# CHAPTER 1: INTRODUCTION

## 1.0     Introduction

In a fast developing country such as Malaysia, English plays a vital part as the tool of communication. It does not only act as the language for international communication, but also as a medium for the latest developments in science and technology. According to Asmah, Malaysians have realized that the English language is an asset to keep, since it can provide them with an avenue to international relations as well as a means to their progression in science and technology (1982:46). Whereas Graddol (2000), states that English is now the international currency of science and technology as most of the science resources are written in English.

At the same time, Gonzales (2009), claims that with the emphasis on Bahasa Melayu and other vernacular languages as the medium of instruction in Malaysian schools, English has been sidelined for the last 20 years. He continues to say that from independence until the 60s, there was a good English education system, with our schools even on par with those in developed countries. According to him, this will be apparent if a comparison is made by scrutinizing the examination papers in the Lower Certificate of Education, Senior Cambridge and the Higher School Certificate examinations in the 60s with the current examination papers. Therefore, Gonzales recommends for some serious changes in our education system pertaining to the teaching and learning of English to

ensure that we can produce the ideal manpower to move Malaysia forward from middle–income country to a high-income country. Thus, it would be useful to study the development of English in Malaysia in order to understand the changes that are deemed necessary.

## 1.1    The development of English in Malaysia

### 1.1.1    English in the pre-independent years

In the pre-independent years, English was taught as the first language and was the medium of instruction in the English schools in Malaya (Platt and Weber, 1980:12). Such schools provided education from the primary up to the Cambridge school Certificate level and the G.C.E 'O' level. Later on, it continued to the Cambridge Higher School Certificate level, which is equivalent to the G.C.E 'A' level.

According to Platt and Weber, Malaysians who were brought up in the English school tradition spoke English that was very approximate to native speakers' English. They categorize this as 'Malaysian English' or 'Malaysian English I' (MEI). Malaysians, especially in the urban areas, communicated in English not only for academic purposes, but also for their social life necessities.

Undeniably, English in the colonial and post-colonial era was important for multiracial Malaysians to climb up the socioeconomic ladder. Even though the

objective of learning English was instrumental at that point of time, English was still used as lingua franca by those who were educated in the English medium.

It was apparent that Malaya had a system of education which had four separate sets of schools identified by language medium before independence (Asmah Haji Omar, 1982: 48)). They were:

i)      The English schools   (English was used as medium of instruction)

ii)     The Malay schools     (Malay was used as medium of instruction)

iii)    The Chinese schools   (Mandarin was used as medium of instruction)

iv)     The Indian schools.   (Tamil was used as medium of instruction)

Among these four types of schools, the English school was considered as the elite school that provided education up to the university level (Platt and Weber, 1980:13). Pupils in the English schools had a brighter future as they were readily employed in the government services and the business sectors. Some even went to the universities abroad and returned to occupy high positions in the government service.

## 1.1.2   English after independence

After independence, the Constitution of Malaya 1957, specifically its Language Act placed English as an official language in Malaysia for 10 years even after independence (Asmah Haji Omar, 1982:42-46).   According to

Chitravelu (1985:9), even after the Revised Act of 1967 made Malay the sole official language of Malaysia, English was still allowed to remain as the language of the legal domain. This means that English was officially used in the judiciary, legal services and legal documents.

Later on, various efforts were taken to develop a national system of education, which emphasizes on the unity of Malaysians. The Razak Report (1956) suggested a national education system that would mould the people into one nation with the use of Malay as the national language. They recommended a common content syllabi for all schools with the pupils learning the same subjects in schools despite the fact that the medium of instruction was different (Ho, 2004).

In 1960, The Education Review Committee 1960 (known as the Rahman Taib Committee) went a step further by recommending the use of national language as the main medium of instruction in all the schools in Malaysia, not only at the primary level but also at the secondary and tertiary levels. Thus, various actions were taken to achieve this objective immediately.

