THE EFFECTS OF USING SEMANTIC MAP STRATEGY ON
READING COMPREHENSION FOR LOWER SECONDARY
LEARNERS

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requirements for the award of the degree of
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ABSTRACT

The aim of this study is to examine the effectiveness of semantic mapping strategy on reading comprehension for lower secondary learners. The research question that are explored in this study are; (1) Does semantic map have effects on reading comprehension? (2) What are the students’ perceptions towards semantic map in reading comprehension? The participants of this study were 10 form two students. Test 1 and Test 2 were used in this study. Research question 1 was analyzed by the Test 1 and Test 2 and these tests acted as primary source of the data which measure the effectiveness of the semantic map in reading comprehension. Test 1 was conducted before students were exposed to the semantic map. In the application session semantic map technique was implemented for two weeks. After that, Test 2 was conducted to examine the effectiveness and improvement of reading comprehension. The results of this study showed that there was a strong connection between semantic mapping and reading comprehension. The mean scores were used to analyze the effectiveness. The scores of Test 2 were higher than Test 1 and this indicates that the use of semantic mapping in reading comprehension is certainly more effective. In order to analyze research question 2, this study also carried out an interview session and researcher found out that students were enjoyed and learnt better using this technique. In conclusion, this study has revealed that, semantic mapping strategy can be used in reading comprehension. This strategy enhances and encourages students’ comprehension skill.
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CHAPTER 1

INTRODUCTION

Reading leads into an ever-expanding multidimensional world and it is through reading that the reader is able to extend his knowledge. The importance of reading comprehension has increasingly been recognized and benefits many parties in learning different domains. It was the intention of this project to investigate the effectiveness of semantic mapping technique in reading comprehension. In this chapter, the areas covered are, the background of the study, statement of problems, objectives of the study, research questions, significance of the study, limitation of the study and definition of terms.

1.1 Background of the problem
The researcher intends to investigate semantic mapping technique in reading comprehension because of the several reasons. At present, reading is a compulsory skill to be taught in all primary and secondary schools in Malaysia. The learning outcomes for English language curriculum for secondary schools and primary schools are based on the four language skills of listening, speaking, reading and writing. These four skills are the core of the curriculum. Learners use these skills to communicate with people, obtain information and present information, respond to the literary texts, and express themselves creatively. Thus, reading as one of four skills has its own important role in syllabus specification. As stated in English Language Curriculum, (2000) the skill of reading a variety of texts will enable learners to adjust the speed and style of their reading to suit the purpose and extract both implicit and explicit meaning from the text. Therefore, reading skill is still one of the most important aspects to be taught in school in order to enable the learners to grasp the meaning from the reading text.

Moreover, learners are expected to read difficult texts as they move to higher forms. The texts are found more complex and difficult to them to comprehend as they move to one level to another level. Most of the texts require learners’ thought and individual construction of meaning. In these days, the text contains various genres and subject matters which challenge the reader to understand the text. The texts that are read by the learners at the presents are more diverse than those used in the old days or several decades ago. Formerly, reading skills was taught for the instructional purpose and learners are only exposed to narrative, expository and descriptive genres. Whereas, these days students are expected to read a variety of text which differ in content, and readability. These varieties of text make the learners much more difficult to read and comprehend the text. On this premise, it is important to the learners to move beyond the text and use semantic map strategy when they engage with the longer and more complicated reading texts.
Apart from that, another reason to examine the effectiveness of semantic map strategy and reading comprehension is that reading remains as one of the skills that tests in examination and its interpret students performance. Most of students are having problem in acquiring reading. It is important for students to use some useful strategy when dealing with reading comprehension. In reading comprehension students are good enough in factual comprehension. However this is the lowest level of understanding because these students just have to reproduce the words of the writer in answering the questions in examination. Since the students are no longer at primary level they are required to have a higher order of reading comprehension skills like inference and critical reading for their examination or assessment. Most of the students are not good at inferring meaning because to get inferences from the reading, the reader must read to get to implied meaning. Thus, exposing semantic map in reading comprehension will give some insight in students’ performance in reading skill during examination.

1.2 Statement of problem

Mastropieri & Scruggs, 1997; Smith & Friend, (1986) stated that reading difficulties are the major problem for many students with learning difficulties. Most of the learners were facing problem due to the lack of awareness in reading skills. They were unable to understand the complex reading text. In this sense, many studies have been carried out to understand the problems students faced during their reading process. According to Arikunto (2008) many of language teachers reported that their students dislike reading.

Furthermore, David Hayes, (1989) in his research found that some teachers who have just graduated from training Colleges and teachers who have been working in schools for many years tend to follow the teachers’ guide books slavishly and dependent on being told what to do by the head teachers, school supervisors and
inspectors. Their teaching style is heavily teacher-centered and many of the activities in their classrooms are focused on rote learning. Their classroom environment is dull and unstimulating, it is not a place where children are likely to take pleasure in learning. This teaching style is not appropriate for teaching reading. Real learning takes place when the pupils in a natural setting take part in activities that require them to use what they have learnt. In this sense, it is appropriate for the teachers to be well adequate with the teaching strategies and methodology. Teachers must know which strategy is suited for their students’ level.

Basically, students are expected to read a variety of reading texts in the schools but fewer teachers only provide adequate explanation on strategic skill that needed to complete the task (Paris & Oka, 1986). Besides that, in an observational study, Durkin (1989) found that very little classroom time, less than 1% was spent on instruction of reading comprehension. Durkin (1981) revealed that teacher’s guidebooks from basal programs did not provide recommendation for teachers in how to go about teaching children reading strategies.

There are several reasons why students were weak on reading. In order to quench the curiosity about the factors, which causes the weaknesses on reading skills among students, many interested party had conducted a research on this area. Among of them are Arbaiyah & Zaidah (2001) who found that students are less efficient in reading because they lack independent reading. These students always have problem in reading. It is anticipated them to read less compare to the students who have skill in reading. In other words, if the students read rarely, they might have problem in acquiring vocabulary. Secondly, students are unable to use context clues to guess the word meaning. If the students come across with the difficult words, they tend to ignore the words and its make them discouraged and stop reading. The last factor is that they do not converse in English outside the classroom; as a result they don’t have the ability to express their idea in English.
1.3 Objectives of the study

Since the aim of this research was to examine the effectiveness of semantic mapping strategy in reading comprehension, the objectives of this study were as follow:

1. To identify the effects of semantic map in reading comprehension.

2. To identify students perception of using semantic map in reading comprehension.

1.4 Research Questions

Principally, this study aimed to answer the following questions:

(i) Does semantic map have effects on reading comprehension?

(ii) What are the students’ perceptions towards semantic map in reading comprehension?

1.5 Significance of the study

This research attempted to examine whether the semantic map will facilitate reading comprehension. Reading will be the most important aspect in acquiring the
target language. Reading comprehension will be the premier skill in the English Curriculum in schools. Semantic map strategy will improve students reading comprehension. Raymond C. Jones, (2006) cited that students use semantic map in reading to clarify the confusing points

Therefore, the result of this study in semantic mapping strategy will improve students comprehension skills. It will help the readers to verify the strategy to be used and the adjustment can be made when students comprehend the text. In addition, this strategy would help teachers to enhance their teaching methodology and increase students performance in reading comprehension. The feedback would provide some insights to the English teacher and hence enable them to identify some feasible steps to improve their vocabulary instruction.

This study would benefit several parties. First and for most, the study can be used as a reference for the ‘Panitia Bahasa Inggeris’ in this school. Other than that, this study would also help the ‘Panitia Bahasa Inggeris’ in planning and organizing activities especially which concern enhancing students reading comprehension skills. Moreover, this study would be useful for authors especially those who wrote the textbook or reference book for primary and secondary students. The findings of this study will reveal students weaknesses on the reading comprehension skills and it enables the authors to design a suitable reading book for those Low Proficiency students. They also can design a better teacher course book to assist them in teaching reading for Low Proficiency students.

In sum, this study is significant because it helps arouse students understanding in reading text. Besides that, this study significantly contributes reading strategy and gives some insights to teachers and students. Developing learners technique might assists the learners effectiveness in reading process and it’s improve students reading comprehension Pressley, El-Dinary & Brown, (1998). Thus, understanding the circumstances of reading comprehension might give some useful development of students reading performance.
1.6 Limitation of the study

The following limitations need to be noted. The subjects of the study were taken from a secondary school in Kluang. In this study, the findings, interpretations of data are pertinent to the selected subjects only. No attempt in wider generalizations is made. The most crucial factor in this study is time constraint. Thus, only limited numbers of subjects were selected in this study. Consequently only limited data can be obtained.

1.7 Definition of terms

The following are the definitions of terms used in this study.

1.7.1 Semantic Map

Semantic map is known as a graphic representation which gives the main ideas of a certain topic and how it is connected (Raymond C. Jones, 2006). Concept maps are useful tools that help students learn about how they structure knowledge while supporting the process of knowledge construction or meta knowledge. According to (Taricani, & Ellen, 2000) semantic maps is a strategy for present the structure of main ideas visually and also the relationships between them.

1.7.2 Reading Comprehension
It refers to the capability to understand what is being read. Moreover, reading comprehension is an understanding of a written text or extracting the required ideas from it as efficiently as possible. Besides that, it also known as construction process as it anticipated all the criteria of the reading process. Reading also involves the recognition of the important elements of meaning in their essential relations including thoroughness in comprehension.

1.7.3 Strategy

Strategies are defined as learning methods, behaviour, problem solving or study skills which make learning more effective and efficient (Oxford and Crookall, 1989) as cited by Singhal (2001).

