UNIVERSITI TEKNOLOGI MALAYSIA

BORANG PENGESAHAN STATUS TESIS ♦

JUDUL : THE INVESTIGATION OF THE READING STRATEGIES USED BY MECHANICAL ENGINEERING STUDENTS IN UNDERSTANDING A TEXT

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On Behalf of
Faculty of Education
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THE INVESTIGATION OF THE READING STRATEGIES USED
BY MECHANICAL ENGINEERING STUDENTS IN
UNDERSTANDING A TEXT

ARINDERJIT KAUR A/P JASPAL SINGH

This Project Report is Prepared as a Requirement for the Bestowal of
Bachelor of Science in Education (TESL)

Faculty of Education
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2004
I admit that this project (Title: The Investigation of the Reading Strategies Used by Mechanical Engineers in Understanding a Text) is my own research, except for the citation and summary which the resources of each has been stated.

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Date: 15th March 2004
DEDICATION

To my family and beloved ones ...
ACKNOWLEDGMENTS

I would like to take this opportunity to voice my heartfelt gratitude and sincere thankfulness to several people. Firstly, I would like to thank ‘Waheguru’ for His blessings in helping me complete this thesis.

This project would not have been possible had it not been for the advice, contributions and moral support of several individuals. I would like to thank my supervisor, Dr. Zaidah bt. Zainal for her invaluable guidance and patience in assisting me during this entire period of time to complete this piece of work. A big thank you also to my examiner, Puan Azian Abdul Aziz for her evaluation and comments to improve my project.

I would also like to thank my mother, Gurdeep Kaur who listened patiently, Ji, for her prayers, my father, Jaspal Singh, brother, Jasvinder, sister, Jurinder, uncles, Karam and Gurdeep, auntie, Harjeet and my relatives, for their moral support, care and constant prayers and love. It is also their help and blessings that helped me throughout the completion of this research.

I thank my friends, Ravinder, Kanesa, Menaga, Loges, Sarah and other friends who were with me, throughout the project for their encouragement and moral support. Their strength, comfort and assistance will never be forgotten.

I also wish to express my gratitude to the students who volunteered to be my subjects for this study. I thank them very much for their co-operation and contribution towards the completion of this thesis.

Last but not least, I would like to thank everyone who has showered me with help and guidance in one way or another towards the successful completion of this research.
ABSTRAK

ABSTRACT

Reading is a skill that enables readers to acquire knowledge and obtain information from the text that they have read. It is a thinking process by which, readers select facts, information or ideas from printed materials. In reading and understanding the printed material effectively, many strategies have been suggested to cultivate good reading habits and also to motivate readers to read more. The use of adequate reading strategies while reading can lead readers to be independent and efficient readers. In this study, Block’s (1986) reading strategies were replicated for the ‘Think-Aloud Protocol’ which was used as the main source of data collection. The reading protocols were transcribed and the reading strategies were identified and categorized to Block’s (1986) reading strategies. Questionnaires were also given out to be used as the supplementary data to identify the strategies that students had used in their reading. In this study, it was found that the students used reading strategies in understanding the text that they read. Besides that, there was a difference in the number and type of strategies used by students of the higher and intermediate level of proficiency. Students of the higher level used more strategies than the intermediate level students. The higher level students used different types of strategies more effectively compared to the intermediate level students. A discussion on the findings and some recommendations for further researchers have been made as reference for researchers who are interested in carrying out researches in this field.
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SECTION ONE

INTRODUCTION
CHAPTER I

INTRODUCTION

1.0 Introduction to the Project

English is used as a second language in Malaysia. It is an important language to enable Malaysia to engage meaningfully in local and international trade and commerce. It also provides an additional means of access to academic, professional and recreational materials.

English is taught in both primary and secondary schools in Malaysia. The English Language Programme is planned in accordance with the National Education Philosophy which seeks to develop the four skills in the language such as, listening, speaking, reading and writing and the accompanying grammar, sound system and vocabulary. English language is also taught at the tertiary level, for instance in Universiti Teknologi Malaysia (UTM). UTM offers English courses for students of the lower proficiency level of all fields of courses. For most of the students, reading at the tertiary level is an entirely new experience. Students might have been reading for 12 years or more in school and for pleasure, but academic reading can be overwhelmingly difficult for those whose skills are less than excellent.

