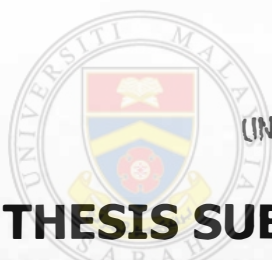


USING METACOGNITIVE STRATEGIES TO IMPROVE STUDENTS' COMPREHENSION ABILITIES

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PERPUSTAKAAN
UNIVERSITI MALAYSIA SABAH

**THESIS SUBMITTED IN PARTIAL
FULFILLMENT FOR THE DEGREE OF
MASTER OF EDUCATION (TESL)**

**SCHOOL OF EDUCATION AND
SOCIAL DEVELOPMENT
UNIVERSITI MALAYSIA SABAH
2008**

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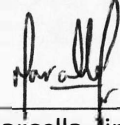
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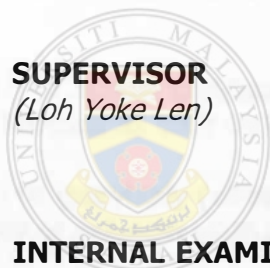
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ACKNOWLEDGEMENT

I would like to thank the Dean of School of Education and Social Development, Professor Dr. Zulkifli Mohamed, for his encouragement and support.

My heartiest gratitude and thanks to my supervisor, Miss Loh Yoke Len for her persistence assistance, encouragement, comments, guidance and suggestions throughout the preparation and in the completion of this dissertation.

I also would like to thank all my lecturers in School of Education and Social Development, Universiti Malaysia Sabah who have taught me throughout the 2-year-course of study.

My appreciation also goes out to Puan Amina Misuari, the former principal of SMK Limbanak, Penampang and Puan Rafidah Karaman, the current principal of SMK Limbanak, Penampang.

My thanks also go out to my dearest friends; MET group 11 course mates and all my colleagues in SMK Limbanak, Penampang especially Puan Maimunah Zainal, the Head of English Panel.

Finally, above all that, special gratitude to my family; my parents, Cyril, Melissa and not forgetting Henry Nicholas for their undying love and emotional support.

Lastly, thank you to everybody (whose name is not mentioned above) who has lent a hand either directly or indirectly upon completion of this dissertation.

This dissertation may not have been completed without the support and prayer from all of you.

ABSTRACT

The purpose of this study was to investigate the effects of using Metacognitive comprehension strategies towards Form 4 students of average level of English proficiency through the use of short story text from the Form 4 English Literature components. Two classes which consisted of 30 students in each class were involved. The classes were classified as control group and treatment group. The treatment group received the Metacognitive comprehension strategies during intervention. 2 quantitative instruments such as IRA and DRA for comprehension tests, a set of questionnaire and 1 qualitative instrument such as strategies recording forms for classroom observation were used. IRA test was used to determine the students' reading awareness and DRA test was used to determine the students' reading development. There were 3 types of statistical tools used to analyze the quantitative data. They were descriptive statistics, paired samples T-test and independent samples T-test. The first analysis from the IRA tests by the treatment group showed significant difference in which reading awareness scores were higher after the implementation of Metacognitive strategies (**M= 26.4333**). The second analysis from the DRA tests by the treatment group also showed significant difference in which reading development scores were higher after the implementation of Metacognitive strategies (**M= 12.0333**). The third analysis was from the IRA and DRA post-tests scores between the treatment and control groups and were compared by using the independent samples test. After comparing the post-tests scores it was found that the observed t statistic for IRA was **8.618** and and DRA was **3.365**. These findings indicated that the treatment group benefited from Metacognitive strategies. The findings gathered from the study rejected all the three null hypotheses of this study and it showed that Metacognitive strategies helped to improve the students' comprehension abilities.

