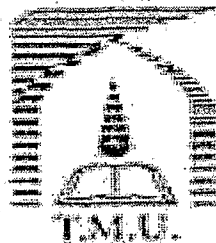


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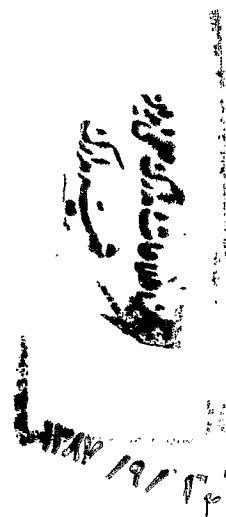


**An analysis of the Present/Target Situations English
Language Needs of
B.Sc. Electrical Engineering Students**

**Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of Master of Arts in
Teaching English as a Foreign Language**

**English Department
School of Humanities
Tarbiat Modares University**

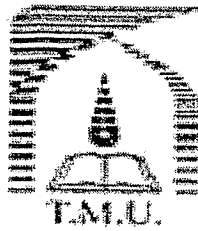
**By: Fateme Adabi Firouzjaee
Supervisor: Dr. Gholam Reza Kiany
Advisor: Dr. Mahmood Reza Atai
February 2008**



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۱۳۸۷ / ۹ / ۱۲

استاد راهنما: جناب آقای دکتر غلامرضا کیانی

استاد مشاور: جناب آقای دکتر محمود رضا عطایی

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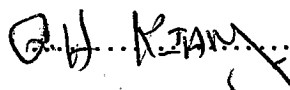
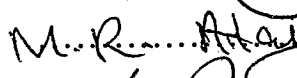
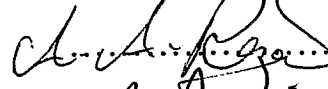
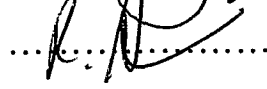
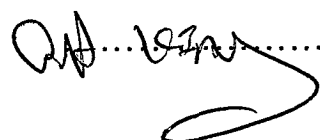
Fateme Adabi Fioruzjaee

ENTITLED

**An Analysis of the Present/Target Situation in English Language
Needs of B.Sc Electrical Engineering Students**

BE ACCEPTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN
TEACHING ENGLISH AS A FOREIGN LANGUAGE (TEFL).

Committee on Final Examination:

	Dr. Gholamreza Kiani	Supervisor
	Dr. Mahmood Reza Atai	Advisor
	Dr. Abass-Ali Rezaee	External Examiner
	Dr. Ramin Akbari	Internal Examiner
	Dr. Dr. Gholam Reza Kiani	Head of Eng. Dep.

Tarbiat Modarres University
Tehran, Iran.
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- ✦ My husband who granted me a life full of love,
- ✦ My beloved in-laws, sisters, and brothers who have been with me in every step of my life, through good times and hard

Abstract

Jordan (1997) believed that needs analysis is an integral part of any language planning and should be considered as an indispensable element of any systematic course design. It "should be the starting point for devising courses, syllabus, and materials and the kind of teaching and learning that takes place" (Jordan, 1997, p.22). Considering this fact and also because of scarcity of needs analysis studies in EST area, this study aimed at finding B.Sc. Electrical Engineering students' present/target English language needs.

To achieve the intended objectives, i.e. to see the priorities which participants set and the differences among their views, having gone through the standardization process, a Needs Analysis Questionnaire (NAQ) was administered among four groups of stakeholders of the field including 15 domain experts, 33 graduates, 122 undergraduates, and 18 employers. As the next step, a semi-structured interview was conducted from 3 domain experts, 4 graduates, and 3 undergraduates. These participants were selected through convenient sampling.

The results of Friedman Test and interview indicated that among the different language competences, written skills – reading and writing – are the skills which are more frequently required by the B.Sc. Electrical Engineering students for both present and future academic settings than oral skills – speaking and listening. More specifically, reading was the most often used skill and posed least difficulty for the intended students. Also, students had the most difficulty with the productive skills, i.e. speaking and writing.

Moreover, One – Way ANOVA revealed that there were no significant differences among the four groups of participants regarding their perceptions of assessment of B.Sc. Electrical Engineering students and their views toward the intended students Present academic needs (P Value > 0.05). But significant difference were found among the participants of the study regarding their perceptions of the intended students' specific reading needs and their future academic/occupational needs (P Value < 0.05). Also, Paired Sample T – Test reflected that there was a significant difference between the perceptions of undergraduates regarding their own present/future English language needs (P Value < 0.05). The study provided some implications for materials developers and syllabus designers to design materials and courses in a way that meet students specified needs.

Key Words: Needs Analysis, Present situation Needs, Target situation Needs

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Abbreviations

EAP.....	English for Academic Purposes
ELT.....	English Language Teaching
EOP.....	English for Occupational Purposes
ESP.....	English for Specific Purposes
EST.....	English for Science and Technology
GPE.....	General Purposes English
LSP.....	Language for Specific Purposes
NA.....	Needs Analysis
NAQ.....	Needs Analysis Questionnaire
PAF.....	Principle Axis Factoring
PSA.....	Principle Component Analysis
PSA	Present Situation Analysis
T.M.U.	Tarbiat Modares University
TSA	Target Situation Analysis

Chapter One:
Introduction

1.1. Background

English for Specific Purposes (ESP), which is part of a more general movement of teaching language for specific purposes (LSP), has been a separate branch of English language teaching for almost half a century. It is essentially a material - and teaching-led movement which has been influenced by developments and changes in Applied Linguistics and ELT, but as a lively, "feisty" movement within ELT, it had a considerable influence on ELT, as well (Dudley-Evans & Johns, 1998). From its genesis until now, it has undertaken a number of definitions, controversies and questions, and approaches.