The main action taken to achieve the objective mentioned above was the conversion of the medium of instruction from English to Malay in the English schools beginning from 1968. The conversion of the English schools into national schools, which used the national language as medium of interaction, was

completed in 1982. Then, the Malaysian schools were categorized into national schools (former Malay and English schools which now use Malay as medium of instruction) and national type schools (use Chinese or Tamil as medium of instruction). In both categories, English is taught as a compulsory subject. Thus, English is considered as the second most important language and taught as the second language in Malaysia.

English is a compulsory subject in all schools in Malaysia, from the primary to the upper secondary levels. At the primary level, the curriculum aims to help pupils with the basic skills and knowledge of the English language so as to enable them to communicate, both orally and in writing, in and out of schools (Ho, 2003). According to him, the teachers also have realized that the learning process is just as important as the teaching process. Thus, more learner-centred teaching methods and techniques have been in use lately. For example, in the 1990s, self access centres were introduced, enabling students to learn independently and without fear.

At the same time, there were also some other notable developments in the Malaysian education system, especially in the year 2000. The Smart Schools project was launched by the government under the flagship of the Multimedia Supercoridor project.

For this purpose, a curriculum emphasizing on critical and creative teaching, learning and technology, and self-directed learning was introduced. In

addition, another policy change took place in 2003 when English was again used as the medium of instruction for mathematics and science for standard one, form one and lower six.

## 1.2   The Need for EST in Malaysia

The day-to-day innovation in science and technology has transformed English language as a universal language for international communication. Thus, Malaysians unquestionably have to master this language in order to communicate efficiently at the international level. Besides, Malaysians who are proficient in English will be the front liners in generating and expanding knowledge in the field of science and technology worldwide.

In Malaysia, English is taught as a second language in all primary and secondary schools in line with its status as a second language. Students are taught the English language to enable them to use the language in everyday life, to further their studies and for work purposes. The continuing emphasis on Science and technology has made it essential for students to access information on science and technology in English. This requires them to listen to, read and present the information orally and in writing in the medium of English. Thus, the Education Ministry developed English for Science and Technology syllabus in 2003.

## 1.3 English for science and technology (EST) in Malaysia

English for science and technology is an elective paper at the upper secondary level (Forms 4 and 5) and will be tested in the Sijil Pendidikan Malaysia (SPM) examination. Students opting for this elective will also be required to study English as outlined in the General English Syllabus. The English for Science and Technology subject lays the foundation for the use of English in the fields of Science and Technology not only for the present school levels, but also for further studies at the tertiary level. This subject is designed to help students develop an ability to grasp basic concepts and ideas in science as well as all kinds of scientific and technical discourse.

The English for Science and Technology Syllabus aims to provide students with the language basis to access and understand materials on Science and technology and to express ideas and concepts in English (Refer Appendix A). As emphasis is placed on accessing content, the ability to read and comprehend materials in English is the main priority. Various topics have been prescribed in the syllabus and they are:

 i.    Nature and Environment

 ii.   Technology and Communication

 iii.  Man and Living Organisms

 iv.   Natural Resources and Industrial Processes

 v.    The Universe

 vi.   Nutrition/Food/Health

vii.    Matter and Energy

The significance of these themes is the ideas and concepts they contain as well as the register they are written in. According to Jacob (2006), The EST syllabus does not aim to teach science per se, but to make available familiar content in science in English. It emphasizes on the application of science in a wide range of fields, which helps to sustain the interest of the learners. Indirectly, the learners are encouraged to read extensively so that subconsciously they learn to recognize and pick up words and phrases that are common in science texts. Jacob also states that a lot of science texts are written for the layman and the local newspapers are the best source of these materials.

Besides that, the main guidebook being used for the teaching and learning of this subject is the textbook which incorporates the Integrated Curriculum for secondary schools. This book is a learning resource that fulfills and complies with the requirements of the syllabus and curriculum specifications produced by the Ministry of Education.