ABSTRAK

Tujuan kajian ini dijalankan adalah untuk mengenal pasti kesan penggunaan strategi pemahaman Metakognitif ke atas pelajar-pelajar Tingkatan 4 yang mempunyai tahap penguasaan Bahasa Inggeris yang sederhana melalui penggunaan cerpen daripada Komponen Kesusasteraan Bahasa Inggeris Tingkatan 4. Dua buah kelas yang mengandungi 30 orang pelajar di setiap kelas terlibat di dalam kajian ini. Dua buah kelas ini dibahagikan kepada kumpulan kawalan dan kumpulan rawatan. Kumpulan rawatan menerima strategi pemahaman Metakognitif semasa intervensi. Dua instrumen kuantitatif seperti ujian pemahaman IRA dan DRA, borang soal selidik serta satu instrumen kualitatif seperti borang catatan strategi untuk pemerhatian di kelas digunakan di dalam kajian ini. IRA digunakan untuk menentukan tahap kesedaran membaca dan DRA digunakan untuk menentukan perkembangan membaca pelajar. 3 jenis alat statistik digunakan untuk menganalisa data kuantitatif. Alat-alat statistik tersebut adalah statistik deskriptif, sampel berkumpulan T-test dan sampel bersandar T-test. Analisis pertama yang diperolehi daripada ujian IRA oleh kumpulan rawatan menunjukkan terdapat perbezaan yang signifikan iaitu $M=26.4333$ di mana keputusan ujian meningkat selepas didedahkan dengan strategi pemahaman Metakognitif. Analisis yang kedua diperolehi daripada ujian DRA oleh kumpulan rawatan menunjukkan terdapat perbezaan yang signifikan iaitu $M=12.0333$ di mana keputusan ujian meningkat selepas didedahkan dengan strategi pemahaman Metakognitif. Analisis yang ketiga diperolehi daripada keputusan ujian IRA dan DRA selepas intervensi oleh kumpulan kawalan dan rawatan dengan menggunakan sampel berkumpulan T-test. Selepas perbandingan dibuat, keputusan statistik t diperhati untuk IRA ialah 8.618 dan DRA ialah 3.365 . Dapatan ini menunjukkan kumpulan rawatan mendapat manfaat daripada strategi pemahaman Metakognitif. Dapatan yang diperolehi menolak kesemua hipotesis null dan ini menunjukkan bahawa strategi pemahaman Metakognitif dapat meningkatkan keupayaan pemahaman pelajar.

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LIST OF ABBREVIATIONS

IRA	– Index of Reading Awareness
DRA	– Developmental Reading Assessment
L2	– Second Language



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CHAPTER 1

INTRODUCTION

1.1 Introduction

Malaysian education has gone through many phases of changes over the years. The most prominent amendment would be the implementation of subjects such as Science and Mathematics in English. This conversion is in line with the Education Ministry's aspiration to produce a generation who are knowledgeable as well as competent in the global language. Under the KBSM (Kurikulum Bersepadu Sekolah Menengah), English is a compulsory subject in all secondary schools curriculum in line with its status as a second language in Malaysia.

The Cabinet Committee Report on the Review of the Implementation of the Education Policy 1979 states that the teaching of English is to enable all school leavers to be proficient in the language. It is also to allow students to pursue higher education in the medium of English. The introduction of teaching and learning Science and Mathematics in English proves that the Education Ministry is serious in their effort to raise the standard of English in Malaysia. However, despite all the effort made, dismal performance is still apparent every time the public examination is announced. This should not have happened in a well-developed society where English is considered as a second language.

The English language curriculum is developed in line with the way English is used in society in everyday life, when interacting with people, when accessing information and when understanding and responding to literary works. The curriculum covers all the four language skills. They are listening, speaking, writing and reading. However, this study would only focus on one language skill that is reading. The skill of reading a variety of texts will enable learners to adjust the style of their reading to suit the purpose at hand and to extract both implicit and explicit meanings from the text. In order to be a competent reader, a student must be able to know the right reading strategies to use. Therefore, it is important for the teachers to possess the knowledge on all reading strategies to be taught to the students.

Apart from the implementation of teaching and learning of Science and Mathematics in English, a small literature component has also been added to the curriculum. The purpose of incorporating literature component in the curriculum is to enable learners to engage in wider reading of good works for enjoyment and for self-development. In addition, they can also develop an understanding of other societies, cultures, values and traditions that will contribute to their emotional and spiritual growth.

Literature component is taught throughout secondary school years, from Form 1 until Form 5. The syllabus consists of poems, short stories and novels. The students are expected to be able to express ideas, thoughts, beliefs and feelings through their understanding of the literary texts. Therefore, it is vital for the students to be able to comprehend the literary texts that they read.

1.2 Background of the Problem

Despite all the changes made to improve the students' knowledge and proficiency, the increase in terms of quality results obtained by the students is not that apparent. Quality should have improved tremendously compared to before the implementation of Science and Mathematics subjects in English. Students still have difficulties in English classes. This is especially apparent in reading classes whereby students are still facing difficulties in comprehending texts. These problems surface in examination and test scores, where

students are not doing well in literature section especially in answering the comprehension questions.

