

CHAPTER 5: SUMMARY AND CONCLUSIONS

5.1 Introduction

This chapter will summarise the findings of the study discussed in Chapter 4. These findings will be reconsidered in relation to the research questions posed in Chapter 1. These findings will identify the English language needs of the Aircraft Maintenance Technology students of this college.

5.2 Research Questions

This study employs Hutchinson and Waters' framework for analysing the learner needs in a target situation (as discussed in Section 5.3 of this chapter). As outlined in Section 3.3, six research questions were formulated based on the five criteria listed by Hutchinson and Waters. The answers to these research questions, as repeated here, would help identify the English language needs of the Diploma in Aircraft Maintenance Technology students at the college. 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?
(through interviews with lecturers)
- iii. What are the perceptions of the industry personnel (employers) regarding the ESP needs of the students? (through interviews with lecturers)
- 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?

5.2.1 The perceptions of students regarding the needs of the employers

The students are aware that proficiency in English is an essential requirement for a career in aircraft maintenance engineering. This is reflected in their responses to the questions in the questionnaire on the importance of English and its frequency of use during their on-job training. More than 70 per cent of students surveyed indicated that the language is very important for the purpose of understanding oral instructions, reading instruction manuals and instructions on job sheets, and for writing log books and reports. Students therefore realise that prospective employers would expect them to have a certain level of proficiency in English in order for them to procure employment.

5.2.2 The employers' expectations of the ESP proficiency of the students

The lecturers interviewed are representative of the employers as well. They have worked for many years in organisations involved in aircraft maintenance and are conversant with the demands of the industry. The lecturers say that it is very important to be proficient in English in order to pursue a career in aircraft engineering. This is because aircraft instruction manuals, job sheets and log books are all in English. The medium of communication at the workplace is also English. Furthermore, maintenance personnel are required to attend periodical training to keep abreast of technical developments in the industry. These training sessions may be conducted locally or in foreign countries. The medium of instruction is English.

5.2.3 Perceptions of the industry personnel (employers) regarding the ESP needs of the students

One of the lecturers interviewed said that the department had received some complaints from organisations where students performed their OJT about the students' lack of proficiency in English. Other lecturers also reported during informal discussions that they

had received feedback from their former colleagues in organisations where Kolej TAFE graduates are now employed that the English proficiency of the graduates is wanting. The lecturers concerned are of the opinion that only about 50 per cent of their students have the required level of English proficiency. The other students may be able to cope with the course at college but the lecturers foresee these students facing problems when they are employed in the industry.

5.2.4 Perceptions of students regarding their ESP proficiency

The majority of students feel that their proficiency in English is good or, at least satisfactory. Only a very small number consider their English language skills as poor. The rest feel that their language skills are of average standard. Therefore, it can be inferred that the majority of the students who participated in the survey are confident that they are proficient in English. This may be because they are able to understand English well and also converse with their friends. They do not appear to be aware of their limitations.

5.2.5 Perceptions of the lecturers regarding the ESP needs of the students

The lecturers recommend that any ESP course taught to these students should emphasise more on reading and writing, and less on listening and speaking. They propose the introduction of a course in Technical English. I interpret this as an ESP course specifically for aircraft maintenance technology students which would familiarise them with the technical terminology used in the field. They also advocate that the language course should incorporate teaching and learning material relevant to aircraft maintenance engineering. For example, passages for reading comprehension could be extracted from aircraft manuals.

5.2.6 Perceptions of the lecturers regarding the ESP proficiency of the students

The lecturers feel that the present level of English proficiency of some of their students would be insufficient to perform their duties satisfactorily in their careers as aircraft

maintenance technicians. The lecturers are of the opinion that the students need further language instruction, especially in reading and writing. They also find that they have to simplify their explanations to aid students' understanding during lessons. This involves rephrasing their sentences in simple language when they feel that the students do not understand what they have said. The lecturers also clarified that the ability to answer examination questions to a large part entails rote learning where students merely regurgitate what they have memorised. Therefore their ability to pass examinations is not a true reflection of their ability to read and write English. This is the reason some of the students face problems during OJT or when they begin working. The students lack proficiency in spoken English to communicate effectively with their lecturers and during OJT. They also emphasise that students need to improve their reading skills to understand the contents of material they are required to read both at college, during OJT and when they begin working. They also need to further improve on their writing skills. In short, the lecturers' opinion is that the students lack basic proficiency in English.

5.3 ESP and Needs Analysis

Hutchinson and Waters (1987) define ESP as an approach to language learning, which is based on learner need. Dudley-Evans and St John (1998) identify one of the absolute characteristics of ESP as that it is designed to meet specific needs of the learner. All the other authorities on ESP quoted in Chapter 2 also share the view that an ESP course must be geared towards the specific needs of the learners.

Hutchinson and Waters (1987) stress that what differentiates ESP from General English is not the existence of a need as such but the awareness of the need. To be aware of the needs requires us to first identify the needs. This process of identifying the needs is referred to as Needs Analysis. Dudley-Evans and St John (1998) define Needs Analysis as

the process of finding out what to teach and how to teach it. Hutchinson and Waters (1987) further distinguish between target needs, i.e. what the learners need to know in the target situation, and learning needs, i.e. what the learner needs to do in order to learn. Therefore, the planning of any ESP course would first necessitate implementation of a needs analysis.

5.4 Learning Needs and Target Needs

As stated in Chapter 4, this study will attempt to identify the learning needs and target needs as defined by Hutchinson and Waters. Hutchinson and Waters' framework for analysing the learner needs in 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.

