2007). Thus, pupils developed a clearer view towards the narrative text through the use of the story map. They performed better compared with their previous work.

In addition, the story map helped to improve pupils’ reading comprehension throughout this action research. Pupils showed progress in their reading comprehension based on the results of
pre-reading comprehension test and post-reading comprehension test as well as pupils’ work. This was because it helped pupils to identify the literary elements and relate the elements with the reading comprehension questions. For instance, “who” indicates the characters whereas “where” indicates the setting.

I was also developed to be a reflective teacher throughout the process of conducting action research. This was because I did the reflective journal after every lesson. According to Mills (2014), reflective journal was used by teachers in order to report and record the happenings of the classrooms from their perspectives. Therefore, I was able to reflect on my teaching strategies through identifying the strengths and weaknesses of my teaching and learning process. I was also able to think of the solutions in order to overcome the weaknesses that I acknowledged from my own teaching and learning process.

On the other hand, the weaknesses were identified as well. The first weakness which I identified through the research was the way of applying the story map. I introduced too much information in one lesson. Some of the pupils were unable to follow the lesson. This was because they were incapable to grasp so much knowledge within a lesson. They learned in a slow pace which they needed time to familiarize with the text and the story map.

Another weakness which I found through the research was the layout of the story map utilized. I applied the same layout throughout the research. Pupils did not show the reaction as the first time I introduced the story map. They were not curious towards the story map after the first action. Hence, the excitement among the pupils decreased.

F. Conclusion

The findings of this research have concluded that the story map benefits the participants’ reading comprehension in narrative texts. However, I noticed that there are limitations of this action that need improvement after the implementation of the story map. Therefore, some suggestions are recommended to improve teachers’ teaching practice, and at the same time, to improve pupils’ learning.

The layout of the story map is recommended to be changed every action. The enthusiasm among the pupils may be stimulated as they may feel curious towards the layout after every action. This is because pupils may easily feel bored towards the activity. They may feel motivated when the teachers are introducing the story map in different layouts. This is because pupils may easily get attracted to the interesting and colorful teaching aids.

Researchers may also integrate Information and Communication Technology (ICT) with story map in the lesson. This is because ICT is able to enhance pupils’ interest and excitement towards the lesson. Hence, the conducive learning environment can be created easily through the use of ICT. Furthermore, ICT is emphasized in the 21st century classroom. According to Saxena (2013), computing devices is one of the characteristics of a 21st century classroom. Thus, pupils should practice their ICT skills in the lesson. This indirectly can train pupils to be independent learners as they are familiar with the use of computer. They are able to search for additional information.

Besides, in further studies in this action research, the researchers may modify the procedure of implementing the action. The researchers may introduce the literary elements separately for a few weeks. The researchers may introduce the characters, setting and moral value in the first week whereas the plot is introduced in the second week and the problem and resolution in the third week. This is because the weaker pupils were unable to comprehend too much information in a lesson. Hence, the weaker pupils are able to perform better as they learn in a slow pace which is suitable for them.

In addition, it is suggested that the action of story map should be implemented for a longer period of time. According to Jiang & Grabe (2007), the repeated exposure and time are needed by the pupils to practice with story map. This is to ensure pupils are familiar with the use of story map in order to aid them in comprehending the texts. As this research was conducted for four weeks only, therefore it did not show significant improvement among pupils.

G. References


