

## **CHAPTER 1: INTRODUCTION**

### **1.1 Introduction**

The Diploma in Aircraft Maintenance Technology course offered by Kolej TAFE Seremban aims to equip students with the knowledge and skills in aircraft maintenance engineering that enable them to be employed as aircraft maintenance technicians, and to provide a pathway to becoming aircraft maintenance engineers. The medium of instruction for the course is English.

Students enrolling for the course are required to have passed the Sijil Pelajaran Malaysia (Malaysian Certificate of Education), commonly referred to as SPM, examination with credits in Mathematics and Science. They are only required to have at least a pass in English. Therefore, some students may not have the required level of English proficiency to perform well in this course which is taught entirely in English. Students who have passed the SPM examination with credits in at least three subjects but do not have a credit in Mathematics and Science are required to pass a 16-month foundation course known as Certificate of Engineering before being admitted to the diploma programme.

This study aims to determine the language needs of the students pursuing the Diploma in Aircraft Maintenance Engineering. This will help identify the components that need to be incorporated into any English for Specific Purposes (ESP) module formulated for students of this course. The needs will be determined by sourcing the views of the students as well as their lecturers and instructors.

The main theoretical framework on which this study is based on is Hutchinson and Waters' (1987) description of the target and learning needs of students. Target needs are what the learners need to know in the target situation, and learning needs are what the learner needs to do in order to learn. Hutchinson and Waters' (1987) framework for a target situation requires determining why the language is needed, how it will be used, who the

learner will use the language with, where and when it will be used and what the resources for teaching the language are.

## **1.2 Diploma in Aircraft Maintenance Engineering at Kolej TAFE**

The Diploma in Aircraft Maintenance Technology at Kolej TAFE Seremban is designed to train students to perform routine maintenance procedures on commercial aircraft. Students of this course are trained to service, repair and overhaul various aircraft components and systems including electrical and hydraulic systems, propellers, avionics equipment and aircraft instruments. Aircraft maintenance technicians work in one of three specialist streams – structural, avionics or mechanical. Aircraft maintenance technicians may be employed by general aviation companies, domestic and international airlines, and aerospace companies. By becoming further qualified as a Licensed Aircraft Maintenance Engineer, they will inspect and approve as ready to fly some of the most sophisticated aircraft in the world.

## **1.3 The Importance of English**

The ability to speak, read and write well in English is an essential requisite for a graduate in Aircraft Maintenance Engineering since the manufacturers' maintenance manuals for the different types of aircraft are in English. Moreover, the medium of both oral and written communication in the aircraft maintenance industry is also English. The importance of the ability to communicate well in English has assumed more significance with English being the preferred language of international communication in the present globalised economy.

Aircraft Maintenance Technology students ought to have a fairly good grasp of the four basic language skills, listening, speaking, reading and writing, in order to understand their lessons, read and understand textbooks and reference material, communicate with their lecturers, instructors and peers, and to answer assignments and examination questions. The need for good English communication skills is even more important when they

undergo practical training on attachment with airline companies or other organisations providing aircraft maintenance services. Therefore it is essential that the students possess the necessary English language skills to perform satisfactorily in their chosen field of study. It is for these reasons that it would be feasible to include an ESP course as a module in this diploma programme.

A Needs Analysis for a course is the process of finding out what to teach and how to teach it. Berwick (1989) defines a need as “a gap or measurable discrepancy between a current state of affairs and a desired future state.”

#### **1.4 Statement of Problem**

Students pursuing the diploma programme in Aircraft Maintenance Technology need to attain the required proficiency in English for the following purposes:

- i. to understand lectures and tutorials conducted in English
- ii. to participate in class discussions and to ask questions to clarify doubts
- iii. to answer examination questions
- iv. to understand the contents of aircraft maintenance manuals and job sheets to enable them to carry out tasks assigned satisfactorily
- v. to interact with colleagues in a multi-national workforce

From information gathered from informal discussions with their lecturers, it has been found that a substantial proportion of the students lack the required English language skills to perform satisfactorily in class and in practical sessions. Thus, there is a need to design an English for Specific Purposes (ESP) course that would equip students with the required language skills to complete the diploma course successfully, and to procure employment and perform efficiently in the demanding airline industry.

#### **1.5 Research Purpose and Objectives**

The medium of instruction in Malaysian schools under the current education system is Bahasa Malaysia. English is taught as a compulsory subject from Year 1 to Form 5 but it is not mandatory to obtain a pass in English in the Malaysian Certificate of Education (SPM) examination. This has resulted in a situation where many school leavers encounter problems when they pursue higher education in the field of science and technology, especially in private colleges and universities where the medium of instruction is English. Therefore, an ESP course would definitely facilitate effective learning in the students' respective fields of study.