Malaysian school settings were still implementing a traditional approach in a reading class which emphasized more on main idea instruction. The students were drilled to identify main ideas in order to get the meaning of the text. Consequently, they were used to the same approach every time they tried to understand the passage. However, the students still fail to comprehend the text although they might find the correct main idea. The inability to comprehend text may spring from the inadequacy of comprehension strategies to apply when comprehending the text. The education system that is present today did not have the effective mechanism to improve the current domain. As stated by (Tierney & Pearson, 1985), prominent researchers indicate that little progress has been made in recent times toward developing instructional practices that improve reading comprehension.

The traditional approach to reading comprehension that exists today moulds the students to be passive readers wherein the reader's task is simply to locate the author's message. Normally, reading class would involve activities consist of directing the reader to find the topic sentence at the beginning or end of the paragraph or, in the event that the paragraph does not contain a main idea, to infer it. In relation to that, in many workbooks or textbooks used, main idea instruction tends to focus on testing and practice using paragraphs followed by lists of questions. Then, questions and answers sessions would follow. Little attention is paid at the process and what are the appropriate strategies that could be applied in arriving at answers.

Moreover, the education system that is present today does not highlight the importance of schemata or background knowledge as well as prior knowledge to be ingrained in reading class. The value of thinking or metacognitive process in reading activities could help the students to comprehend text more effectively. Metacognitive strategies are one of the comprehension strategies that proved to be effective. These strategies are executive in nature. They are the strategies a student uses when planning, monitoring and evaluating learning or strategy performance. Hence, they are often

referred to as self-regulatory strategies (Vaidya, 1999). In metacognitive strategies, there are several strategies that are proven to be effective in helping the poor readers. In addition, past studies have shown that explicit instruction of the specific metacognitive strategies of using prior knowledge, predicting and sequencing of the comprehension development of readers bears significant improvement in a first-grade students' comprehension abilities.

Although the age difference between first grade students of Western settings who have undergone this project and the subjects selected for this study is exceptionally wide, it is vital to know whether the strategies is applicable to the subjects. Past research indicates that first-grade English L2 learners have benefited from these strategies. Therefore, it is hoped that the subjects selected for this study would as well benefit from this study.

1.3 Statement of the Problem

During the 1970s, the structured comprehension method focused more on reading instruction. During that time reading instruction was thought to be effective if it broke down the process into isolated skills such as reading for the main idea, reading for inferences and so on. This method is still heavily implemented in Malaysian setting today. All these reading skills are taught to improve students' comprehension on the text they read. However, students of average level of English proficiency are still facing the problems to comprehend text although they have been implementing these skills throughout reading class.

Schools in Malaysian setting are more focus on students' ability to complete the comprehension tasks inside the time frame as opposed to whether the students manage to grasp the meaning of the text. Teachers provided students with opportunities to interpret the text but much of the interaction around the text was prompted by questions rather than direct instruction in how to comprehend the text. But teachers ask questions both to assess and scaffold instruction. Teachers regularly assess reading comprehension typically by asking comprehension questions. But such questions are also

used during instruction and classroom activities, often as the basis for literary discussions. Classroom questioning is primarily at the literal level and students are not encouraged to interpret the text based on their prior experiences. The examination-oriented school system in Malaysian setting has overlooked the issues of students' inability to comprehend the text they read. Reading class activities usually involve discussion about the text which is more teacher-oriented rather than student-oriented. Allington and Cunningham (1996, p. 46) noted, "Children are routinely asked questions after reading but are infrequently provided with demonstrations of the comprehension strategies needed to answer the questions posed". Students are not exposed to the strategies that could be helpful in comprehending text.

The unceasing issue pertaining to students' incompetence to comprehend text has brought into the attention of the researcher to do this study. Reading comprehension skills are frequently left untaught. How important it is to remember that comprehension is the essence of reading and that it has to be taught and cannot be left to chance. Prior of doing this study, the researcher has gone through few informal observations in reading comprehension classrooms as well as the researcher's own reading comprehension classroom. It is discovered that much of the classroom instructions during reading comprehension focuses on measuring comprehension of individual stories or text that has been read. Reading instruction in many classrooms, as viewed by the researcher, focuses on the literal recall on the current text being read rather than on strategies for understanding texts. This has become the norm for reading comprehension instruction as mentioned by Durkin (1979). This precisely means that the strategies applied measure comprehension rather than teaching students strategies for comprehension. As a result, teachers are always bemoaning about the complexity that the students face when it comes to reading comprehension. The teachers have increasingly emphasized that their students are able to read text but they do not understand what they read. *Fisner (2001, p.371) stated "Reading text is not only a process of decoding, it is also a process of encoding. We make sense of what we read."* In other words, be able to read alone does not mean the students could comprehend the text that they read.