1.8 Conclusion

Overall, this chapter has introduced a study on semantic map in reading comprehension. This chapter discussed the background of the study, statement of problem, objectives of the study, research questions, significance of the study, limitation of the study, and definition of terms. The next chapter deals with the related literature review and studies.
CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter is presenting the relation between Semantic Maps and reading comprehension. Previous research which related to using Semantic Map in teaching learning are also included in this chapter.

2.2 What is Reading

Reading is crucial to learning and is applied across the school curriculum and content areas. It is also known as receptive language process. In addition, reading is also represented as psycholinguistic process whereby it is begin with linguistic surface representation encoded by a writer and ends with meaning which reader constructs. Thus, the writer encodes thought as language and the reader decodes language to thought.
Researchers have pondered the effects of the model and explained what happens when people read. Past researches in the reading process have come up separately with three models of reading such as Bottom-up, Top-down and interactive.

### 2.2.1 Bottom-up model

This model discusses that the person who reads constructs the text from the minimum unit to the maximum unit (letters to words to phrase to sentences, etc). Bottom-up theories suggest that reading is controlled by textual input; the reader plays a relatively passive role in the process Waves & Resnick, (1979). Strange, (1980) added that, the printed material provides more information than the reader.

The key feature of bottom-up approach is the phoneme-grapheme correspondence notions and the information-processing view of reconstructing an existing message. The process is assumed to require the processing of all graphemic information on the page. The most prototypic model of the uncompromising bottom-up approach is proposed by Gough (1972), which he calls one second of reading. Gough (1972) describes how the reader passes through a reading process in which the visual system scans the series of letters one by one. Through this process, the reader registers the characters in milliseconds and decodes them into phonemic units.

A second theory based on bottom-up processing is proposed by Laberge and Samuels (1974). This version incorporated more interactive processes in such a way that comprehension of particular parts of text influence subsequent mental processing. The model focused on the development and application of automaticity in reading skills applied in a linear manner. A distinction between automatic and control processing is assumed. As the processing of any macro-level reading skill
becomes automatic, all of the subskills associated with that macro-level skill also become automatic and place fewer demands on working memory.

The linear information processing approach of bottom-up models has a great deal of appeal to many researchers who are primarily interested in how reader reads rather than the reader comprehends. However, several researchers have focused their attention on the comprehension process itself, and have developed views that have been labeled as top-down approaches to reading.

### 2.2.2 Top-down model

According to this model, a text will be convey an enormous deal of awareness, expectations, assumptions, by the reader and its given a basic knowledge to acquire the vocabulary, readers will keep on read as long as the text confirms their expectation (Goodman, 1967). In addition, Hayes, (1991) argues that the readers prior knowledge and cognitive and linguistic abilities are important factors in constructing meaning from the printed page. He further explained that before or after any graphic input the reader develops predictions about the meaning of the printed page.

Accordance with this view Smith (1982;87) pointed out that “reading comprehension is more too prediction and its is achieved by making exploit on what we already know about the world by making use of the theory of the world in the head. This view is supported by Neate (1992) who believes that comprehension places much emphasis on the importance of prior knowledge to the reader understanding.

Smith (1994) also focused on the top-down approach of reading. A continually moderating factor in the process is the severe limit on the amount of
information the visual system can process into the reader’s short-term memory, and the interaction or trade-off between the visual and non-visual processes. Smith (1994) views prediction and use of context as factors that mediate the bottlenecks of memory during reading. He places extreme importance on background knowledge in a person’s construction of meaning during the processing of virtually any type of information, including print.

Smith sees reading as purposeful and selective where readers attend only to what is necessary to their current purposes. As such, reading is an active process based on comprehension and is anticipatory in nature. The implication is reading instruction should take place when comprehension of a text is possible, rather than focusing on isolated phoneme-grapheme correspondence activities and drills.

2.2.3 Interactive Model

This model discusses that these top-down and bottom-up processes are taking place at the same time. In this sense, different processes are thought to be responsible for providing information that is shared with other processes. Currently, most researchers and teachers have accepted some versions of interactive model of reading which acknowledge a great deal of communication between the differing bottom-up and top-down processes.

These interactive approaches allow explanations for many variables in the reading process. It reflects whether the interactive frameworks focus on the process of reading, or the product of the reader’s interaction with the idea in the text, or the reader’s background prior knowledge during comprehension (Grabe, 1991).

Basically top-down process is directed by the result of bottom-up process. Moreover interactive theorists believe that two processes occur almost
simultaneously. It is supported by Rumelhart (1977) who had developed the most widely cited interactive model, which suggest that, at least for skilled readers, top-down and bottom up processing occurs simultaneously.

2.2.4 Schema Theory

According to Rumelhart (1984) schema theory is concerned with knowledge, mainly about how it is presented and how the representation is used in certain ways. This theory used to explain how skilled readers make use of their own language in interaction with the printed text during the process of comprehending it.

Researchers have listed few variety of schemata; contents schema, formal schema and linguistic schema. In content schema it gives readers with a basic knowledge, and a basis for comparison. In addition to content schema, researchers have also identified formal schema, which more focus to the organizational forms and rhetorical structures of written text. Besides that, Linguistic schema is also including the decoding features that need to recognize words and see how they fit together in sentences.

2.3 Reading Comprehension

Comprehension should be the primary objectives of the reading process. It is also known as a difficult process to grasp the meaning of vocabulary or a series of words highlighted in oral or printed form. It includes not only the ability to decode words but also the awareness of their meaning. Furthermore, comprehension and decoding skills combine to allow an individual to make sense of a printed text.
Anderson and Pearson (1984) contented that the reader comprehends a text by actively constructing meaning internally from interacting with the materials that are read. Basically, comprehension involves a special kind of thinking process. Turner (1988) provides this description of thinking process on comprehension.

“Successful comprehension involves the reader discovering the meaning needed to achieve the particular purposes set for, or by, him. It may be finding a particular piece of information, solving a problem through reading, working to understand an idea, or following a set of directions” (1988:160)

In addition, once students are able to decode, formal instruction should be continued to make them understand what they had read. This will enhance students thinking and reading process. Thus, comprehension monitoring skilled and unskilled awareness is important to develop students reading skills. This is supported by, Paris & Jacobs (1984) who has provide this description of skilled and unskilled readers:

“Skilled readers often engage in deliberate activities that require planful thinking, flexible strategies, and periodic self-monitoring. They think about the topic, look forward and backward in the passage, and check their own understanding as they read. Beginning readers or poor readers do not recruit and use these skills. Indeed novice readers often seem oblivious to these strategies and the need to use them. (p.2083).

In sum, comprehension is an important aspect to develop students ability to read with understanding. Besides that, comprehension monitoring skill reader and unskill reader are crucial because students are able to engage appropriate methods to highlight their reading skills. Moreover, its give some insight to the instructors or teachers that how unskilled and skilled learners engaged with the reading skills. It is
important for teachers and instructors to know about reading processes and it will be discussed in the next sub topic.

2.3.1 Problems in reading comprehension

Reading ability is an important skill that needed by learners. Yet despite the specific need for this reading ability, there are few learners still unable to read efficiently in English language. Most of the students read text slavishly with less understanding. There are several factors why students were not able to improve their reading ability.

Jolly (1978) stated that learners can be read well once they have adequate knowledge in their first language. He highlighted that, students will comprehend easily when once they know how to transfer old skill- first language reading skill. He further explained that, most of the students fail to read adequately just because they do not apply their first language reading strategy. This view is supported by coady (1979)

“We have only recently come to realize that many students have very poor reading habits to transfer from their first language, and thus, in many cases, we must teach reading skills which should have been learned in first language instruction”. (p.12)

Moreover, Yorio (1971) stated that the reading problems of second language are due to largely imperfect knowledge of the language and native language interference in the reading process. According to him, the reading process is made considerably more difficult for the learner because of the new elements; knowledge of the native language, picking up graphic cues and relating them to syntactic, semantic
and phonological cues. He summarized that those elements as interference from native language and inadequate knowledge of the target language.

Furthermore, Clarke (1979) states “if the reading process is basically the same in all languages we would logically expect good native language readers to be good second language reader”. As the expertise mention above it is clear that the poor reading in second language is due to poor reading ability in the first language and also incorrect reading strategies. Thus learner would be encouraged to adopt successful reading strategies such as semantic map to infer or imply the meaning of the text.

2.3.2 A brief overview of research on reading processes

Venezky (1984) notes that research into reading processes can be traced back to cognitive psychologists James Cattell and Wilhelm Wundt in Leipzig in the late 1870s. However, reading research was traditionally focused on reading primarily as a vehicle for examining perceptual processes such as eye movement, field of vision, perceptual span, and word recognition. A great deal of such research was carried out between the 1880s and the 1910s.

However, soon after the publication of Huey’s pivotal text, Psychology and Pedagogy of Reading (1908), psychological research turned its focus to behaviorist explanatory theories, and little cognitive processing research was pursued for quite some time until the 1960s. Although some research did take place, it did not form a cohesive body of knowledge and as such did not reach the critical mass needed to push an academic discipline forward.

Venezky (1984) points out that the current emphasis on reading comprehension has only been of primary concern for thirty or forty years. He notes
that though the term appears in early reading literature, it was generally associated with teaching methodology or testing. In the 1960s, in part as a response to Chomsky’s critiques of Skinnerian psychology, attention to reading process research began to reemerge with studies addressing speed of word recognition and comprehension (Tulving and Gold, 1963). Some of the cognitive approaches mentioned by Beck and Carpenter, (1986) indicate a renewed emphasis on the reading process rather than procedure alone, with research into eye-fixation times, text structure processing, and word recognition speed.