What is the main purpose of reading? Readers usually read for comprehension of the printed materials that they read. Williams (1985) suggests that comprehension is the main motivation of reading. Most researchers such as Sloan and Lantham (1979) have defined comprehension as ‘deriving meaning from text.’ Comprehension can
be achieved when there is interaction and communication occurring between the
writer and the reader where the reader interprets the written message and integrate
the information into his or her own knowledge structure. Lapp and Flood
(1984:274) states that

...“comprehension occurs when the reader extracts meaning from the written
text rather than when he merely name the words in the texts.”

It can be said that reading focuses on the identification of words and also the
recalling of messages that the writer share. Johnston (1983), however, believes that
reading is the process of using the cues provided by the author and one’s prior
knowledge to infer the author’s intended meaning. A reader who has strong
background knowledge and experiences can only interpret the author’s message. In
order to make sure that students master the comprehending ability, teachers play an
important role in assisting students who are facing difficulties in understanding a
text.

Reading at the tertiary level requires the usage of English references, especially
in the field of engineering where without solid language proficiency, second
language readers cannot perform at the levels they must in order to succeed.
Students need to think about how their learning style interacts with the text that they
read and perhaps change their reading strategies to meet the challenges of the text.
There are four variables to be considered when learning how to read more
successfully, according to Haugen (1998), which include the reader, the text, the
strategies and the goal.

Some students are good readers; they instinctively understand how to use the
strategies in reading. There are other students who are unmotivated or feel insecure
and easily intimidated by complex materials. They find reading the materials or
reference books in the university libraries, textbooks or other research materials
difficult. Reading for academic purposes may be difficult especially when students
have not learned to use a variety of strategies (Haugen, 1998). Part of learning to use
reading strategies is to try out new and different ways of reading. Effective reading
in a second language is critical, therefore professionals in second language education
should be concerned with the approaches that can improve the reading strategies of students at the tertiary level.

Reading strategies show, "how readers conceive a task, what textual clues they attend to, how they make sense of what they read and what they do when they do not understand the text" (Block, 1986:465). They range from simple fix-up strategies such as simply rereading difficult segments and guessing the meaning of an unknown word from context, to more comprehensive strategies such as summarizing and relating what is being read to the reader's background knowledge (Janzen, 1996).

Reading is one language skill that enables students to obtain information and from there it develops the students' ability to acquire knowledge as well as the language itself. Reading as a subject is very important because it is still the major avenue by which an individual may become a life long learner. According to Goodman (1973),

"reading is a receptive language process. It is a psycholinguistic process in that it starts with a linguistic surface representation encoded by a writer and ends with meaning, which the reader constructs".

This means when students read, they recognize the words or symbols, associate the words or symbols with their sounds and meanings, piece together the meanings until they have a complete idea and then think about or explain to others the ideas they have received from the reading text.

In sum, reading is characterized as an active process of comprehending and readers need to use appropriate reading strategies more efficiently to enable them to explore the entire text that they read to comprehend written materials. In the following section, the background of the problem of this research will be discussed.
1.1 Background of the Problem

Reading is viewed by many as an activity that requires a variety of strategies for its effective accomplishment and it is one of the main tools by which one derives and gets meaning either from written or printed form of the language. Through my observations, I discovered that UTM students, engineering students in particular, do not use the appropriate reading strategies while reading their texts. Students normally end up not understanding the content of the text they have read due to the complicated terminologies and advanced level of English used in the texts.

Some of the good readers that I have observed used reading strategies and were able to comprehend texts well compared to some weak readers who did not use reading strategies while they read. It has then, sparked my interest to do an empirical research in reading strategies that can be employed by good and poor readers to understand the content of the texts they read. Many researchers have addressed the issue of reading strategies. The study carried out by Kleitzen (1991) focused on reading strategies used by students of high school level. This differs from the present research carried out on UTM students which focuses on tertiary level students.

