# CHAPTER FIVE

# CONCLUSION, DISCUSSION, AND IMPLICATION

The purposes of this study were : (1) to compare the students' reading comprehension scores whose background knowledge is not activated with those whose background is activated in the prereading phrase, and (2) to compare the effects of three types of background knowledge activation: semantic mapping, pictorial previewing, and self-questioning. The subjects were ninety - six Mathayom Suksa 5 students of the Science – Math programme taking an English Core Course (English 0110) in the second semester of the 2002 academic year at Muang Chiang Rai School, Muang District, Chiang Rai Province. The research instruments consisted of twenty prereading activity plans, and forty items of comprehension tests. The data were analyzed by using One – Way ANOVA or F – Test, and Scheffe Test.

Chapter five presents conclusion, discussion and the implications for teaching and learning as well as recommendations for further studies. The organization of this chapter is based on the research questions proposed in chapter one.

## CONCLUSION

The research questions of the study were: (1) Do prereading activities enhance the students' reading comprehension? And (2) Does one type of prereading activities facilitate students' reading comprehension better than the others?

Based on the research questions of the study, it was hypothesized that: (1) After students' background knowledge has been activated, the comprehension scores of students who receive different kinds of prereading activities will be higher than those of the control group. And (2) There is a difference in the reading comprehension scores of students in the three different prereading activities groups.

## RESEARCH RESULTS

### Research Question One

Do prereading activities enhance the students' reading comprehension?

The answer is yes! Students whose background knowledge was activated in the prereading phase scored higher in the comprehension test than those whose background knowledge was not activated.

### Research Question Two

Does one type of prereading activities facilitate students' reading comprehension better than the others?

There were no significant differences within the three experimental groups. In other words, each type of the prereading activities was as good as the others. The finding rejected the hypothesis that there was not a difference in the reading comprehension scores of students in the three different prereading activities groups.

## DISCUSSION

Based on the findings, the comprehension scores of students in each experimental group whose background knowledge was activated were higher than those of the control group whose background knowledge was not activated. These findings support the schema theory which is based on the assumption that " every act of comprehension involves one's knowledge of the world as well" (Anderson et al. cited in Carrell and Eisterhold, 1983: 73). Thus, readers develop a coherent interpretation of the text through the interaction process of combining textual informa-tion with the information a reader brings to a text (Widdowson cited in Grabe, 1988: 56). Schema theory describes the process by which readers combine their own background knowledge with the information in a text to comprehend that text. All readers carry different schemata and these are also often culture – specific. This is an important concept in ESL teaching, and prereading tasks

are often designed to build or activate the learner's schemata. Carrell, Devine and Eskey (1988: 4) claim that schema theory has provided numerous benefits to ESL teaching and, indeed, most current ESL textbooks attempt schema activation through prereading activities. Ringler and Weber (cited in Dowhower, 1999) also agree that it is important to activate the students' background knowledge of the subject to facilitate them in achieving the reading tasks. Carrell (1988b p. 245) lists numerous ways in which relevant schemata may be constructed, including lectures, visual aids, demonstrations, real-life experiences, discussion, role-play, text previewing, introduction of key vocabulary, and key-word/key-concept association activities. Furthermore, the prereading activities must accomplish the two goals: building new background knowledge as well as activating existing background knowledge (Carrell, 1988b p. 248).

As the result indicates, it can be seen clearly that these three prereading techniques are effective in activating students' background knowledge and background knowledge does influences students' reading comprehension.

Semantic mapping is a term which describes a variety of strategies designed to show how key words or concepts are related to one another through graphic representations (Miyazaki). From this study, the results have shown that semantic mapping enhanced students' reading comprehension when their background knowledge was activated in the prereading phase. This can be described that during mapping activities learners are instructed to make associations with the main ideas in a text and its' supporting details. Furthermore, they are asked to make association between the key words and their internal knowledge prior to reading the texts. In other words, learners are asked to create their own unique semantic networks of association with a given text. The results were supported with the earlier studies. Recently, semantic mapping has been used in a variety of ways, including a technique for increasing vocabulary and improving reading comprehension (Carrell et al, 1989, Johnson and Pearson, 1984), as a framework for identifying the structure organization of texts (Clewell and Haidemos,1983 cited in Miyazaki). Semantic mapping activities that are carried out during the prereading phase of a lesson are functioned as activating learners schemata and introducing them to key vocabulary from the text as well as enhancing the comprehension of vocabulary, main ideas, supporting details, patterns of

textual organization, including character and plot development. In conclusion, the major benefits of semantic mapping is that it helps to build schemata and influence reading comprehension.