Discussions of the relative importance and role played by visual word recognition, linguistic comprehension, comprehension processes, background knowledge, etc., cycle through time in a recursive fashion that thwarts clear statements that one view began at a particular time and ended at another. However, we can identify trends in the ways that reading has been viewed. These cyclic and models are yet another reason that second language reading researchers need to attend to developing issues in second language reading.

2.4 Description of Semantic Map

Semantic map can be described as a web like graphic display. Johnson & Pearson (1978) developed this semantic mapping technique. He stated that semantic map is graphic arrangement of words and it shows how new words and ideas related to each other with in text. Moreover, according to Sokmen, (1997) Semantic mapping generally refers to brainstorm associations which word has and then diagramming the results.

On this premise, Hague (1987) outlines the major steps to semantic mapping as below:
1 Write target topic on chalk board:
2 Have students brainstorm words related to topic
3 Write/list the words by categories in form of a map
4 Have the students provide labels for each category
5 Discuss the words on the semantic map:
6 Revise map after discussion

Basically semantic map can be used for the language skill such as reading and writing. It can be used for pre and post writing, for teaching of study skills and for link with reading and writing instruction.

2.5. Review of Related Research Literature

2.5.1 Local Research

Education Psychologist believes that the improvement of learning in school is achieved through the improvement of teaching quality. The most important factors in deciding learning outcomes from teaching strategy is how the strategy that have been used can help students in meaningful learning (Ausubel et. al. 1978) in (T. Subahan, 1999). Ivie and Stanley D, (1998) said that meaningful learning is important to quench higher order thinking skill. It enhance and improve students thinking skill and understand more ideas. In order to achieve meaningful learning, we need quality instrument. Among those instrument is semantic maps. An instrument which is used to construct and improving someone conceptual structure.

T. Subahanan, (1999) highlighted the effectiveness of “mind mapping” technique He conducted this study to 94 students. He teaches mathematics to the
particular students under the Australian Matriculation Programmed. He used pre and post test to measure the effectiveness of mind map. His study reveal that the experimental group perform better than control group. The mean score for experimental group was (X = 48.18) whereas the mean score for the controlled group was (X = 46.32). According to Starr and Krajcik, (1990) they have been using concept map as an instrument in science curriculum development. They believe concept map development activity for science curriculum causes teachers to involve actively in the process of development and implementation. However, they said that building a concepts map should be repeated several times in order to produce a perfect concept map.

Kamisah, T. Subahan, & Mohd., (2004) have conducted a research to examined the effects of using concept mapping and Vee Diagram in the teaching of chemistry in enhancing of attitude of students. The study found that the main effect of experimental groups in improving students’ attitude towards chemistry. Overall, the attitude change in the experimental group is significantly higher as compared to control group across all ability level. The main implication of their study is that the use of concept mapping in teaching strategy can help improve students’ attitude towards Chemistry, particularly in the high ability group.

Fatimah, (2002) stated that a research have been conducted by Zaleha, (1993), proved that there is a positive relation between using graphic organizers and students thinking skills. She also stated that Zaleha, (1993) who conducted a research to form one students for Geography subject by using a networking technique, has found that it was an effective technique to facilitate students thinking skills. Besides that, she also mentioned that Baljit, (1999) has been conducted a research to find out whether there is a significance relation between using graphic organizer in teaching History and students performance. From the study, he found out that those intermediate and LEP students in form six in experimental group have shown a better result than those intermediate and LEP students in control group which exposed to lecturing technique.
Mathialagan, J (1990) conducted a study on teaching composition writing through semantic map. He highlighted that; semantic map is an effective diagnostic tool to write an essay. Moreover, this study reveals that, semantic mapping can be used as a prewriting strategy and its can be used in by the following way:

1. Teacher gives some words to the class.
2. Student need to come in front with a word.
3. The classroom discussion occur and there is 2 way communication
4. Students spell correctly the words the teacher wrote in the blackboard
5. Elementary students were able to pronounce and spell
6. At the end, students become excited and able to construct sentence and able to put word correctly, like a jig saw puzzle.
7. Students participate eagerly and take part actively in the session because they encourage to give words and sentences.

The study has indicated that, semantic mapping technique will reduce anxiety and improve lower secondary learners’ acquisition. The main problems like lack of ideas can be overcome through this technique and the lesson can be carried out more lively and adventurous.

2.5.2 Oversea Research

According to Ausubel and Fitzgerald (1962) excellent students are those who have better and clear understanding. They gain a little profit by this semantic map whereas slow learners learn better through this semantic map. Its benefit them in many way in order to gain the ideas and structures of the sentences.
Seidel, Perencevich and Kett (2005:57) stated that 10 studies were carried out using concept maps as instruction tools Horton et al. (1993) and it reveals that the effect size was observed for student-prepared maps were similar, the greatest effect size was observed for student-constructed maps in which students identified key terms. Since students must specify the hierarchical relationships and create valid links among concepts, it is a significant predictor of text comprehension and conceptual learning from text.

They also added that Starr and Krajcik (1990) highlighted that educators can use graphic and semantic organizers to enrich activities and aided the learner’s to the conceptual development. The semantic mapping process itself is an opportunity for teachers to consider the importance of the individual concept and the organization of the ideas.

In their research paper Baker, Simmons and Kameenui, stated that there were research conducted which support the effectiveness of using semantic maps in teaching vocabulary. Firstly, Bos and Anders (1990) examine the effects of interactive vocabulary instructional techniques with a traditional vocabulary acquisition. The subjects were 61 of LD students. Students who are in the semantic mapping group performed better than the students who are in the traditional method. Its clearly indicate the students performed better using semantic map.

Moreover, Margosein, Pascarella and Pflaum (1982) and Vogt (1983) make a confirmation in their research that semantic map was a better technique on vocabulary acquisition. It is further explained by them that, semantic map help the students to relate their background knowledge to the new words and to see the conceptual connection among words

According to them also, implementation of semantic maps brings huge developments in reading comprehension. Baker, Simmons and Kameenui said,
(Sinatra, Berg, and Dunn, 1985) stated, that the use of two types of semantic maps, developed reading comprehension marks for three students with LD on 11 of 15 comparisons. The researchers, suggested their findings supported the theory that students with LD have no difficulty in using semantic map to organize and to recall the verbal information.

Gardil and Jitendra (1999) examined the effects of story mapping/semantic mapping procedure on students with learning disabilities. The result indicates that all six students in the study had improved reading comprehension scores, with a mean increase of 56% from baseline to generalization. The semantic map was used to engage the students to recognize explicit and inferred information. In order to maintain the consistency of instructional, explicit texts were used. It is followed by reading the passages and completing the story map/semantic map. Significantly, it shows improvement in students reading comprehension skills.

Another study conducted by Boulineau et.al (2004) on semantic mapping and story mapping strategy in reading comprehension. The learners were required to read and complete the web organizer. Some questions were asked by teacher during baseline, and it is followed by intervention session. In this session teacher gave instruction on completion of the maps. During the final base students continue to use maps without the instruction from the teacher. This study showed that all students performed better in the intervention phase and were able to continue to achieve at high levels.

Meanwhile, L.K.Taylor et al. (2002) used story mapping in comparing the efficacy of three conditions on the literal and inferential reading comprehension of five elementary students in third through sixth grade. The three conditions were the use of story mapping/semantic mapping, a self questioning strategy and no intervention. The results indicated that students score higher in story mapping and self questioning strategy compared than no intervention conditions.
Furthermore, Onachukwu et.al (2007) examines the effects of a story mapping procedure on the reading comprehension skill of eight grade students at a middle school. The researcher used multiple baseline design. There were two condition used in this study; baseline and intervention. The result indicated that the use of the story mapping procedure improved and enhanced the students reading comprehension skills.

Buzan (1991) claims that the mind map is kind of technique to note taking method. Buzan also highlighted, mind map used both left and right cortical skill. It helps the learner to organize and get the ideas easily from the mind map. Mind map which is demonstrates by Buzan really enhances students thinking skills.

2.5 Conclusion

Based on the research that has been conducted, it shows those semantic maps are being used in many subject namely, Mathematic, Science, Chemistry, History and English Reading Comprehension. From these studies, researchers prove that there are positive relation between semantic map technique and reading comprehension.
CHAPTER 3

METHODOLOGY

3.1 Introduction

This chapter looks into the research design, the research procedure, the research framework, research instrumentation and method of data analysis. This chapter explained how the research was conducted to gather the relevant data to answer the research objectives and research questions. A number of steps were taken to maintain the validity and reliability of this research. The methodology used in this study was qualitative and quantitative. There were number of methods that can be used to indicate reliability and validity. The main aim of this qualitative and quantitative study was to examine the effectiveness of semantic map in reading comprehension.

3.2 Research Design

This study used qualitative and quantitative method to find out the effects of reading comprehension using semantic map. In other words the aim of this study
was to find out whether the use of semantic map in reading comprehension would help to improve students’ performance. This study also aims to identify students’ perception towards this technique.

In this study, Test 1 (reading comprehension) was given to the respondents. The following week, students were exposed to the semantic map. It is important to take note that the treatments were conducted twice a week after the school ended at 1.50 – 2.30pm with consent and permission from parents and school’s administration. Moreover, the treatments were conducted for two weeks consecutively, in which each treatment took two periods where each period was equivalent to approximately forty minutes. In the following week, directly after treatments, a Test 2 was administered to the respondents. Lastly, respondents were interviewed. The data from this study were analyzed and findings were reported.