The aim of teaching reading strategies is to enable students to recognize spoken vocabulary in print, increase the speed and accuracy of word recognition and to develop understanding of form written symbols and concepts learned in speech. It also aims to enable students to comprehend and interpret what has been read either silently or orally and become independent readers. Some of the strategies can be used to develop good reading habits that will help encourage them to read and understand materials.

Research into reading strategies of English as second language learners has concentrated on describing the strategies, which are involved in understanding a text. A vast amount of research in second language reading and reading strategies has found that good readers are better at monitoring their comprehension than poor readers, that they are more aware of the strategies they use than are poor readers, and that they use strategies more flexibly and efficiently (Garner, 1987).
Many English as second language (ESL) researchers have also begun to recognize the importance of the strategies ESL students use while reading because many students learn the language through reading. Strategy use is different among the more and less proficient readers and the more proficient readers use different types of strategies in different ways (Kleitzen, 1991). Successful reading depends on the usefulness of strategies used by poor readers to improve their understanding.

Therefore, UTM students who lack reading strategies must be shown how and when reading strategies should and could be used when they are engaged in reading. Having discussed the background of the project, the following section will focus on the statement of the problem of the research.

1.2 Statement of the Problem

In order to enjoy what has been read, readers have to respond to the texts. However, there are readers, particularly weak readers who still read but could not understand the texts completely. There may be two reasons as to why students in UTM who are in the field of engineering, may not understand some of the English technical terms or explanations used in textbooks or academic materials. First, they do not have the background knowledge on the specific engineering area. Second, they have not been exposed to these terms that are used in English. They do not use reading strategies while reading a text. It would be more difficult for students who are less proficient in English to understand some complicated texts. This research, therefore, attempts to find out the useful reading strategies students of high and intermediate level of proficiency can employ in order to help them read effectively.

Alexander, Heathington and Betty (1988) notes that:

A poor comprehender could often find a text too difficult to understand due to one or amalgamation of the following: inadequate prior experience, have little awareness of reading as a meaningful process, poor memory usage or inadequate decoding skills. (Alexander, Heathington and Betty, 1988)
As far as language problems in reading are concerned, it is important to ascertain the nature of the difficulties that readers encounter, in order to help them cope with these difficulties. The lack of comprehension is not only due to the factors mentioned by Alexander, Heathington and Betty (1988) above but could also be due to the lack of knowledge on reading strategies. Reading strategies involve ways of processing text, which will vary with the nature of the text, the reader’s purpose and the context of situation.

Students should be shown explicitly how and when a reading strategy could be used when engaged in reading a text. Many strategies have been suggested to cultivate good reading habits and to motivate the slow and reluctant readers to read more. For the purpose of this study, the ‘think-aloud’ protocol will be used to find out what types of reading strategies do the good and poor readers use in understanding a text by analyzing the mental activities in these readers’ mind through this method.

After the brief explanation on the statement of problem, the next section discusses the purpose of the research.

1.3 Purpose of the Study

Learning to read is not learning just a single strategy. It is learning many strategies that work together and build on each other. Each time a student improves any one strategy, it strengthens all the others. As his vocabulary improves, he will be able to understand and interpret his reading. As he learns to comprehend and interpret better, he will gain more clues about the meanings of unfamiliar words.

This study is interested in the question of what strategies do the students use and whether there are differences in the number and types of strategies used among the higher and intermediate level students. This study is carried out to discover the types of reading strategies in order to help students understand a text to improve their level of understanding while reading independently. It is hoped that the types of strategies
discovered can be used to help lower proficiency students change their attitudes in becoming a successful reader.

1.4 Research Objectives

The objective of this study is to investigate the types of strategies commonly used by readers in the engineering field to understand a text. This study also seeks to find out whether there are differences in the number and types of strategies among the higher and intermediate level students.

1.5 Research Questions

This research is carried out for some particular purposes. It is important to bear in mind the research questions throughout the research so as to make sure that the researcher achieves the objectives of the research and whether the research questions are answered at the end of the research. The research questions for this research are:

1) What strategies do students use in understanding a text?
2) Are there any differences in the number and types of strategies used by the higher and intermediate level students?