The Research Objectives are:

- i. to identify the perspectives and expectations of the students .
- ii. to identify the perspectives and expectations of the academic sector, i.e. the lecturers and instructors.
- iii. to identify the perspectives and expectations of organisations engaged in aircraft maintenance in their capacity as the future employers of the students.

## **1.6 Research Questions**

The research questions are:

- i. What are the perceptions of students regarding the needs of the employers?
- ii. What are the employers' expectations of the ESP proficiency of the students?
- iii. What are the perceptions of the industry personnel (employers) regarding the ESP needs of the students?
- iv. What are the perceptions of students regarding their ESP proficiency?
- v. What are the perceptions of the lecturers regarding the ESP needs of the students?
- vi. What are the perceptions of the lecturers regarding the ESP proficiency of the students?

## **1.7 Research Methodology**

The methodology consists of two methods; one is a questionnaire and the other is interviews. The questionnaire will be administered to 100 students in the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> semesters of this course to obtain feedback on their English language needs. Five senior lecturers teaching the course will be interviewed to obtain their views and comments. Four of these lecturers are Malaysians who were previously employed in organisations engaged in aircraft maintenance and had worked with students who graduated from TAFE College. Thus they would also be able to present the viewpoints of the employers. The other lecturer is an expatriate from India who had experience teaching the course in India.

## **1.8 English Language Proficiency of Malaysian Students**

At this juncture, it would be pertinent to elucidate the level of English language proficiency of students in Malaysia. Malaysia, or Malaya as it was then known, was a British colony until it achieved independence in 1957. During the British administration of Malaya, the language used for official communication was mainly English. English-educated Malaysians were needed to man the subordinate ranks of the Malayan civil service as well as to occupy clerical and supervisory positions in private enterprises. The colonial government set up English medium schools in Malaya. English schools were also established by British missionaries. Students at these schools sat for the Senior Cambridge Examination as the Cambridge O Level examination was then known. Those who passed the examination could then join the Malayan civil service or work in the private sector. A small number pursued tertiary education in Britain and other Commonwealth countries, and the University of Malaya in Singapore. Although there were Malay, Chinese and Tamil medium schools, the English schools were the preferred choice of parents who wanted their children to pursue a professional career or secure a good job in the civil service or private sector. After independence, the education policy was amended to make the Malay

language the medium of instruction in the English medium schools. The transition was implemented for the Year One students in 1970 and was completed in 1981 when the first batch of students sat for the school certificate examinations in Malay. English continues to be taught as a compulsory second language from Year 1 to Form 5. However it is not compulsory to obtain a pass in English for the SPM (school certificate) examination. Although Chinese and Tamil medium national primary schools are allowed, secondary education in all national schools is in Malay. There are no English schools. The level of English proficiency among students has gradually declined with the introduction of Malay-medium education. The Ministry of Education has acknowledged that the level of English proficiency among students has declined and is taking steps which it hopes will lead to better proficiency in English among students.

### **1.9 Limitations of the Study**

There are two major limitations of the study. First, the findings in this study are based on feedback obtained from students and lecturers via the questionnaires and interviews. I did not have the privilege of observing the classes, workshop sessions or on-job training. Neither did I have a closer look at language used by the students. The information obtained is merely the viewpoints of the students and lecturers. The students may be reluctant to confess that they lack the required proficiency in English and may give misleading information or may misjudge their abilities. The information provided in the questionnaires, or at least in some of them, may not be reliable to accurately gauge the English proficiency level of the students.

The second limitation is the lecturers' lack of formal training in teaching. The lecturers interviewed are trained technical personnel who rely on knowledge gained during their pre-service and in-service training and their working experience to teach the course. They have no formal training in teaching. Therefore any difficulties faced by the students in

understanding lessons may not be solely due to the students' lack of English proficiency but also to the teachers' use of inappropriate teaching methodology. Moreover, the Malaysian lecturers interviewed were all educated in English medium schools, have passed the Cambridge School Certificate examination, and therefore have a good command of English. The lecturers face no difficulty in using English while the same cannot be said for the students who were educated in the Malay medium schools. The lecturers may therefore be unable to appreciate the language difficulties of the students.

The questionnaires were administered on a sample of only 100 of the students so as to minimise disruptions to classes. The respondents were selected at random and do not represent a proportionate number of students of different academic abilities.