3.3 Research setting

This research was conducted in a secondary school in Kluang. The researcher is working in the particular school and teaching form 2 students. Therefore, it will be more convenient for the researcher to carry out the research since the researcher has better understanding and knowledge of the students’ proficiency level in the English language. As a result, the researcher was able to monitor the progress of the students throughout the whole process of the research effectively.
3.4 Research Sample

The respondents that were involved in this research were taken from Form Two class. The levels of the students English Language Proficiency were same. This was based on their English Language achievement in their previous examination. The students were not received special treatment at the beginning. Treatments were given after administer Test 1. The samples were around 10 students. Limited numbers of students were chosen because of the time constraint. These 10 students were selected based on their marks during their final year examination in the previous year (form 1). Students who scored within 40% -60% and received grade C and D in the final year examination were chosen. There were two assumptions of selecting students made based on the final year examination.

1) The students who scored between 40%-60% in the examination demonstrated that they were in the intermediate level and this group of learners’ level of English language proficiency still can be improved.

2) The students who scored less than 40% were not chosen because it might be assumed that they could have language difficulty in teaching and learning process or assumed that they might have issue relating to health or slow learner. The main reasons of not choosing these type students are to avoid any problem during implementation of the semantic technique. Moreover, the purpose of this study is to find the effects of using semantic map in reading comprehension and not to test those who do not have basic knowledge or skill in English language.
3.5 **Instrumentation**

In this research, researcher used two methods in collecting data that were Test 1 and Test 2, and Interview.

3.5.1 **Reading comprehension (Test 1) and Reading Comprehension with semantic map (Test 2)**

The questions that used in these tests were same except in Test 2 respondents were aided by the semantic map. Otherwise the questions were same. Semantic map helps respondents to focus on text structure and play role as a tool to examine and show the relationships in the text. The question papers were divided into two sections which carried 50 marks. Students were given 40 minutes to complete the test.

Section 1 – A. Fill up the semantic map,

Section 2 – B. Comprehension Question

The purposes of these tests were to measure the achievement of the students constituting the sample. These both tests; i.e. the Test 1 and Test 2 were constructed by the researcher after a thorough review on reading comprehension. Both tests consist of the same questions. The test was divided by two sections. All the marks were converted to 100%.
3.5.2 Interview

The interview that was used in this study was in the form of semi-structured interview questions. This interview questions were designed to identify students’ perception on using semantic map strategy in reading comprehension. The interview was conducted face to face. A student interview, between teacher and individual students perceive valuable information about what the students think and how they feel about reading comprehension through semantic map. According to (Vacca et al, 1987) interview provide rich source of information. Interviews strengthen information from other informal measures of student performance. In addition, interviews may reveal information that cannot be gleaned from more traditional methods.
3.6 Research Procedure

For implementing this research, researcher has designed a procedure as a guide in implementing this study. Below is the procedure for this research:

Figure 3.1 Research procedure

CONDUCTING TEST 1

TREATMENT (SEMANTIC MAPPING)

CONDUCTING TEST 2

Calculating and analyzing the tests scores

Concluding the results of the test

Interview the 10 students
Table 3.1: Implementation of semantic map

<table>
<thead>
<tr>
<th>Date</th>
<th>Period</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7th, 2011</td>
<td>40 minutes</td>
<td>Test 1 (Reading Comprehension)</td>
</tr>
<tr>
<td>14</td>
<td>40 minutes</td>
<td>Implementation of semantic map</td>
</tr>
<tr>
<td>17</td>
<td>40 minutes</td>
<td>Implementation of semantic map</td>
</tr>
<tr>
<td>21st</td>
<td>40 minutes</td>
<td>Implementation of semantic map</td>
</tr>
<tr>
<td>24th</td>
<td>40 minutes</td>
<td>Implementation of semantic map</td>
</tr>
<tr>
<td>28th</td>
<td>40 minutes</td>
<td>Test 2 (Reading comprehension with semantic map)</td>
</tr>
</tbody>
</table>

On the first day, researcher will conducted Test 1 to the selected 10 students. On the second, third and forth day researcher had given special treatment for these students. In other words, these students were exposed to semantic map technique in reading comprehension skills.

Before administered Test 1 the researcher used traditional method to teaching reading comprehension. Researcher asked the students to read the text and answer the questions. There is no technique applied in this period. These students were examined by the researcher. Few reading text were used in this research were selected from text book and work book. The main basis for selecting the reading
material from text book and work book is to identify the effectiveness of learning reading comprehension skills within their level. The researcher intends to use few reading text only because it is equivalent to the learners’ level since all of them are from same proficiency level. The lesson was conducted in a language lab. After the researcher, conducted the Test 1 students were exposed to the semantic map. Researcher had used semantic map to organize/get the idea from the text. These treatments were carried out by the same researcher to maintain the basis of the research.

The treatments for these students were carried for four days for 40 minutes per lesson. During this period, students were exposed to the semantic map. Reading comprehension task aided by semantic map. Firstly, the respondents were required to read the reading comprehension. Then, they were given semantic map with empty boxes and only one main idea will be highlighted. Next, the respondents were required to fill up the rest of the empty boxes. Then, they were asked to answer the reading comprehension questions. On the last day, the researcher conducted Test 2.

After Test 1 and Test 2 administered, the respondents were interviewed by the researcher. Eight questions were given to them to identify their perceptions on semantic map in reading comprehension.

3.7 Data analysis

Test 1 and Test 2 were analysed by using descriptive statistic. Descriptive statistic is used to simplify the presentation of data and organization. It is used to show the difference between the mean score of Test 1 and Test 2. The marks of the Test 1 and Test 2 were also statistically described using the bar chart presentation.
Meanwhile the interview of students’ perception was analysed by reporting their comments, feedback and perception. The researcher will analysed each question of interview in details. Respondents’ comments and perceptions will be reported and analysed according to the interview questions.

3.8 Conclusion

This chapter has introduced the research design, the research setting, the sample and sampling. In addition, the research procedure has been presented. The next chapter is to analyze and interpret the data collected in order to answer the research questions of this quantitative and qualitative study.
CHAPTER 4

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter discusses the outcomes of the study. The main objective of this chapter is to analyze and interpret the data collected. The findings are presented in relation to the research question as stated in chapter 1. The Test 1 and Test 2 were the primary source of the data which measure the effectiveness of the semantic map in reading comprehension meanwhile the interview acted as secondary data which clarify students’ perception towards semantic map.

4.2 Findings

In this chapter the effect of semantic map was identify through the comparison which is made between the Test 1 and Test 2. The first research question; Does semantic map has an effect in reading comprehension was measured and analyzed by the Test 1 and Test 2. Meanwhile the second research question; What are the students perception towards semantic map in reading comprehension
was analyzed by an informal interview. In order to establish the participation perception and opinion towards semantic map 10 students were interviewed.

4.2.1 Research Question 1: Does semantic map has an effect in reading comprehension?

As mentioned above, the primary data of this research was collected and analyzed through Test 1 (reading comprehension) and Test 2 (reading comprehension with semantic map). The findings of these Tests 1 and 2 were summarized in the table below.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Test 1 (reading comprehension)</th>
<th>Test 2 (reading comprehension through semantic map)</th>
<th>Margin of Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>45</td>
<td>55</td>
<td>10</td>
</tr>
<tr>
<td>Student 2</td>
<td>40</td>
<td>55</td>
<td>10</td>
</tr>
<tr>
<td>Student 3</td>
<td>55</td>
<td>60</td>
<td>5</td>
</tr>
<tr>
<td>Student 4</td>
<td>45</td>
<td>55</td>
<td>10</td>
</tr>
<tr>
<td>Student 5</td>
<td>40</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>Student 6</td>
<td>60</td>
<td>75</td>
<td>5</td>
</tr>
<tr>
<td>Student 7</td>
<td>50</td>
<td>55</td>
<td>5</td>
</tr>
<tr>
<td>Student 8</td>
<td>65</td>
<td>80</td>
<td>15</td>
</tr>
<tr>
<td>Student 9</td>
<td>60</td>
<td>75</td>
<td>15</td>
</tr>
<tr>
<td>Student 10</td>
<td>55</td>
<td>60</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 4.1 shows result of Test 1 and Test 2. Test 1 was conducted before students were exposed to the semantic map. In Test 1 students were required to
answer questions on reading comprehension. In this phase students were not exposed to any technique. They answered the reading comprehension without prior training in using any strategies. In this phase they were required to read the text and answer the questions.

After administering Test 1, the researcher analyzed the results and found that students performed satisfactorily level. Their average score is C and the higher mark obtained was 65. Then, the researcher implements semantic map technique to the 10 students.

The researcher exposed the group of the students to the semantic map technique. Firstly, students were asked to read the passage, after that, they were required to fill up the semantic map before attempting the reading comprehension questions. By doing this, students could easily understand what they were reading and how to answer the questions. The students were exposed to this technique for two weeks. After that, Test 2 was conducted. In this Test 2, the students were asked to answer the reading comprehension question with the help of semantic map.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test 1</td>
<td>10</td>
<td>40</td>
<td>65</td>
<td>51.50</td>
<td>8.835</td>
</tr>
<tr>
<td>Test 2</td>
<td>10</td>
<td>50</td>
<td>80</td>
<td>62.00</td>
<td>10.593</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2 : Descriptive Statistics

Descriptive statistics is used to simplify the organization and presentation of data. In this study the researcher intended to use descriptive statistic to organize the score that has been obtained into some comprehensible form so that any trends in the data can be seen easily and communicated to others. Descriptive statistics were used as the graphical representation. Comparisons of the two tests were statically described using the bar chart presentation.
The Table 4.2 shows the minimum and maximum scores that were obtained in Test 1 and Test 2. The minimum scores that obtained in Test 1 was 40 and Test 2, was 50. The maximum scores that obtained by respondents in Test 1 was 65 and Test 2 was 80. The mean score of the Test 1 was 51.50 whereas the mean scores of the Test 2 was 62.00. The standard deviation for Test 1 is 8.835 and Test 2 was 10.593. This results show that Test 2 has a greater value than Test 1, indicating in better performance of students in reading comprehension after the semantic mapping treatment.