The test for EST comprises two papers: Paper one (6355/1) and Paper two (6355/2) (Refer appendix B). The candidates have to sit for both papers. Paper one, which carries 50 marks, consists of two sections. The time allocated for this paper is 1 hour and 15 minutes. The sections in paper one are:

**Section A**: Answer 20 questions on two information transfer type exercises.

**Section B**: Carry out a writing task based on the input given.

Meanwhile, Paper two, which carries 30 marks is also divided into two:

**Section A**: Answer 25 Multi Choice Questions (MCQs) based on short texts.

**Section B**: Answer 5 questions based on a cloze exercise.

The English for Science and Technology curriculum enables learners to:

i. Obtain information by reading and understanding different text types in science and technology in English.

ii. Obtain information by listening to and viewing texts on science and technology in English from audio-visual and electronic sources such as talks and television programmes.

iii. Access and understand information on the internet and other electronic media.

iv. Present information on science and technology at an appropriate level in both the written and spoken form: and

v. Think critically and give their points of view on issues pertaining to science and technology.

## 1.4    Statement of the problem

The results of the SPM (Sijil Pelajaran Malaysia) examinations for the past seven years have shown a good passing level for English for Science and Technology in Sekolah Menengah Kebangsaan Taman Maluri (Refer Appendix C). Unfortunately, the number of students who got credits and distinctions are very low compared to their achievement for English language. They do also fail to achieve the target set by the English department every year. In addition, the result of the 2009 SPM examination has shown a notable decrease in the number of A's for this subject. This condition has definitely created awareness, not only among the English teachers of the school, but also the head of the department and the school management.

Undeniably, this condition is not only prevalent in the SPM examinations, but also in the school and district level tests and examinations. Even if the percentage of passes is at the above average level, the students struggle to get credits and distinctions. This is very disappointing for the teachers as well as the students. It is essential to find out the reason for the students' failure to achieve excellent results despite the fact that their English proficiency is above the average level.

Thus, having in mind that the plan of teaching EST is relatively new, it is realized that a research has to be carried out into different areas related to this policy as it would help to get response on various aspects such as the teachers and the students needs, facilities, resources and teachers' training.

10

Therefore, this study focuses on the needs analysis of students learning English for Science and Technology in this school, based on their perceptions of their language needs and the teachers' perceptions of the students' needs. This analysis is carried out with the intention of making recommendations for appropriate strategies and teaching methods that will facilitate the students to learn the subject more efficiently.

## 1.5 Objectives of the study

The main objectives of this study are:

a) To carry out a needs analysis of students learning English for Science and Technology in a national secondary school.

b) To find out the students' perceptions' relating to the learning of the subject.

c) To find out the teachers' perceptions about the students' needs relating to the learning of the subject.

## 1.6 Research Questions

This study sets out to answer the following questions:

a) What are the students' perceptions concerning the learning of English for Science and Technology?

b) What are the teachers' perceptions about the language needs of the students concerning the learning of English for Science and Technology?

c) What is/are the most important English language skill/skills needed by EST students?

## 1.7    Scope and limitations of the study

The subjects involved in this study were 50 students from a local school. As only 50 students were involved, the findings of this research may not reflect the needs of all students learning English for Science and Technology in Malaysia. The results obtained through this study are only valid to the subjects involved in this study and should not be extended to other schools in Malaysia.

Another limitation of this study is whether the subjects answered the questionnaires honestly. This is because the questions are related to the perceptions of the students and teachers. Thus, there might be a disparity between their perceptions and the reality. It is hoped that accurate information on the specific language needs of the students is obtained.

## 1.8    Significance of the study

The data gathered from this study is hoped to provide an insight into the problems faced by the students learning EST and the teachers teaching EST with regards to some of their needs and perceptions. Identifying the needs will also help in the recommendation of appropriate strategies and teaching methods. At the same time, the findings might be relevant to and representative of the needs of students of other schools to a certain extent.