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Development of English Reading Comprehension by Using Concept Maps

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Abstract

Reading is the single most important fundamental skill a person can acquire. However, in Thailand, English language learning, especially in reading skill, seems to be the big problem to students because most of them find English reading difficult and lack of motivation in doing so. As a result, the purpose of this study were to study the development of English reading comprehension by using concept maps, and to study the students' attitudes towards learning English reading comprehension by using concept maps. This study conducted through the use of scores from concept map retelling based on the redeveloped rubrics and comprehension test. The interview was also conducted. The results showed that the percentage of retelling and comprehension test were 81.25 percent and 86.50 percent respectively. Student stated that concept maps helped them understand English reading better. This could be concluded that the use of concept maps could enhance the students' English reading comprehension.

Keywords: Language learning, teaching methods, secondary level, reading difficulty

1. Introduction

Today English is important in ESL/EFL countries because it is a world language. People around the world use English language to communicate to each other. All four fundamental skills are used: listening, speaking, reading, and writing. All are important, including reading skill. Reading is important for a variety of reasons. For example, it is a vital skill in finding a good job, enriches thoughts, widens visions, and enhances knowledge. However, one of the fundamental problems many English language teachers face with is enhancing ESL/EFL learners' reading ability and maintain their interest in reading. Most ESL/EFL learners have certain difficulties while reading English because they are not aware of the effective ways of reading and understanding a text, which might cause resistance

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and affect their attitudes towards reading in English (Mede, 2010). In Thailand, one of EFL countries, English language learning, especially reading skill, seems to be the big problem to the students. The main reason is most of them find English difficult and lack of motivation in doing so. These problems cause Thai students have negative attitudes towards learning English and believe that learning English is very difficult for them. Sloat, et al. (2007) stated that failure to learn reading during primary level might cause a student to be lacking in the ability to read well. Actually, the students were required to practice grasping the text information so that they would improve their skills of reading for meaning. Thus, teachers need to get students to practice reading for meaning.

Reading comprehension refers to the ability to understand information presented in written form. While this process usually entails understanding textbook assignment, reading comprehension skills also may affect one's interpretation of direction on examination, homework and completion of job applications or questionnaires. Many students still have problems with their reading comprehension because they are unable to accurately understand written materials. That is, they cannot interpret what they read and make the connection between what they read and what they have already known.

According to the research, concept mapping appears to be an effective way to teach and learn about new information and overarch concepts. The arguments for concept mapping include the importance of connecting new information to prior knowledge and experience (Novak & Gowin, 1984; Cromley & Azevedo, 2007; Jonassen, et al., 1999; O'Donnell, et al., 2002), the efficacy of building visual-verbal representations of knowledge (Novak & Gowin, 1984; Jonassen, et al., 1999; Plotnik, 1997) and that these representations are more effective for knowledge retention than using traditional text (McCagg & Dansereau, 1991; Jonassen, et al., 1999). Plotnik (1997) described purposes of concept mapping and stated that the main advantages of concept mapping are the use of visual symbols because they are easily recognized, easy to scan for a specific word or general idea and it also allows for more holistic understanding of a concept. Therefore, to solve the students' problems, concept maps were used as a study technique to promote their reading comprehension and help them understand reading as a process (Anderson, 1978).

The purposes of the present study were to study the development of English reading comprehension by using concept maps, and to study the students' attitudes towards learning English reading comprehension by using concept maps.

2. Method

The population of this study was 18 students in 10th grade of Demonstration school of Khon kaen University (Suksasart) in the second semester, academic year 2010. Fifteen samples were drawn by simple random sampling method. This study was conducted through the use of percentage of scores from concept map explaining and retelling based on the assessment rubric adapted from the Regent of the University of Minnesota and Barbara Martinson (2004) and reading comprehension tests. Moreover, the individual interview was administered with 3 of the following themes:

　　1) Does your English reading comprehension skill improve? If yes, how? If no, give reasons;
　　2) Do you think the concept map help you understand English reading better? Why or why not?; and
　　3) Are there any questions or suggestions?
The obtained data from the tests was analyzed by average scores and percentage. The interview results were analyzed by content analysis.