Table 4.3 : Frequencies

<table>
<thead>
<tr>
<th></th>
<th>Test 1</th>
<th>Test 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>N Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>51.50</td>
<td>62.00</td>
</tr>
<tr>
<td>Median</td>
<td>52.50</td>
<td>57.50</td>
</tr>
<tr>
<td>Mode</td>
<td>40(a)</td>
<td>55</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>8.835</td>
<td>10.593</td>
</tr>
<tr>
<td>Minimum</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Maximum</td>
<td>65</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 4.3 shows the scores of mean, median and mode. It clearly indicates that this Test 2 has greater value than Test 1. The maximum marks obtained by the respondents in Test 2 was 80 and minimum marks that obtained in Test 2 was 50.
Table 4.4 : Frequency Table (Test 1 and Test 2)

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>40</td>
<td>2</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>2</td>
<td>20.0</td>
<td>40.0</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>1</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>2</td>
<td>20.0</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>2</td>
<td>20.0</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>1</td>
<td>10.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Test 2

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>50</td>
<td>1</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td></td>
<td>55</td>
<td>4</td>
<td>40.0</td>
<td>50.0</td>
</tr>
<tr>
<td></td>
<td>60</td>
<td>2</td>
<td>20.0</td>
<td>70.0</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>2</td>
<td>20.0</td>
<td>90.0</td>
</tr>
<tr>
<td></td>
<td>80</td>
<td>1</td>
<td>10.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 interpreted the frequency of the marks obtained by respondents. In Test 2 four respondents obtained same marks which is 55, whereas in Test 1 most of the respondents have the same frequency with the other respondents. Its shows that their levels are similar with one other.

Findings of the Test 2 shows some improvement. It clearly indicates the effectiveness of semantic map in reading comprehension. Thus, semantic map assisted respondents to see the information clearly. Moreover it helps the respondents to distinguish the relationship, understand the organization, connect ideas, and make abstract ideas concrete. In other words, respondents were directly taught to represent their thinking and comprehension through semantic map.
Figure 4.1 Bar Chart

Comparison between Test 1 and Test 2

Figure 4.1 clearly shows the difference between Test 1 and Test 2. As mentioned above Test 1 represents reading comprehension without any technique and Test 2 represents reading comprehension through semantic map. Category (X) axis represents students meanwhile value (Y) axis represents marks obtained by students in Test 1 and Test 2. Overall, the 10 students scored well in Test 2. There was an improvement in Test 2 compared Tests 1.
4.2.1.1 Analysis of the scores that obtained by the respondents

Student 1

The score obtained by Student 1 in Test 1 was 45 marks meanwhile in Test 2 the respondent managed to obtain 55 marks. The margin of improvement was 10. In the Test 1 the particular respondent scored less in the aspect of identifying the main idea of the reading comprehension. This respondent failed to understand the gist of the passage and this lead the respondents’ failure to answer the question. In the Test 2 the respondents obtained 55 marks. It shows that semantic mapping has helped the respondent to answer the questions very well.

Student 2

Student 2 obtained 40 marks in the Test 1 and 55 marks in the Test 2. The margin of improvement in Test 2 was 15 marks. The respondent scored less in Test 1 because he failed to understand the relation and organization of the text. Then, the respondent was exposed to the semantic map in reading comprehension for two weeks. The second Test was carried out and the respondent scored more than the previous Test. It clearly indicates that the respondent was able to monitor his attention, concentration and effectiveness in reading comprehension and he able to organize the text well.

Student 3

This respondent shows some improvement slightly in the Test 2 and able to gain 60 marks. The marks has increased in Test 2 compared Test 1. In the Test 1 the respondent was able to get 55 marks only. He shows some improvement in the part
of organization and connection of ideas and able to connect the ideas. It is revealed that the respondent was able to show some improvement after the implementing of the semantic map technique. This technique has helped the respondent to develop a deeper understanding and able to highlight the important points.

Student 4

This particular respondent has shown some improvement in Test 2 just like the other respondents. This respondent managed to achieve 55 marks in the Test 2 compared to 45 marks in Test 1. She managed to improve her marks in the aspect of paying attention to supporting cues. Moreover, the implementation of the semantic map helped the respondent to identify the details and supporting cues of the passage. Once the respondent was able to complete the semantic map with the important details, next it will be easier for her to answer the reading comprehension questions.

Student 5

In the first test the respondent managed to gain 40 marks and the marks has been improved in Test 2. The margin of improvement is 10 marks which means in the second Test the respondent managed to get 50 marks. Overall the respondent has improved in Test 2 after the implementation of semantic map. It is clearly can be seen in the Test 2 whereby the students grasp the knowledge to organize and constructing the ideas from the passage. It has proved that the semantic map has helped them to organize the ideas.
**Student 6**

The score that obtained by S6 in Test 1 was 60 marks and in Test 2 the respondent managed to improve the marks to 75. The margin of improvement was 15 marks. The respondent shows some increase in the aspect of organizing ideas logically and functionally. Besides that, it can also be seen clearly that the respondent shows some interest and motivating when answering the second test using semantic map. It is can be concluded that the stronger the participation interest is the greater their comprehension.

**Student 7**

This respondent has improved slightly in the second test. The respondent managed to get 55 marks compared to 50 marks in the first test. The margin of the improvement was 5 marks. The respondent has improved slightly in organizing ideas and developing understanding to review some important points. It indicates that semantic map has helped the respondent to score higher in the Test 2. Moreover, the respondent also shows some interest when answering Test 2.

**Student 8**

This respondent shows greater development in Test 2. The respondents achieved 80 marks in the Test 2 compared to 65 marks in the Test 1. The margin of improvement was 15 marks. The researcher analyzed the respondent test paper and noticed that semantic map has helped him reinforces his understanding and thinking skill. Furthermore, the respondent tries to anticipate the reading comprehension and predict the ideas using the semantic map. Therefore, it is important to implement
semantic map technique in order to increase students’ performance in reading comprehension task.

**Student 9**

This respondent achieved 60 marks in Test 1 and 75 marks in Test 2. The margin of improvement was 15 marks. The respondent shows greater development in Test 2. Semantic map has helped him to improve the reading comprehension skills. He knows the structure of paragraph and how to construct as well. The semantic map has given an overview to her by adding the important details in the network. It also enhances respondent’s deeper understanding.

**Student 10**

In Test 1 the respondent scored 55 marks and 60 marks in the Test 2. The margin of improvement was 5 marks. The respondent improves slightly in the Test 2. He shows some improvement in organizing and sequencing ideas. Although the improvement is very little semantic map has helped the respondent in organizing the ideas and develop thinking skill and reinforce deeper understanding. Once the respondents can organize the ideas in semantic map accurately, it will help them to answer the reading comprehension question correctly.

**4.2.1.2 Summary of the tests findings**

The first research question of this study aimed to investigate the effects of semantic map in reading comprehension. These tests finding has answered the first research question. It is revealed that semantic map in an effective strategy and it has
improved students comprehension skill. So, the researcher concluded that semantic map is an effective technique in reading comprehension. Overall, the 10 respondents show some improvement in Test 2. The respondents achieved better results once the reading comprehension was assisted by semantic map technique.

Semantic map has helped the respondents to organize their ideas logically and functionally. Moreover, it helped them to construct paragraphs that have a beginning, middle and ending. Semantic map helped them to give an overview about the particular reading comprehension that they are dealing with.

In addition to this, semantic map also enhanced respondents thinking skills and reinforced their deeper understanding. They managed to think and understand the reading task. Once they understand the reading comprehension it will helped them to answer the reading comprehension correctly and accurately.

Besides that, semantic map also creates interest and motivates the respondents. As mentioned above the stronger the students interest is the greater their comprehension would be. Reading comprehension has been fun and interesting through the implementation of the semantic map. The semantic organizer guides the respondents to find the answer for the particular reading comprehension.

The systematic reading technique such as semantic map has increased the respondents’ awareness and concentration in reading comprehension. Moreover, semantic map helped them to recognize the main ideas and review important points.

These tests findings clearly indicate the effectiveness of the semantic map in reading comprehension. All respondents show improvement in Test 2 which was
aided by semantic map. Thus, it is important to use this technique when deal with any reading comprehension task.

4.2.2 Research Question 2: What are the students’ perceptions towards semantic map in reading comprehension?

The secondary data of this study was collected through an informal interview. This interview was carried out to clarify students’ perception on semantic map. The researcher interviewed 10 students to obtain the necessary data. Basically the 10 students comprised those who achieved high marks and low marks in the test. The interview was conducted after the administration of Test 2 and obtains the results. Each student was interviewed for 5 to 10 minutes approximately.

Some of the students faced difficulty to speak in the target language. They were permitted to speak in their mother tongue in order to get the necessary results. Few selected excerpts of interview were highlighted for the analysis purposes. However, other’s respondent perceptions were sum up by the researcher.
**Question 1:** Does semantic map help you to find the ideas from the reading text?

All participants admitted that semantic map has helped them to get the ideas easily from the text. Besides that, the participants mentioned that they can retrieve the ideas and put them in words. In contrast, before implementing the semantic map technique they revealed that it is very hard for them to get the ideas from the text. They agreed that semantic map has assisted them to get ideas easily and point out that the reading comprehension was no longer difficult for them.