5.4.1 Why the language is needed

As pointed out in Chapter 4, 'the language of aviation is English'. Proficiency in the language is indispensable for students to complete the Diploma in Aircraft Maintenance Technology course successfully and to perform their duties satisfactorily as aircraft maintenance technicians. As explained in earlier chapters, the medium of instruction for the course is English. Lectures, tutorials and workshop sessions are all conducted in English. Reference texts and aircraft manuals are in English. The students will also have to answer examination questions and complete assignments in the language. Moreover, the student will have to undergo OJT, for which proficiency in English is of utmost importance.

5.4.2 How the language will be used

It will be used in college to understand lessons and to participate in class discussions, for reading reference texts and to answer examination questions. During OJT, it will be used to read aircraft manuals and instructions on job sheets, to write reports, to maintain a record of work done in the students' log books and to communicate orally with superiors and fellow

technicians. When the student completes the course and begins work, English will be used to read aircraft maintenance manuals and other documents, to write reports as well as to communicate with others at the workplace. Therefore the aircraft maintenance technology student will have to be proficient in all the four language skills.

5.4.3 Who the learner will use the language with

In college, the student will use the language in class to understand lectures and to ask and answer questions, and to communicate with lecturers, other staff members and fellow students both in and outside the classroom. During OJT, it will be used to understand instructions from superiors and senior technicians and to speak to them. When the student begins working, English will be used to communicate with other staff at the workplace. It will also be used to communicate with instructors when they are sent for further training locally or in foreign countries.

5.4.4 Where and when it will be used

As described in detail in the answers to the earlier questions, English will be used in college, at organisations where the students perform their OJT and subsequently at the workplace. As to when it will be used, it will be used at all times when the students are in college and at the workplace.

5.4.5 What the resources are for teaching the language

H. Abdul Raof and Masdinah (2006) argue that learners would be more receptive to an ESP course which is in tandem with their present course of study or their future working environment. Hutchinson and Waters (1987) are of the view that learners perform better in a 'learner-centred' environment, i.e. the use of material that catered to their knowledge, skills, experience, schemata and learning strategies and situations. Gatehouse (2001), too, advocates the use of authentic material, in original as well as modified form. All the

lecturers interviewed were also unanimous in their belief that the material for an ESP course for their students should be sourced from texts that are pertinent to aircraft maintenance engineering. The fourth theory of learning, the Affective Approach, is based on the rationale that learning is an emotional experience. It is based on the premise that before learners can actively think about something, they must want to think about it. In other words, they must be motivated to think. Based on all these recommendations, it can be safely assumed that students would be best motivated if the learning material is relevant to their chosen field of study, i.e. material related to aircraft maintenance engineering. Therefore the resources should be extracted from aircraft maintenance manuals, reports and other documents related to aircraft maintenance engineering.

5.5 Conclusions

I make three conclusions. First, from the data obtained through the questionnaires and the interviews with the lecturers, it is apparent that the English language proficiency of a substantial number of the Diploma in Aircraft Maintenance Technology students of the college is wanting. Although proficiency in English, 'the language of aviation' is of essence to a student of aircraft maintenance engineering., the majority of aircraft maintenance technology students lack the required level of competence in the four language skills, even after the second or third semester. This is despite having to attend classes conducted in English and answer assignment and examination questions in the language. The language used in class, during workshop sessions, in communication with lecturers and other staff and during on-job training is English. The lack of proficiency is due to the students not having attained the desired level of English proficiency on completing their secondary school education. This could be due to various factors, as discussed in Section 1.8 of Chapter 1. The areas which they are most weak in, as shown by the survey, are reading and

writing. It is imperative that the weaknesses be addressed. The students need to be equipped with the required level of proficiency in English to complete the course successfully and to perform to expectations as aircraft maintenance personnel. The students not only need competence in the four language skills but would also have to familiarise themselves with the technical language used in the profession. Therefore any measures taken would have to address both these needs.

Second, the students and their lecturers have divergent views about the students' proficiency in English. Although the majority of students feel that they are proficient in English, the lecturers do not concur. The students' confidence is probably derived from their ability to understand and communicate in English in the EGP context. However the lecturers opine that the students lack the level of English language proficiency required of aircraft maintenance personnel. This can only be addressed with the introduction of an ESP module. As pointed out in Section 2.2.2, the current approach to ESP teaching is to focus on the skills needed in specific contexts in a particular discipline. The interviews with the lecturers reveal that the areas in which the students are most lacking are reading and writing. Therefore, the syllabus content for the ESP module should emphasise reading and writing skills. The teaching and learning material used for reading should be drawn from aircraft instruction manuals, magazine articles on aircraft maintenance engineering and other relevant publications. The material could be sourced from the internet or the English teacher concerned could approach the lecturers from the Aircraft Maintenance Engineering Department for assistance in procuring relevant material. The writing component should be weighted in favour of report writing and should also incorporate other documents such as memos and instruction manuals.

The third conclusion, based on the findings, is that it is evident that the students need to improve their level of ability in the four language skills. This calls for the introduction of an EGP module to improve the students' language skills. The EGP course should be weighted in favour of reading and writing skills, as these are the areas in which the students are found most wanting. The teacher should also help the students gain confidence to express themselves in English. The EGP module should preferably be offered during the first semester of the course. This would help the students to improve their basic language skills before proceeding to the ESP module. The second module should preferably be taught in the third or fourth semester when the students have already experienced at least one stint of on-job training. They would then be more aware of the importance of procuring the required skills.

Finally, the study conducted has focussed on the information acquired via the questionnaires and interviews but it has not collected qualitative data produced by the students. An ideal EGP or ESP course should be based on the results of both quantitative and qualitative data. I believe that this study has contributed to the former, and the latter will hopefully be supplemented in future.