3. Findings

3.1 Results of concept map retelling and reading comprehension tests

Distribution of students' statistical values of retelling tests is given in Table 1. It has been found out that the percentage of the scores in retelling tests was higher from article no.1 (70.26%) to article no.6 (90.00%) continually. With the total percentage of retelling tests, it was 81.25 percent which was in the high level.

Table 1. Distribution of students' statistical values of retelling tests

Articles	Percentage of Retelling Tests	Level
No.1	70.26	Moderate
No.2	73.00	Moderate
No.3	79.00	Moderate
No.4	87.00	High
No.5	87.00	High
No.6	90.00	High
Total	**81.04**	**High**

When considering comprehension tests, the distribution of students' statistical values is given in Table 2. It was showed that the percentage of comprehension tests from article no.1 (82.00%) to article no.6 (91.00%) was higher gradually, and it was all in high level. The total percentage of comprehension tests was 86.50 percent considered as in high level as well.

Table 2. Distribution of students' statistical values of comprehension tests

Articles	Percentage of Comprehension Tests	Level
No.1	82.00	High
No.2	84.00	High
No.3	85.00	High
No.4	88.00	High
No.5	89.00	High
No.6	91.00	High
Total	**86.50**	**High**

3.2 Results from the Interviews

With three interviewed questions, it has been found that most students agreed that after learning English reading by using concept maps, their English comprehension skill improve. They gave reasons that due to using concept maps in reading, they could get main ideas and relations of the sentences, paragraphs and different parts of the text. They also use previous knowledge while reading the texts. Besides, they suggested that with 6 lesson plans, it was too short. They wanted to learn more. They felt that they could do it better if they had a chance to learn and practice more. In addition, beside concept maps, they wanted to read various texts and learn other strategies or techniques that could help them better in reading.

4. Discussion and Conclusion

English Reading Comprehension of students:

The result of students showed that, with the retelling and comprehension tests, at last the students were in high level in both tests (90% and 91% respectively). In other words, concept maps could improve English reading comprehension of students which was related to the study of Flood and Lapp (1988) stating that students' practice in constructing their own maps from different texts could help enhance their 'metacognitive skills' leading to successful reading. Also, the students' abilities in constructing a variety of concept maps could help visualize the ideas of other texts in network (Sinatra, et al., 1984). With the study of effective strategies of teaching reading,

Askov (1991) pointed out that an effective teacher should help students be efficient at self-learning. Therefore, students needed study skills which they could apply while reading inside and outside of class. He also explained that the 'mapping' technique is a study skill that helped students see relationships between the message since they required learners to think through while constructing the maps. In addition, the study of Thai students learning English reading through the use of concept maps of Kaewkongmuang (2001) and Pongkaew (2002) showed that the concept map training or the semantic mapping technique could improve their students' reading comprehension because they could understand the text more easily through the concept map.

Considering the relationship between retelling and reading comprehension, the study of Stoicovy (2004) stated that oral retelling of reading or listening text was produced based on the students' increased comprehension and recall of discourse. When students reconstruct text, they were learning language complexity by accepting ideas of the text which allowed students to pick up a sense of story structure leading to students' schema activating. As a result, it allowed comprehending, learning, and remembering the ideas in the stories and texts (Gambrell, et al., 1991; Lipson & Wixson, 1997; Brown & Cambourne, 1987; Morrow, 1985; Anderson, 2000).

With the data from the interview, it was found that students entirely answered the interviewed questions that their reading comprehension was better since they had learned concept map constructing. They felt that they could find the relationships among words, sentences, and paragraphs leading them understand the texts, especially main ideas of texts. Besides, they wanted to learn and practice reading with concept map more. They thought that the duration of each class was not enough. Sometimes they wanted more time to think, practice, and understand the texts in case they were quite difficult or not related to what they had known or experienced. Moreover, after they were familiar with using concept map in reading, they would like to learn other reading techniques to enhance their reading comprehension.

Suggestions for learning experience management in reading comprehension were that the teacher should have the orientation about the concept map before learning with the way to construct concept maps with clear teaching methods. At first, to make the students familiar with concept map, the teacher should make students work as a group or in pair, and then individual. Moreover, the teacher should provide students a little bit more difficult texts in each class, so the texts would challenge them to use their abilities to think and practice with the support from the teacher.

In conclusion, there have been relationship between reading comprehension and concept maps and they could be able to apply in learning management to enhance students' English reading integrally and creatively.

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