**Table 4.5 Students view on finding ideas from reading text**

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 2</td>
<td>“Semantic map helped me in getting idea”</td>
</tr>
<tr>
<td>Student 5</td>
<td>‘Yes teacher…. It make me get the idea faster”</td>
</tr>
<tr>
<td>Student 6</td>
<td>‘haaa…..yup… easy to get the idea from this map and able to answer the reading comprehension</td>
</tr>
</tbody>
</table>

The views of these respondents has been supported by Pehrsson R. S. & Denner P. R (1989) stating that semantic organizers seem to be helpful for students who have difficulty in learning. These researchers also highlighted that many youngster who have not been successful with traditional approaches have been able to demonstrate greater advances when they have applied semantic organizer to their study. It is clearly proven that, semantic map is a useful tool for learners.
Question 2: How was the learning process during the implementation of this new technique?

All the respondents acknowledged that the learning process was very meaningful and interesting. They commented that semantic map is a useful method. Moreover, semantic map assisted them to get the main ideas from the reading comprehension. They also highlighted that the learning process was fun and attractive as they were required to write the answer in the boxes that provided. It was unusual for them and they enjoyed doing it. Furthermore this method is different from the conventional method. Indeed, helped them to be creative to identifying the answers. On top of that, this semantic map enabled them to complete the network as the map was presented in organized structure.

Table 4.6 How was the learning process using semantic mapping?

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 1</td>
<td>“it is fun teacher and the ideas are organized clearly”</td>
</tr>
<tr>
<td>Student 3</td>
<td>‘I enjoyed my lesson today’</td>
</tr>
<tr>
<td>Student 7</td>
<td>‘Teacher ….next time we do more exercises on this semantic map…. Hmmm…..because its nice’</td>
</tr>
</tbody>
</table>

Respondents were encouraged to attempt the reading comprehension when it’s organized correctly. If the text presents information in an organized structure, the students will acquire the lesson easily. It is supported by (Mandler & Johnson, 1977; Meyer, Brandt & Bluth, 1980; Stein & Glenn. 1979; Taylor, 1980) stating that learners able to uncover the top-level structure can organize ideas in ways that more or less match the pattern used to convey the information and as a result can grasp the subject more readily.
**Question 3**: Does semantic map improve your comprehension skills?

The weaker participants expressed that they were able to improve their comprehension skill through semantic map. They said that before this method was implemented they have no idea to organize their points. Obviously, they have difficulty to comprehend the text. Formerly, the reading comprehension questions were found difficult for them without the help of semantic map. It is difficult for them to find the relation between one paragraph to another and the cause effects of the text. This making them bored and demotivated to attempt the reading comprehension task. But once the semantic map technique was implemented in reading comprehension is no longer difficult for them.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Except of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 4</td>
<td>“yah…… I got more marks in Test 2”</td>
</tr>
<tr>
<td>Student 8</td>
<td>‘Yes teacher…. I can put words into sentences now”</td>
</tr>
<tr>
<td>Student 9</td>
<td>‘hmmmm its improve my skill…I can easily identify the main ideas, effect and cause of the reading comprehension. Now I can answer longer reading text easily</td>
</tr>
</tbody>
</table>

Semantic map is an effective tool and its help the respondents to assemble information and trace the relation among the information. Semantic map helps learner to identify the cause and effect from a reading comprehension. According to Pehrsson R. S. & Denner P. R (1989) semantic organizers that takes the form of episodic organizers represent change and it can be a powerful tool to aid the comprehension of changes such as those found in stories, causes-effects and development ideas.
**Question 4:** Do you feel you learn better through this semantic map technique?

All respondents agreed that they learnt better through this technique. They felt that they had grasp well the comprehend skill through this technique. Undoubtedly, they managed to get the answer easily. Apart from that, they also admitted that the semantic map encourage them to retrieve words which have been store in their mind. It enabled them to construct meaningful sentences based on these words. They declare that, semantic map had allowed them to brainstorm the ideas and helped them to get the overall idea about the text. Indeed, semantic map had stimulated all the respondents thinking skill and improve their reading strategy.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 10</td>
<td>“yes of course…its easy and I learn strategy to deal with reading comprehension”</td>
</tr>
<tr>
<td>Student 5</td>
<td>‘Teacher…. I enjoyed my lesson I guess and its brainstorm my ideas”</td>
</tr>
<tr>
<td>Student 7</td>
<td>Ohhhh .. yes! Im able to answer reading comprehension even though its long….</td>
</tr>
</tbody>
</table>

These respondents learnt semantic map strategy to handle the reading comprehension. Once the learners able to acquire the proper strategy, they were able to improve their reading comprehension skill. According to (Canney & Winograd, 1979; Garner & Kraus, 1982; Paris & Mayer, 1981) one of the major differences between good and poor students is the gap between their strategies and skill. Good students employ integrated strategies while less successful students focus on isolated skills. Thus, it is important to teach n engage the learners with proper strategy.
**Question 5** : Is it troublesome to use semantic map in reading comprehension?

Respondents stated that at first they were confused and did not know how to complete the network. Possibly, it was unusual for them as they were familiar with the conventional method. However, once they were exposed and explained to this method they feel at ease to complete it. They were enlightened with the new technique. Furthermore, the respondents expressed that it would be troublesome if they have not been exposed to this useful method. Besides that, respondents also said that they were able to reduce their anxiety to attempt the reading comprehension question. Little by little it enhanced their comprehend skill.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 2</td>
<td>“Easy to use teacher…….”</td>
</tr>
<tr>
<td>Student 3</td>
<td>‘not difficult… its wonderful”</td>
</tr>
<tr>
<td>Student 4</td>
<td>‘errrr…. Last time im scared to answer reading comprehension….hmmm now no more teacher…”</td>
</tr>
</tbody>
</table>

Before implementing the semantic map students face some troublesome in identify the main ideas. Most of the respondents stated that they faced problem at the beginning to identify the ideas. It is also supported by Brown & smiley, (1977) the problem involves are helping student to acquire the main ideas from the text passage . The ability to isolate the central ideas of a content passage, like other learning strategies, develop gradually. Once the students know to identify the ideas then they will easily grasp the skill.
**Question 6**: What is your perceptions/opinions regarding of this new technique?

Participants have confessed that the implementation of this technique has been very effective in making their learning fun and enjoyable. Although this technique is new for them, they admitted that semantic map arose their thinking skills and helped them to the answer easily. They highlighted that the students were able to understand better the reading comprehension. Initially, they found that this method has helped them to explore their background knowledge. It also increased their awareness in reading comprehension skills.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 6</td>
<td>“Semantic map helped me in getting idea and answered easily”</td>
</tr>
<tr>
<td>Student 9</td>
<td>‘hmmmm…. I understand better activate my background knowledge”</td>
</tr>
<tr>
<td>Student 6</td>
<td>‘haaa…..now I can think well and get answered easily because of the organization of semantic map.</td>
</tr>
</tbody>
</table>

These respondents view implied the importance of prior knowledge in education. Semantic map has helped the learners to retrieve the words and activate the background knowledge. The first step in the learning process is to help students activate prior knowledge in an organized form. Students were encouraged to develop to prior meaning and it will serve as a base for new information about to be learned. Rumelhart, (1984) stated that as new information presented, students should evaluate its goodness new and old meanings as they relate to the same topic. The new information fits and adds to a more complete understanding. Thus, students should know to relate the new and old meaning.
**Question 7**: Briefly explain what are the benefits that you gain from implementing this technique?

Participants said that this technique has further enriched their reading comprehension skills. It also enables them to organize the ideas into meaningful sentences structures. Meanwhile the weaker respondents stated that they managed to acquire new words and phrases. They also proudly admitted that they could complete the reading comprehension questions easily. Furthermore, they were able to write correct sentences. All respondents accepted that the further implementation of this technique could help them to acquire more knowledge.

### Table 4.11 What are the benefit you gain through this technique

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 2</td>
<td>“Semantic map helped me learn more words”</td>
</tr>
<tr>
<td>Student 1</td>
<td>‘…. Now I can answer long and difficult text..”</td>
</tr>
<tr>
<td>Student 6</td>
<td>“hmmmm… get the more idea and more knowledge”</td>
</tr>
</tbody>
</table>

The major basis of this semantic map technique is turning the information into meaningful ideas. Which integrating the new information with prior information that has been stored and structured. This view was supported by Anderson & Pearson, (1984) by highlighting that learners are not passive, reactive organisms, they are anticipating information and readying appropriate schemata to receive and transform incoming information into meaning. The scholars also stated that, basically schemata function during learning by providing “empty slots” that might be thought of as a set of expectations onto which learners map the presented content.
**Question 8:** What is your comment regarding this semantic technique?

They commented that this teaching technique should be continued. They mentioned that this technique is very useful for the learners. Semantic map develops and motivate to learners to learn. It also could be used as an effective teaching technique which could facilitate the teaching learning process. All respondents agreed that this technique is very meaningful for those who have difficulty to attempt the reading comprehension. Respondents also noted that this is an interesting and fun technique. All of them were satisfied to use this technique.

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Excerpt of the interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student 8</td>
<td>“Semantic map ….. … make me answer reading comprehension easily”</td>
</tr>
<tr>
<td>Student 3</td>
<td>“its fun and interesting” … I have learn better through this technique</td>
</tr>
<tr>
<td>Student 7</td>
<td>“hmmm its useful and meaningful technique”</td>
</tr>
</tbody>
</table>

According to the Pehrsson & Robinson, (1985) One of the more direct ways in which the patterns used in organizing information can be made explicit to students is through the use of semantic organizer. Moreover, it is supported by the students claims that they learn better in through this technique. The graphic representation of content information via semantic organizer also can help teachers and learners improve their teaching and learning process.
4.2.2.1 Summary of the interview findings

The findings of this interview have answered the second research question. Based on the interview the researcher concludes that semantic map is an effective technique. The findings of this interview indicate that all respondents were overwhelmed with this technique. Basically all respondents actively took part in the teaching learning process. It can be summarized that they play their role well in the discussion part. They managed to adapt this new technique and able to work with it.