Students' inability to comprehend text well probably stem primarily from the limited number of effective instructional strategies taught in reading classes. In fact, prominent researchers indicate that little progress has been made in recent times toward developing instructional practices that improve reading comprehension (Tierney & Pearson, 1985). Past researchers asserted that "the specific instruction in this domain seems in disarray" (Moore, Cunningham & Rudisill, 1983). Consequently, students may not be receiving adequate instruction in how to grasp independently the important information in text.

Apart from that, the traditional approaches that are still heavily implemented in Malaysian school settings are based on the premise that the main idea is inherent in the text and can be located in specific portions of paragraphs. Thus, it implies that the process of determining the main idea is passive whereby the reader is receptor of knowledge. In addition, reading class activities always involve the teachers asking questions to the students, during or after reading. Usually the discussion focuses on finding the right answers. The thinking or metacognitive processes involved in arriving at answers are often neglected whereas, the process of determining main idea are supposed to be active and complex, involving construction of meaning from text (Anderson, Hiebert, Scott & Wilkinson, 1985). They further suggested that, the reader cannot look to the text only, but must use several sources of information in the process of constructing a main idea. These sources include the reader's purpose as Brown (1980) suggested, if readers are unaware of the purposes and goals of reading, it is unlikely that they will employ successful strategies to meet the demands of reading, and background knowledge as well as the author's purpose and the organization of the text.

When students are not exposed to certain reading strategies to the reading task, they would have difficulty in comprehending text. Consequently, students would be demotivated when they come across complex structure and vocabulary in a text if they do not have the right strategies to employ. In relation to that, students feel disengaged from the lesson when comprehending text becomes a conundrum for them. They do not enjoy the lesson and to reengage them to any activities pertaining to reading comprehension activities would be an uphill task.

All these underlying problems have underscored the need for teaching the students a more structured approach. The approach was interactive in nature that would teach them to establish meaningful purposes for what they read as well as to approach text metacognitively in order to construct the main idea or author's intended message.

1.4 Aim and Objectives of the Study

This study attempted to investigate the effects of using metacognitive comprehension strategies towards Form 4 students of average level of English proficiency in SMK Limbanak, Penampang. Specifically, it attempted to

- (1) investigate if the explicit instruction of specific metacognitive strategies of using prior knowledge, predicting and sequencing on the comprehension awareness and development of the readers is able to improve the post-tests results of the treatment group.
- (2) investigate if there is a significance difference in the DRA and IRA post-tests results between the treatment and control groups.
- (3) investigate if the students are motivated after the implementation of metacognitive strategies.

1.5 Research Questions

This study will attempt to answer the following questions:

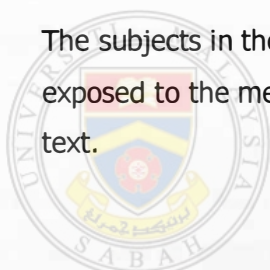
- (1) Will the metacognitive strategies help students of the treatment group to improve their reading comprehension through the use of a short story?
- (2) Will there be a significance difference in the post-tests results between the treatment and control groups?

- (3) Will the students be motivated after the implementation of metacognitive strategies in reading comprehension?

1.6 Research Hypotheses

This quantitative research will be guided by the following null hypotheses:

- H₀₁** There is no significance difference between the pre-tests and post-tests results of the treatment group.
- H₀₂** There is no significance difference in the post-tests results between the treatment and control groups.
- H₀₃** The subjects in the treatment group are not motivated after they are exposed to the metacognitive strategies to help them in comprehending text.



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1.7 Research Significance

This study would hopefully become a stepping stone to all English teachers who have similar situation as the researcher. It would definitely benefit the students to comprehend short story text. Secondly, it is hoped that these metacognitive strategies would be expanded to a larger scale. Thirdly, it is also hoped that more in-depth and thorough study could be carried out in the future.

The findings of this study would also benefit the Ministry of Education and the State Education Department, Curriculum Development Center, teachers and students on the whole because the generated data would enable them

- (1) to understand the concept of metacognitive strategies and its importance towards helping the students to improve their reading performance.

