AN INVESTIGATION INTO THE ENGLISH LANGUAGE NEEDS OF
ELECTRICAL ENGINEERING STUDENTS: A CASE STUDY

MAGANDRAN A/L MALAYAPPAN

A Thesis submitted to the Faculty of Languages and Linguistics,
University of Malaya
in partial fulfillment of the requirements
for the degree of Masters of English as a Second Language
2000
ACKNOWLEDGEMENTS

I am pleased to express my deep appreciation and gratitude to a number of people who have helped me in the study. First of all, I would like to express my special appreciation and gratitude to my Spiritual Master, Oshenushisama for her constant grace and blessings.

My heartfelt appreciation and gratitude to my thesis supervisor Puan Narindar Kaur Chinjer for her time, helpful guidance and encouragement and motivation to complete this dissertation. It would have never been finished in time without her great guidance.

Special thanks are extended to my beloved wife, Selva Letchumi for her constant encouragement, my family members for their understanding and to my grandmother, Madam Mariamah for being my sounding board.

My sincere thanks to the Vice Principal, English Language lecturers, Electrical Department lecturers' and the Diploma of Electrical Engineering students of Politeknik Ungku Omar for any help and assistance rendered to make this study successful. Special thanks are extended to Mr. Perumal, a senior lecturer at the PUO Electrical Engineering Department for helping to administer the questionnaire to the students and to obtain relevant materials and references for the study. Lastly, I would like to dedicate this study to the memory of my mother Madam Ramayee; may her soul be guided by Oshenushisama.
ABSTRACT

The study is an attempt to identify the needs of Diploma of Electrical Engineering students in Ungku Omar Polytechnic. It aims to contribute to the English Language Department of the Polytechnic and the parties concerned, essential findings that forms a basis for course revision and development in its present English Language programme. This study researches in some depth into the area of needs for English, concentrating on the students' needs in respect of reading, speaking, writing and listening.

The aims of the study are to find out:

i. What are the present needs of the UOP Diploma of Electrical Engineering students?

ii. What are the needs in terms of proficiency of prospective employers?

iii. What are the needs and problems of the students during industrial training?

iv. What are the changes that need to be made in the syllabus to meet the real needs?

The findings reveal an academic study situation where reading, speaking, writing and listening are essential skills to be mastered by students in order to succeed in their technical courses as well as in their future workplace. The findings also reveal areas of difficulty that students face and certain speaking and writing skills that need emphasis.
In conclusion, this study offers suggestions and recommendations which could be the solutions for certain problems or an onset for further research.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS i

ABSTRACT ii

CHAPTER 1: THE STUDY

1.0 Introduction 1

1.1 Significance of English as an International Language 3

1.2 The Function of English in the Employment Domain 5

1.3 Background of Polytechnic Ungku Omar 7

1.4 Administrative System of UOP 8

1.5 Programs at UOP 8

1.6 Industrial Training 9

1.7 Student Evaluation 9

1.8 Student Admission 10

1.9 Entry Requirements. 10

1.10 Outline of the English Syllabus For Diploma and Certificate Courses in UOP 11

1.11 Entry Requirements for English Proficiency 12

1.12 Time Allocation 14

1.13 General Aims of the Syllabus 15

1.14 Syllabus Content and Weightage 16
1.15 Teaching and Learning Approach as Prescribed in the Syllabus 19

1.16 Methods of Students Assessment 20

1.17 Course Evaluation 20

1.18 Statement of the Problem 21

1.19 Objective of the Study 23

1.20 Research Questions 23

1.21 Significance of the Study 24

1.22 Aims of the Study 25

1.23 Limitations of the Study 26

CHAPTER 2: REVIEW OF LITERATURE

2.0 Reading: Its Significance in the Scientific and Technological Innovation Era 28

2.1 Needs Analysis 29

2.2 English for Specific Purpose (ESP): Definition and its Parameter 35

2.3 Designing ESP Programs 37

CHAPTER 3: METHODOLOGY

3.0 Introduction 42

3.1 Research Design 42

3.2 The Sample 43
3.2.1 The Students 43
3.2.2 The English Department Lecturers 44
3.2.3 The Employers 45
3.3 Instrumentation 46
3.4 The Students' Questionnaire 47
3.5 The Employers Questionnaire 49
3.6 The English Lecturers' Questionnaire 50
3.7 Administration of the Questionnaire 51
3.8 Development of the Questionnaire 52
3.9 Research Proceedings 53
3.10 Methods of Analysis 53
3.11 Conclusion 54

CHAPTER 4: RESULTS AND FINDINGS

4.0 Introduction 55
4.1 Background of Respondents 56
4.2 English Language Usage in Coursework and Reference Work by Students 59
4.3 Extent of English Used During Industrial Training as Perceived by the Employers 60
4.4 Abilities of Students in the English Language Skills 61
4.5 Importance of the English Language Skills 62
4.6 Importance of Language Sub-skills 65
4.7 Problems in English Language Skills 82
4.8 English Language Proficiency Course and Evaluation: Means 87
4.9 English Language Proficiency Course Evaluation: Wants 96
4.10 Lecturers' Opinions and Suggestions About the English Language Program 100
4.11 Usage of English During Industrial Training 108
4.12 Employers' Opinions of Students' Command of the English Language 115