Principally, this is an effective technique. In fact, all the feedback and responses seem to be very positive towards the implementation of the semantic map in reading comprehension. It can also be considered an effective strategy to teach reading comprehension. Respondents were able to understand the reading comprehension and were able to attempt the questions. On top of that, they were able to construct sentences correctly and meaningfully after implement the semantic map technique. It shows drastic improvements on the students performance compared to the conventional classroom.

Gradually, participants were learnt to exploit the semantic map. At first they were found some difficulty in understanding the purpose of the semantic map. Once they familiar with the semantic map they felt at easy and became interested in using it. It can be clearly seen during the interview session. Respondents expressed that this technique is really useful for them. Basically, in conventional classroom they felt bored and demotivated to attempt the reading comprehension. Apparently, they were not exposed to any reading comprehension strategy. Thus, they have low self esteem and high anxiety to engage with reading comprehension before this.

The finding of this interview also indicates that the respondents had extended their thinking skill as well as their background knowledge. They were able to retrieve the words that were stored in their mind. Semantic map helps them to
retrieve the words and enhances their writing and reading skills. Moreover, this semantic map helps them to get the ideas, points and answer easily. Once they completed the semantic map it was easier for them to answer the reading comprehension questions. All participants were actively took part in completing the semantic map. Moreover, they were very keen to complete the semantic map as it look very attractive and fun for them.

Besides that, it can be seen in this interview that all participants enjoyed doing their reading comprehension through semantic map. At present, they were motivated to read the reading comprehension compared to before. They have shown positive attitude towards this technique. Moreover, this technique is considered to be helpful for the weakest students as well. The weaker students are able to complete the semantic map, and subsequently, this help them to complete the reading comprehension as well.

In conclusion, the informal interview clearly highlighted that the implementation of the semantic map technique has some effects on the reading comprehension. It can be stated that semantic map is an effective tool for the reading comprehension. Students learnt better through this semantic map technique. Indeed they score well in reading comprehension.

4.3 Discussion

The previous section discussed the results and findings of the Test 1 and Test 2 as well as the informal interview on students’ perception towards semantic map technique. It clearly highlighted that the pre and post test as well as the interview indicated that the semantic map technique is an effective tool for reading comprehension. As mentioned earlier, this technique enhanced students’
comprehend skill. Students became engaged in the reading comprehension task easily through the semantic map.

It is generally accepted that students learnt comprehension skill easily if they know how to and what strategy to use in reading comprehension. Reading comprehension will be easier if the students know how to use the strategy. The good students would become aware of what they are reading, and know why they are reading and exploit some useful strategies to scrutinize their comprehension. On the contrary, the weak students seem to regard the reading comprehension skill without knowing what strategy to use.

As discussed in chapter 2, it has been proven that learners can attempt reading comprehension task based on contextual learning. In short, the use of semantic map is generally known to help learners to develop their reading comprehension skill. Learners are able to attempt the reading comprehension questions as they are able to acquire and brainstorm the ideas. The semantic map indirectly trains the learners to brainstorm for idea and in turn to construct sentences.

Learners who can grasp the technique efficiently and apply the reading strategy in their learning process can be a proficient and good reader. It is explained by Aebersold & Field, 1997; Pressley & Afferbach, (1995) in their study which stated that good readers use the following types of behaviours: go through the text before reading, utilize contextual clues such as topic, subtopic, and organizer, identify the specific and relevant information while reading and pay full concentration to it than other information, try to relate specific and relevant points in text to one another in order to understand the text as a whole, activate and use background knowledge to interpret text, try to predict the information from the text, a determine the similar or exact meaning of words not understood or recognized, monitor text comprehension, and use strategies to remember the text (paraphrasing, repetition, making notes, self-questioning).
On the other hand, Bos and Vaughan (1994) claims that even though poor readers were able to interpret words correctly; they rarely use the meaning of the text, to relate what is being read to their previous knowledge, or examine their own comprehension. Thus, semantic map plays an important role to improve reading comprehension skill. Lower secondary learners were able to engage reading comprehension text easily.

Instruction through semantic mapping also facilitates text comprehension. Comprehension is an active process in which readers understand what they read in accordance with what they already know about the topic, thus building bridges between the new and the known Pearson & Johnson (1978). Semantic map triggers the brain to retrieve the prior knowledge of the topic and use this in reading. An opportunity to see graphically the concepts they are retrieving helps the students relate the new information to what they already know about the topic, thus promoting better comprehension.

In this study, the respondents claimed that semantic map activate their prior knowledge. Many linguists (Carell, 1998; Koda, 2004) granted that the activation of prior knowledge will help readers to attain better comprehension of the text to be read. This is because this strategy will facilitate readers in making predictions and interpret the text content by relating the new information to their prior knowledge. Therefore, the implementation of semantic map in reading will be more efficient and the readers will be able to attempt the reading comprehension easily.

Moreover, semantic map improved students’ evaluation and analysis skill. Learners were able to analyse the reading comprehension crucially. Most of the learners do not read critically and this leads them to face difficulty in evaluating and analyzing the text they read because this would require them to read critically. Text evaluation or analysis requires readers to evaluate and judge what is read in relation to the knowledge which the readers have formed from his past experience (Stauffer,
According to Gardner and Alexander (1988), students often avoid evaluating and analyzing texts since it takes time and efforts to do so. However, this problem had been avoided by implementing semantic map in reading comprehension. Semantic map helped students to evaluate and analyze text. They were able to attempt longer text without any anxious.

Furthermore, Students revealed that semantic map strategy can be used easily for any reading task. They felt that this strategy was appropriate to use it in order to answering reading comprehension task. Baker and Brown (1984) stated that, it is not enough to simply know the appropriate reading strategies. Students must also be able to regulate or monitor the use of such strategies to ensure success in reading comprehension. Meanwhile, Andersons (2003) study also seems to specify that strategic reading is not only a matter of knowing which strategies to use but in addition, the reader must know how to apply strategies successfully. He accomplished that competence in implementing and monitoring their application is important.

Therefore, the instructor or teacher should play their role fullest. Malaysian language classrooms constitute a mixture of poor and good readers. Teachers should play their part in handling strategy. Teachers should use proper strategies to teach the learners. Educators should not expect learners to employ any strategy by themselves. Teaching and learning process should be carried out with a proper strategy and techniques, and this will lead to an effective teaching and learning process to.

The findings of this study show that this technique can be utilized as a better teaching technique among various methods of teaching reading comprehension. The evidence of the effectiveness of this technique can be found on the effects and margin of improvement shown by the Test 2. Roughly, all respondents show some improvement in Test 2 compared to the Test 1. The mean score in Test 2 was 62 and the mean score for Test 1 was 51.50. A greater improvement in Test 2 implies that
the semantic map is an effective tool for teaching and learning for reading comprehension.

In summary, the results of this study show that implementation of the semantic map gives huge impact not only in students’ scores but also from having greater awareness of reading comprehension strategy. All students agreed that this technique gives them self confidence to answer any reading comprehension. They stated that, this technique has instilled the confidence in their performance and now they acknowledged that they were able to answer challenging reading comprehension questions.

4.4 Conclusions

This chapter has attempted to answer the research question for this study. It has also analyzed and discussed the research findings by using quantitative and qualitative methods. Data of the tests were analyzed by descriptive statistics and the interview of students’ perception was analysed by reporting on the students comments for each questions.
CHAPTER 5

CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

In this last chapter, the researcher will draw conclusions and recommendation of this study based on the findings. Moreover, the researcher also will include pedagogical implication and suggestion for the future research in this field.

5.2 Summary

This study reveals that semantic map has enhanced students’ performance in reading comprehension. The results from Test 1 and Test 2 interpret that semantic map has enhanced students performance in reading comprehension. Thus, it proves that semantic map is important and essential for reading comprehension. Semantic map has played an important role in reading comprehension. A reader who has grasped the technique of semantic map has high potential to get good marks while answering the reading comprehension. This differs from those who do not have the
technique of semantic map and tend to get low marks. This study shows that the target group not only performed well in reading comprehension but also had shown great awareness in the use of semantic map strategies. This study enhanced students’ ability to monitor their comprehension accurately and they know how to use proper strategy to assists them in comprehension. Consequently, they seem to know what information should be eliminated and what to attend to.

5.3 Implication of ESL/EFL classroom

The pedagogical implications from this study include that semantic map plays an important role in students reading comprehension. As noted earlier, once the learners grasp the strategies, it will be easier for them to attempt the reading comprehension task. Learners feel powerless because they do not know what strategies to use. They have no awareness to use any strategies. Awareness is important for the development of the effective strategies. As Baker and Brown (1984) point out, such kind of awareness and control of one’s reading activity, or the ability to monitor one’s own comprehension, is highly important. This is supported by Brown & Smiley, (1978) who noted that only about half of the eighth graders in their analysis, when given an opportunity to study content material, revealed any sign of strategy use. Thus, educators should instill awareness and help learners develop more efficient strategies to learn.

Furthermore, the findings of the study indicate the importance of the teaching semantic map strategy and how and when to use the semantic map strategy to enhance learners comprehend skill. Most of the educators failed to teach the learners the appropriate strategy to use. Some educators assign lesson without any instruction or explanation and expect learners to complete the task on their own. It is clearly stated by Durkin, (1979) that more times seem to be spent in assigning, testing, and correcting than teaching the strategies necessary to perform those tasks. In the sense,
educators are encouraged to utilize their teaching skills and learning strategies during the teaching and learning process.

