#### CHAPTER 1

#### INTRODUCTION

Reading is a complex and dynamic process in which the reader actively interacts with the text to construct meaning. Inherent in constructing meaning is the reader's ability to activate prior knowledge, use a repertoire of reading strategies and adapt to the reading situation. Goodman (1967) succinctly defines reading as "a psycholinguistic guessing game. It involves an interaction between thought and language" (p.128). He further defines reading as "an interaction between reader and written language, through which the reader attempts to reconstruct a message from the writer" (Goodman, 1969, p.15).

The importance of reading especially in English cannot be overemphasized especially in the context of Malaysia today. While the medium of instruction is Bahasa Malaysia in all public schools and at tertiary level, it is important for students to be able to read effectively in the English language. This is because the wealth of information found in the 'treasure throve' of libraries and learning resource centres is mostly in English. To enable students to access this copious information both in print and via the electronic media they have to be proficient in English. At pre-university level the importance of the ability to read well in English cannot be denied especially due to the paucity of academic materials in Bahasa Malaysia at higher levels of education. This situation is reflective of other ESL situations where information necessary for academic success is still in English. As Carrell (1988), states "without solid

reading proficiency, second language readers cannot perform at levels they must in order to succeed"(p. 1). Effective reading in a second language is critical for students to access the information that is necessary for academic excellence.

The teaching of reading has a vital place in the Malaysian education context. In the Malaysian English Language syllabus for secondary schools, it has been succinctly stated that students should

be able to extract the gist of a passage, the stated and inferable details, cause and effect relationship, comparison and character traits, to classify, outline and sequence ideas and to predict outcome. (Kementerian Pelajaran Malaysia, 1973, p.12)

All these abilities are emphasized in order to make students independent and effective readers who can access the information that is abundant in the English Language.

In the sixth form the need to be able to read effectively is reemphasized, especially since the need to access information independently and confidently is vital at both pre and tertiary levels. The aim of the STPM level 914 English Language syllabus is:

to enable candidates to further develop their language skills, so that they can use the language confidently and effectively for tertiary education and vocational needs.

(Majlis Peperiksaan Malaysia, 1998, p.1)

The English Language 914 paper that was introduced in 1998 at principal level has four components that are tested in four different papers. The components are Listening, (914/1), Speaking (914/2), Reading (914/3) and Writing (914/4). The reading component emphasizes students' ability to understand and respond to a variety of texts as well as analyze and evaluate a wide range of texts. The introduction of the new syllabus demands that students be competent in reading comprehension. The focus is on high-order comprehension skills. Questions used in teaching and assessment are often open–ended requiring analytic and evaluative skills.

In a nutshell, the main aim of the Malaysian sixth form syllabus is to equip students with the basic competence of English as well as to provide an additional repertoire of means to access academic and resource materials especially at tertiary level in anticipation of future needs. Reading is one of the basic ways of acquiring information in a second language situation. The crux of reading is reading comprehension. It is therefore pertinent that teachers explore and use appropriate teaching strategies to enhance students' skill in reading.

### 1.1 Teaching Reading Comprehension

This study explored a strategy for the effective teaching and learning of reading comprehension through the use of semantic mapping. The importance of this strategy draws from a preliminary understanding of the concept of reading comprehension and in particular the of role schema theory in explaining how reading comprehension occurs in readers.

# 1.1.1 Defining Reading Comprehension.

Defining comprehension is an arduous and extremely difficult task (Harrison, 1980). This difficulty stems from the fact that comprehension is an internal process that occurs in the reader's mind. It is not subject to external observation (Carroll, 1972). However reading comprehension is generally viewed as a process of understanding or getting meaning of something read. Comprehension is viewed holistically and includes encoding, storage and retrieval (Deitsch, 1985). Comprehension can be viewed as an active process in which readers interpret what is read in accordance with what is already known about the topic, thus building bridges between the new and the known (Pearson & Johnson, 1978). Reading comprehension is seen as an active process in which students integrate prior knowledge with the text information to create new knowledge (Adams & Bruce, 1980).

### 1.1.2 Schema Theory

According to schema theory (Bartlett, 1932), background knowledge has a vital role in the comprehension of a text. One of the fundamental tenets of schema theory is that meaning does not reside in the text. According to Rummelhart (1980), a text only provides direction for readers as to how they should retrieve or construct meaning from their own previously acquired knowledge, which is the readers' background knowledge. This knowledge occurs in structures called the schemata (Bartlett, 1932).

The schema theory explains the comprehension of a text as an interactive process between the readers' background knowledge and the text, that is "every act of comprehension involves one's knowledge of the world as well" (Anderson et. al., 1977, p. 369).

Carrell and Eisterhold (1983) posit that schemata are hierarchically organized from most general at the top to most specific at the bottom and as these bottom level schemata converge into higher level, more general schemata are activated. According to Rumellhart (1980), the important aspect of top-down and bottom-up processing is that both should be occurring at all levels simultaneously. The data is needed to "instantiate" or fill in the schemata through the bottom-up processing while the top-down processing facilitates predictions made by the readers prior to reading the text. Therefore readers have to activate an appropriate schema to give a text a consistent interpretation for successful comprehension of the text.

For comprehension to take place appropriate or relevant schemata must exist and must be activated during text processing. Pearson and Johnson (1978) describe the process of activating and building relevant prior knowledge as one of building bridges between the new and the known. This concept demonstrates the importance of preparing students for reading

and learning. Readers construct meaning by interacting with the text. When writers write, they assume that readers will have a certain amount of background knowledge that they will use to infer the intended meaning. Comprehension occurs when readers connect the new information in the text with what they already know. Making those connections is the process of constructing meaning. Helping students make those connections is the essence of teaching reading. The teacher needs to build schema for the effective comprehension of any text. There are several approaches for activating schema for this purpose. Students will have great gaps in knowledge for some texts, that will need to be bridged before they can be expected to profit from their reading and learning (McKeown, Beck, Sinatra & Loxterman, 1992). Teachers cannot assume that students have all the prerequisite knowledge for easy assimilation of the new ideas and facts that they will encounter in the reading text.