CHAPTER 5: SUMMARY OF FINDINGS AND RECOMMENDATIONS

5.0 Introduction 117
5.1 Summary of the Findings 118
5.2 Background of the Respondents 118
5.3 Abilities of Students in the English Language Skills 119
5.4 Importance of the English Language Skills 120
5.5 Speaking sub-skills 120
5.6 Reading Sub-skills 120
5.7 Writing Sub-skills 121
5.8 Listening Sub-skills 121
5.9 Problems of Students in the Various English
5.9 Problems of Students in the Various English Language Skills

5.10 Types of Problems in Learning the ESP Course

5.11 English Language Proficiency Evaluation Wants

5.12 English Language Proficiency Evaluation Means

5.13 Lecturers Suggestions and Opinions About the English Language Program

5.14 English Usage During Industrial Training

5.15 Research Questions and Findings

5.16 Research question 1: What are the present Needs Of UOP Students?

5.17 Research Question 2: What are the Needs of the In Terms of Prospective Employers?

5.18 Research Question 3: What are the Needs and Problems of the Students During Industrial Training?

5.19 Research Question 4: What are the Changes Need to be Made in the Syllabus to Meet the Real Needs?

5.20 Conclusion
5.21 Suggestions for Further Research

BIBLIOGRAPHY

APPENDICES A - G

ix
LIST OF TABLES

Table 1 Academic Qualifications Of the English Lecturers 56
Table 2 Lecturing Experience 57
Table 3 Students SPM English Language Grades 58
Table 4 Place for Industrial Training 59
Table 5 Amount of Course Work Done in English by Students 59.
Table 6 Amount of Reference Work Done in English 60.
Table 7 Extent of English Used During Industrial Training as Perceived by the Employers 61
Table 8 Abilities of Students in the English Language Skills 62
Table 9 Importance of Language Skills at the Work Place as Perceived by Employers (Small and Big) of Polytechnic Graduates 63
Table 10 Importance of Language Skills as Perceived by Students and Lecturers 65
Table 11 Importance of Speaking Sub-skills as Perceived by Students and Lecturers 66
Table 12 Importance of Speaking Sub-skills as Perceived by Large and Small Companies(Employers). 68
Table 13 Importance of Reading Sub-skills as Perceived by the Students and Lecturers
Table 14 Importance of Reading Sub-skills as Perceived by Employers (Small and Big Companies)
Table 15 Importance of Writing Sub-skills as Perceived by Students and Lecturers
Table 16 Importance of Writing Sub-skills as Perceived by Employers (Small and Large Companies)
Table 17 Importance of Listening Sub-skills as Perceived by Students and Lecturers
Table 18 Importance of Listening Sub-skills as Perceived by Employers (Small and Large Companies)
Table 19 Problems with Listening as Perceived by Students and Lecturers
Table 20 Speaking Problems as Perceived by Students and Lecturers
Table 21 Problems in Reading as Perceived by Students and Lecturers
Table 22 Students Problems in Writing as Perceived by Students and Lecturers
Table 23 Students and English Language Lecturers Opinions Concerning the Learning of ESP Courses
Table 24 Negative Responses about English for Special Purposes 89

Table 25 Opinions on Problems in Learning/Following the ESP Courses 90

Table 26 Identifying the Types of Student's Problems in Learning ESP Course 91

Table 27 Important Facilities for Language Learning 92

Table 28 Types of Classroom Activities Preferred by the Students as Perceived by the Students and Lecturers 93

Table 29 Opinions of Students and Lecturers on Whether They Should Be Tested on the Things They were Taught 94

Table 30 Conducive Number of Students for an English Class. 94

Table 31 Classroom Activities That the Lecturers Liked To Use in Teaching 95

Table 32 Students Criteria of the Materials for English Lessons for Diploma of Electrical Engineering Students 97

Table 33 Lecturers Criteria of the Materials for English Lesson for Diploma of Electrical Engineering Students 98

Table 34 Lecturers Opinions About the Materials Used in the ESP Courses 99
Table 35 Opinions of the Lecturers About the Scope of Materials Used for the ESP Courses 99

Table 36 The Nature of Materials for the UOP Diploma of Electrical Engineering - Students 100

Table 37 Opinions About the English Language Teaching and Learning Strategies for the UOP Diploma of Electrical Engineering Students as Perceived by the Lecturers 101

Table 38 Areas of Emphasis in the Course Design for UOP Diploma of Electrical Engineering Students 102

Table 39 Opinions Related to the Learning of ESP Courses 104

Table 40 Problematic Areas in Conducting ESP Courses 105

Table 41 Lecturers Opinions on Learning of the English Language. 106

Table 42 Areas that have to be Considered in the Implementation of English Language Courses For the UOP Diploma of Electrical Engineering Students. 107

Table 43 Location of Organization of Industrial Training 108

Table 44 Students Responses of Whether They were Required to use English During the Course of their Industrial Training 109

Table 45 Frequency of English Usage During Industrial Training 109
Table 46 Speaking Frequency of Performance of Communicative
Events at the Industrial Training Place by Students 110

Table 47 Listening Frequency of Performance of Communicative
Events at the Industrial Training Place by Students 110

Table 48 Reading Frequency of Performance of Communicative
Events at the Industrial Training Place by Students 112

Table 49 Writing Frequency of Performance of Communicative
Events at the Industrial Training Place by Students 113

Table 50 Purpose the Students Have to Use English at the
Industrial Training Place 114

Table 51 Opinions of Students Whether They Were
Prepared Adequately To Function in English 114

Table 52 Employers Opinions Whether They Were
Impressed by the Language Skills Possessed by the UOP
Diploma of Electrical Engineering Students 115