Moreover, accepting the importance of semantic map strategy in reading comprehension shed lights for the educators to plan effective reading instruction for the poor readers. It is known that the poor reader could not adapt complicated techniques. In this case, learners with poor language ability would find it difficult to develop their ability and motivation in reading. The findings of this study suggested that implementing semantic map in language classroom especially reading classes will enhance poor readers reading ability. Due to this, educators should use simple technique for the poor reader to facilitate them in reading comprehension.

Besides enabling learners to experience the text for themselves the semantic map strategy also draws independent learning. The good reader can build up confidence towards literary texts, and reading in general. Similarly, learners also can develop their critical and creative thinking skills which are appropriate with what the Education Ministry highlighted in syllabus curriculum specification.

5.4 Recommendation for future research

It is worthwhile to state few limitations that were found in this study. Firstly, this study was only focused on the lower secondary students. In this sense, it is difficult to determine the effectiveness of this technique whether it is applicable to all level of students. It is recommended that semantic map should be exploited to the fullest to all students in the language classroom.
Secondly, the scope of this study was only limited to reading comprehension. It is suggested that in future research the scope should be expanded in terms of other three important skills; writing, speaking and listening. By making the scope wider, the researcher can get a clear view of the utilization of semantic map in all aspects.

Besides that, the present study employed the Test 1 and Test 2 as a main instruments to get the findings. Therefore, in the future research it will be interesting to include questionnaire and interview to produce more meaningful data and to gain consistent results.

5.5 Conclusions

This study conclusively shows that reading comprehension using semantic map is a powerful tool for learners. The findings reinforce the importance of semantic map in reading comprehension which was stated and highlighted earlier. Moreover, this finding demonstrates the benefit of using this strategy in reading comprehension. On top of that, teachers can improve their teaching skill in reading comprehension and it does prove that this strategy helps them a lot to conduct the reading comprehension lesson and it’s instill positive attitudes towards teaching reading comprehension. Thus, teachers should play critical role to encourage learners to read accurately and use proper strategy when attending to any reading comprehension task. In this manner, it is hoped that this research has given a great insight to teachers, learners and researchers in handling and improving the reading comprehension strategy.
REFERENCE


Clarke, M. (1979)'Reading in Spanish and English: Evidence from Adult ESL Students.’ Language learning, 29,121-150


Mastropieri, M. A and Scruggs, T.E.(1979). Best practices in promoting reading comprehension. Remedial and special.18(4);197-216


Yorio, C.A.(1971)’Some Sources of Reading Problems for Foreign Language Learners.’ Language Learning, 21, 107-11
Appendix A

Interview

1) Does semantic map help you to find the ideas from the reading text?

2) How was the learning process during the implementation of this new technique?

3) Does semantic map improve your comprehension skills?

4) Do you feel you learn better through this semantic map technique?

5) Is it troublesome to use semantic map in reading comprehension?

6) What is your perceptions/opinions regarding of this new technique?

7) Briefly explain what are the benefit you gain from implementing this technique?

8) What is your comment regarding this semantic technique?
Appendix B

TEST 1

(40 minutes)

Instruction to candidates:

DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Section A
This section consists of 4 questions. Each question will carried 5 marks.
Reading comprehension with semantic map

Read the passage below and complete the semantic map that follows.

It happened during the school holiday two years ago. I was studying in a boarding school. So I always looked forward to spending the school holiday on my father’s farm. That day was like any other day with me following behind my father.

My father was operating the noisy old plough which he used to dig the earth. He stopped and asked if I wanted to do it. I happily took over the plough.

It was fun holding the old plough. I felt like I was riding high over the farm and everything on it. While I was handing it back to him, I saw a black stick. It seemed to be moving across the ground. It was a tiny black snake! And it was gliding towards me.

I screamed, “Snake!” For a minute or two, I stood rooted to the ground. It was just as if I were charmed by that snake, unable to move.

I felt my father grabbed my hand. We both ran until we came to the road. By then, we were breathless and dizzy. I will never forget that day on the farm. That incident has left me with a permanent fear of anything that looked like a black stick.

Answer the following questions based on reading comprehension above.

1) When was the incident happened?

2) What is the thing that operated by his father?
3 Why does he screamed?
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

4) How does the narrator and his father save their self?
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

THE END
Appendix C

TEST 2

(40 minutes)

Instruction to candidates:

DO NOT OPEN THIS QUESTION BOOKLET UNTIL YOU ARE TOLD TO DO SO.

This test consists of two sections:

Section A
Complete the given semantic map

Section B
This section consists of 4 questions. Each question will carried 5 marks
Reading comprehension with semantic map

Read the passage below and complete the semantic map that follows.

It happened during the school holiday two years ago. I was studying in a boarding school. So I always looked forward to spending the school holiday on my father’s farm. That day was like any other day with me following behind my father.

My father was operating the noisy old plough which he used to dig the earth. He stopped and asked if I wanted to do it. I happily took over the plough.

It was fun holding the old plough. I felt like I was riding high over the farm and everything on it. While I was handing it back to him, I saw a black stick. It seemed to be moving across the ground. It was a tiny black snake! And it was gliding towards me.

I screamed, "Snake!" For a minute or two, I stood rooted to the ground. It was just as if I were charmed by that snake, unable to move.

I felt my father grabbed my hand. We both ran until we came to the road. By then, we were breathless and dizzy. I will never forget that day on the farm. That incident has left me with a permanent fear of anything that looked like a black stick.
Answer the following questions based on reading comprehension above.

1) When was the incident happened?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

2) What is the thing that operated by his father?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

3) Why does he screamed?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

4) How does the narrator and his father save their self?

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

THE END
The teenage period is a time when the teenagers try to assert their identity. This explains why they are often rebellious. The best way for parents to handle them is to let them find their identity, but at the same time guide them.

A child’s behaviour is usually learnt. This explains why some teenagers behave well and some do not. Learning good manners and conduct takes place during the growing up process. Just as we decide each day what to wear for school, in the same way, we choose to be courteous or well-mannered.

As teenagers, we must always be conscious whether our behaviour is socially acceptable or not. If we follow this principle of doing to others what we want to be done to us, it is good enough. Likewise, we do not do to others what we do not want to be done to us.

Of course, as teenagers, we want to be treated with respect by adults. Only then, can we behave with respect towards others. So respect is a two-way process.

How teenagers should behave.
Answer the following questions based on reading comprehension above.

1) How should teenagers behave?

__________________________________________________________________________

__________________________________________________________________________

2) Why teenagers expect to be respected by adults?

__________________________________________________________________________

__________________________________________________________________________

3) What is the best way for parents to handle the teenagers?

__________________________________________________________________________

__________________________________________________________________________

4) When is learning good manners and conduct  take place?

__________________________________________________________________________

__________________________________________________________________________
Appendix D2

Reading comprehension with semantic map

Read the passage below and complete the semantic map that follows.

Butterflies are beautiful insects. They can be found in the gardens and parks. They come from the eggs laid by the female butterflies. Soon, tiny worm-like caterpillars will hatch from these eggs.

Once they are hatched, the caterpillars spend most of their time eating. Thus, they will grow big and soon, their skins become too small for them. Due to this, they will change their skins several times.

The butterflies will stop eating when they change their skin for the last time. They will cover themselves with a white substance, which will eventually turn into cocoons. Inside the cocoons, the caterpillars will change into butterflies.

Finally, when the beautiful butterflies come out from the cocoons, they are not ready to fly. This is because they are waiting for their wings to dry. When their wings are ready, they are able to fly.

The life cycle of butterflies
Answer the following questions based on reading comprehension above.

1) Where can be found butterflies?
   _______________________________________________________________
   _______________________________________________________________

2) What does the caterpillar do most of the time?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

3) When do the butterflies stop eating?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

4) When does the butterflies are ready to fly?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________
Appendix D3
Reading comprehension with semantic map
Read the passage below and complete the semantic map map that follows.

I have many friends. But I have one very special friend. His name is Han Meng.
He is a Chinese boy. He is thirteen years old. He is tall and handsome with a crew-cut hair style. His eyes are bright and alert.
Han Meng is friendly and helpful. Whenever I need help, especially in my studies, Han Meng never refuses to give me a helping hand. For this reason we are able to get along very well.
Han Meng comes from a good family. He is the eldest child. He has two sisters and two brothers. His father is a businessman and his mother is a teacher.
Since we share some common interests, we often do things together, such as cycling and playing computer games.
It is great to have such a good friend.
Answer the following questions based on reading comprehension above.

1) How does Han Meng hair looks like?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

2) How does Han Meng help his friend?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

3) How many sibling Han Meng has?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

4) How does Han Meng and his friend spend their time?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Cycling to school can be fun especially if you are cycling with a group of friends. However, are you aware of the danger on the road? There are rules every cyclist must follow and observe to ensure safety on the road.

Before you start to ride your bicycle, be sure that you know how control it first. You must be able to ride straight and know how to mount and dismount the correct way. If you are with a group of friends, always ride in single file. Do not ride too close behind a moving car. Keep a safe distance so that you have time to stop if the car stops suddenly. This will prevent you from knocking the car from behind.

Another important rule is do not carry anything with one hand and leave the other hand to control the handle. Always keep both hands on the handle-bar of the bicycle. Finally, check that your bicycle is in good condition. You should have a bell, a front lamp, red tail-light at the back and functioning brakes.
Answer the following questions based on reading comprehension above.

1) What you should ensure before you start to ride bicycle?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

2) Why you should ride in a single file?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

3) Why you need to use both hands when ride bicycle?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________

4) How does a good condition bicycle looks like?
   _______________________________________________________________
   _______________________________________________________________
   _______________________________________________________________