In this study the strategy used to make connections between new information and existing prior knowledge that is, for constructing meaning in order to facilitate comprehension of a text, is semantic mapping. The activities used include guessing vocabulary items from context, asking probing questions to activate prior knowledge and using semantic mapping to activate and link ideas in the text in order to increase comprehension.

## 1.1.3 Semantic Mapping

According to schema theory, that which is experienced and learnt, is stored in the brain in networks or categories called schemata (Rumelhart, 1980). Schema theory asserts that activating existing prior knowledge before reading would help improve reading comprehension. Semantic mapping or webbing is a method that activates and builds on student's prior knowledge. The semantic mapping process influences students to become active readers by triggering the brain to retrieve what is known about the topic and use this

information in reading. Semantic mapping is designed to help students tap their prior knowledge about the topic and expand that knowledge through discussion. It is an effective way to learn new concepts, a procedure for activating students' schemata and a technique to improve comprehension.

Semantic mapping is graphically and visually displaying relationship among ideas and concepts (Heimlich & Pittleman, 1989). The technique encourages higher thought process, stimulates oral interactions and fosters ideas. Ginny Hoppes (1989) found that semantic mapping improves reading comprehension.

Semantic mapping can be used as both pre and post-reading activities to accomplish several purposes. It can be employed to activate and create background knowledge, to help students see relationships among vocabulary items, to connect new information to prior knowledge, and to assist students in organizing information.

### 1.2 STATEMENT OF PROBLEM

The problem investigated in this study was to ascertain the effectiveness of the use of semantic mapping as a strategy to teach reading comprehension to pre-university level students in form 6. This strategy comprised the following activities:

- the teaching of vocabulary skills
- · activating prior knowledge with probing questions
- linking ideas in the text through semantic mapping.

At Form 6 level reading texts may comprise narrative, expository, non-linear and literary text. For the purpose of this study the texts used were expository texts.

A dominant problem among my students as they attempted to read and understand text was they were often unable to make a distinction between understanding the meaning of the whole text and understanding discrete vocabulary items in a text. A false belief was that understanding individual words would lead to understanding the whole text. Some of the students were consulting the dictionary for every other word. As such, they were not progressing as effective readers who could activate prior knowledge and connect the ideas in the text.

## 1.2.1 Purpose of the Study.

The identification of the problem was based on personal, professional experience. As a result of personal observations of reading comprehension in my form 6 English class, I noticed that some students were very slow in answering comprehension questions because most of the time they were preoccupied with finding the meanings of individual lexical items in the passages given. This was time consuming and students were not progressing as effective readers. I therefore, decided to investigate what was impeding their progress and decided on an approach to teaching reading comprehension more effectively.

The purpose of this study was to investigate the effectiveness of a reading comprehension strategy, semantic mapping, that would help make students aware that the understanding of each individual word in the text is not necessary to understand the whole text. It investigated the effect of this approach on the ability of the four selected students to comprehend expository text. In essence it sought to ascertain if the use of semantic mapping could improve students' reading comprehension ability. This was assessed in terms of the quality of the student responses. Students were given a preliminary test to identify problems with reading comprehension and the responses were later used to serve as a basis for comparison in discussing the findings at the end of the study.

#### 1.2.2 Research Questions

The study considered if explicit instruction with the use of semantic mapping and probing questions would have an enhancing effect on the performance of the learners. It was anticipated that there would be a significant difference in the reading comprehension performance of students after the two methods of activating prior knowledge were used. The investigation ran along the following lines of inquiry.

- Does a lack of understanding of specific vocabulary items in the text impede the ability to comprehend text?
- 2. Can students' prior knowledge be activated to make learning more meaningful and the text more familiar?
- 3. Would the use of semantic mapping lead to an enhancement of comprehension?

## 1.2.3 Significance of the Study.

The acquisition of effective reading strategies is crucial to pre-university students because at tertiary level they are required to extract information from written texts. Many of these academic texts and reference materials are still in English. To gain access to the myriad forms of information texts in English, students in Malaysia need to possess a relatively good command of reading skills in English.

The Ministry of Education recognizes the need for students to read efficiently and in 1997 the English 914 paper was designed. The Malaysian Examination Board has also introduced the Malaysian University English Test (MUET) to bridge the gap between the 'Sijil Peperiksaan Malaysia' (SPM) and the pre-university 'Sijil Tinggi Pelajaran Malaysia' (STPM) after an absence of an English paper for 17 years since 1982. Therefore, an investigation of an effective reading strategy such as semantic mapping was important as the

findings could provide guidelines and directions for educationists involved in helping preuniversity level students acquire the reading skills necessary for academic success.

### 1.2.4 Limitations of the Study

I would like to highlight that this study was conducted as part of the lesson objectives of each English class. The whole survey took about five weeks to investigate, plan, act, record findings, reflect and replan. The findings of this study point favourably to the concept that vocabulary teaching and use of semantic mapping as techniques to improve reading comprehension, however, it is limited to the observation of one practitioner and four students. The sample was small because of the specific focus of the study. The findings showed some improvement but this did not represent the whole population of students taking the paper. Additional research work would be needed to replicate the study. It should also be pointed out that since the sample involved research on reading comprehension the findings may have limited applicability in terms of other aspects or area of the language.