According to pictorial previewing, the results indicated that pictorial previewing which were used in the prereading stage enhanced students' reading comprehension. The results were supported by many former research works. The purpose of visuals is to help students better understand important text ideas and how they are related. The information from a visual structure also aids summarization and allows for use of multiple modalities ( Dowhower,1999). Craik and Lockhart (1972, cited in Rakes et al., 1995) and Pavio (1986) agreed that the use of visuals with text creates both verbal and nonverbal code as well as connections between the two. Individuals can process information in a variety of ways, and these processes determine what is learned and how well it is learned. There appeared to be qualitatively different levels of processing. Information more deeply processed is likely to have a stronger memory path, and therefore, will be remembered longer. Teacher can achieve in facilitating student's comprehension by direct students to use illustrations effectively in building connections between the content in the text and their background knowledge.

Self-questioning is another technique in activating students' background knowledge. This technique encourages students to focus on deep learning and understanding as well as on the explicit facts. Answering these questionings requires knowledge, comprehension, and analysis. The self-questioning strategy encourages students to create questions in their mind, predict the answers to the questions, and search for the answers to those questions as they read the text. Based on the finding, the self-questioning strategy can increase the students' reading comprehension. Through self-questioning, students became aware of what and how they learned. The role of the teacher is to help students, especially the struggle readers to develop their self-awareness so that they can learn to get control of their process of reading comprehension.

It has been shown that application of the schema theory benefits the teaching of reading. In the prereading phase, building up of inadequate schemata and activating readers' schemata can improve L2 reader comprehension as shown in the results earlier that these three techniques

were as good as the others. Although these three techniques were presented differently but they had the same purpose and had reached the same result. The reason may be because though these three prereading activities could activate students' background knowledge in different ways but they influenced students' reading comprehension. With semantic mapping, students were able to see relation in the text clearly and meaningful; with pictures, students were directed their attention to relevant content; whereas, self-questioning encouraged students to focus on deep learning and understanding as well as the explicit facts. Furthermore, self-questioning encouraged students to create intelligent questions to be independent readers. Therefore, it would seem sensible for teachers to utilize such activities to activate students' background knowledge to increase their reading comprehension.

## IMPLICATION

The main purpose of the three prereading techniques were to activate students' background knowledge. In addition, the results of the study indicated that scores of students whose background knowledge was activated were statistically higher than scores of students whose background knowledge was not activated. Thus, the implications of the research can be divided into three major parts. First, creating awareness of the importance of background knowledge in teaching reading. Second, developing teaching techniques especially in teaching reading. And third, providing guidelines for further study.

### Creating Awareness of the Importance of Background Knowledge in Teaching Reading

According to the schema theory, comprehension is an interactive process between the reader and the text. Learners who has background knowledge on the topic comprehend the text better than those without that background. Reader with background knowledge of the content can relate his or her prior knowledge on a new information or a new learning situation.

Unfortunately, teacher often fails to address the importance of schema theory and prior knowledge in text comprehension. Thus, schema activation often does not occur. Thus, teacher should provide the learners appropriate schemata they are lacking and teach them how to build bridges between existing knowledge and new knowledge needed for comprehension of text. The

three prereading activities proved to build up an inadequate schemata and activate learner's schemata are recommended for future application to improve students' reading comprehension.

## Developing Teaching Technique

As the research results indicated, the prereading techniques were effective in not only activating students' background knowledge but also enhancing their reading comprehension. In activating students' background knowledge before learning the content area, more than one technique can be combined. For example, semantic mapping with pictorial previewing, semantic mapping with self-questioning, self- questioning with pictorial previewing or a combination of the three prereading techniques. Each will complement the other application well.

## Providing Guideline for Further Study

Although the differences of the effects of the three prereading activities were not statistically significant but it seemed that semantic mapping activity was better than the other two techniques in enhancing reading comprehension. This is a suggestion for further research:

The study is needed to be replicated. Since in this study, the three techniques were used only in the prereading phase to investigate the effectiveness and the importance of background knowledge. In further study, these three techniques should be conducted within the whole comprehension strategy framework : prereading, active reading, and post-reading, to examine which technique is the most effective on enhancing students' reading comprehension.