- (2) to realize the importance of introducing metacognitive strategies at the early age.
- (3) to realize the significant importance of making use of students' background knowledge to be activated and incorporated in reading class.
- (4) to realize the significant importance of exposing students to text-connections when comprehending texts.
- (5) to plan and coordinate syllabus or programs that could incorporate metacognitive strategies in reading.

The purpose of this study is to investigate the effects of using explicit instruction of metacognitive comprehension strategies on students' reading comprehension abilities through the use of short story text from the Form 4 Literature Component. The subjects will be the Form 4 students of average level of English proficiency in SMK Limbanak, Penampang. The research is conducted to see whether metacognitive comprehension strategies could be effective to the students in Malaysian school settings.

The results of this study will indicate whether metacognitive strategies could be applied to the students in Malaysian school settings. Therefore, it would be one of the mechanisms that could be employed in helping the students in comprehending text in a more interactive approach.

1.8 Limitations of the Study

This study is carried out in one school only, which is SMK Limbanak, Penampang. The school consists of about 1800 students from Form 1 until Form 5. However, there are only 2 classes involved for this study which consists of 60 subjects. The criterion for subjects' selection is those who scored B and C for English subject in their PMR examination taken last year, in 2007. They are all considered as average students in terms of their English proficiency. The subjects will be classified as treatment and control groups. The treatment group is going to receive the metacognitive strategies during intervention. The researcher chooses a small number of subjects because these 2 classes are happened to be the researcher's actual classes. The researcher wants to see

whether the metacognitive strategies are really helpful and effective for the students before she can introduce the strategies to a larger scale. Furthermore, the school is a two-session school and it will be difficult for the researcher to conduct the study to a larger number of students outside of school hours.

This study is also conducted in duration of 6 weeks which starts in the middle of January until March. The first six months of the school calendar is packed with many school activities and therefore, it is quite difficult for the researcher to conduct this study to other classes. In addition, the Principal is quite reluctant to allow other classes which are not the researcher's class to become the sample of the study.

The subjects chosen are those who scored B and C since the study focuses only the average students. The researcher chooses the average students because these students have the ability to read but are unable to understand or comprehend what they read. Their performance in topical tests demonstrated their inability to comprehend what they read.

Apart from that, the researcher focuses only on one type of text which is short story text taken from the Literature component. The researcher discovers that, this is the type of text that majority of the students in SMK Limbanak, Penampang have difficulty to comprehend because they do not have the right reading strategies that can help them to comprehend the text.

Finally, the researcher has chosen metacognitive strategies to be implemented and introduced to the subjects because these strategies can help the students to make full utilization of their background or prior knowledge that can help them to relate it to the text that they read. In a way, the students can practice active thinking while they are reading the text. In addition, the components of these reading strategies also focus heavily on the students' awareness and monitoring of their own reading.

1.9 Operational Definition

1.9.1 Metacognition

Based on several articles reviewed, there are many definitions of the word metacognition. The definition from the early researches up until recent researches will be presented in order to see how the word metacognition has evolved throughout the years. According to Brown (1980), who has done much seminal work in this area, he has suggested that there are two important factors involved in defining metacognition:

- (1) The reader's awareness of his or her own cognitive process, and
- (2) The reader's knowledge of cognitive resources and use of self-regulatory mechanisms such as planning, monitoring effectiveness and evaluating the outcome of one's strategy use. Such skills have been demonstrated to be critical to efficient reading (Wilson & Peters, 1987).

According to Baker and Brown (1984), metacognition refers to knowledge of the factors that affect learning activity, including reading, as well as control of these factors. The three sets of factors that act and interact in reading are knowledge of oneself as a reader, the demands of reading tasks, and the strategies one can employ in reading activity (Garner, 1987).

When metacognition is automatic, mental processes are derived by a less conscious process (Flavell, 1985; Siegler & Shrager, 1984). As applied to learning, automatic metacognition involves selecting and using a problem-solving strategy at the moment a problem is encountered.

Baker and Brown (1984, p. 353), on the other hand, defined metacognition as "the knowledge and control a child has over his or own thinking and learning activities including reading".

Baker and Brown (1984) distinguished two dimensions of metacognition: the knowledge of one's own cognitive resources in relation to the demands of the reading task, and self-monitoring- in the case of reading, comprehension monitoring