The most basic definition is provided by Hutchinson and Waters (1987) as an approach to course design which starts with the question "why do the learners need to learn English" (p.19). Although this question can be a justification for any course design, as Long (2005) indicates: "there is an urgent need for courses of all kinds to be relevant – and to be seen to be relevant – to the needs of specific groups of learners and of society at large" (p. 19), an awareness of the needs for involving in the program has been among the distinguishing features of ESP courses (Hutchinson and Waters, 1987).

In a most basic classification of ESP provided by Johns (1991), ESP is divided into two broad categories of English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). EAP itself subsumes English for Science and Technology (EST) and others, named as EAP.

EOP includes English for Professional Purposes (EPP) and English for Vocational Purposes (EVP). According to Hutchinson and Waters (1987), EST, which this study is an attempt of the area, has been particularly important in the development of ESP. They cited Swales (1985) whom attributed the development of EST to illustrate the development of ESP, in general:

"With one or two exceptions... English for Science and Technology has always set and continues to set the trends in theoretical discussion, in ways of analyzing language, and in the variety of actual teaching materials" (P.9).

In recent years, there has been a tendency for the use of information from and about learners in curriculum decision-making (Nunan, 2001). This is because of the fact that an acknowledgement and appreciation of the learner's purposes in undertaking a language course, and the syllabus designer's belief about the nature of the language and language learning can have a considerable influence on the kind of the syllabus on which the course is based on. This information can be gathered through the needs analysis process which specifically investigates the language required for performing a given role or roles (White, 1988). Information of the needs analysis will be used in finding why learners' learn the target language as well as issues like societal expectations, constraints, and the available sources for implementing the syllabus (Nunan, 2001).

Jordan (1997) believed that needs analysis is an essential section of any language planning and should be considered as an indispensable element of any systematic course design, and according to Jordan (1997) it "should be the starting point for devising courses, syllabuses, and materials

and the kind of teaching and learning that takes place" (p.22). More specifically, effective language teaching and learning could be achieved when the involved stakeholders are aware of the learners' needs, capabilities, and preferences. Therefore, ESP practitioners (classroom teachers, course designers, material developers and evaluators) should try to conduct needs analysis studies and employ their findings to their teaching.

1.2. Statement of the Problem

The most basic enquiry advocated by this study is the necessity of needs analysis itself, as Taillefer (2007) stated, university and professional stakeholders must be politically and pedagogically aware of the importance of the needs assessments which would imply "a state of mind open to external evaluation and the ability and willingness to question traditional values and modes of operations" (pp.148-9). But until now, to the best knowledge of the researcher, the numbers of domestic researches already conducted in needs assessment are less than ten which in comparison to the enormous number of majors being taught in B.Sc., M.Sc., and PhD levels is far less than enough; and the number of research specifically conducted in needs assessment in EST (English for Science and Technology), at least at the thesis level, is still non-existing. Therefore considering the wide spread of engineering fields, conducting such needs assessment researches seems obligatory.

In order to meet students' needs, it's essential to identify their needs before designing a course and preparing the materials. These needs include both present academic and target academic/occupational needs (Hutchinson and Waters, 1987). Moreover, in order to be realistic and

comprehensive, in designing a course and developing the materials not only administrators' and instructors', but also learners' own beliefs, interests and preferences should be taken into account. This requires a careful needs analysis of the learners under consideration which will make EAP syllabus designers and material developers more aware of the learners' needs and help them design a more effective and efficient language course.

1.3. Significance of the Study

The study hopes to provide a description of the present and target English language needs of the B.Sc. students' Electrical Engineering students which to the best knowledge of the researcher is the first study specifically aiming at the needs assessment of EST students. Therefore, the findings of the study might be of some values for EST material developers, instructors, and course designers as to develop materials and design courses according to the perceived needs of the intended learners. It also would pave the way for instructors to create tasks and activities which would enable students to meet their real-life needs both in present and target educational/occupational settings in meaningful ways.

Moreover, the use of triangulation (i.e. use of multiple sources of information and methods in data gathering process) is a distinguishing feature of the study which intends to shed light on students' needs from multiple sources of information, including domain experts, graduates, undergraduates, and the employers of Electrical Engineering, through multiple methods including questionnaire survey and interview to help both students and instructors understand the potential differences in learning expectations between and among the involved groups.

1.4. Research Questions

1. What are domain experts, graduates, undergraduates, and employers of Electrical Engineering perspective toward the priorities of B.Sc. Electrical Engineering students' present/target situations English language needs?
2. Is there any significant difference among the four groups of participants (1. undergraduates, 2. graduates, 3. domain experts, and 4. employers) regarding their perceptions of B.Sc. Electrical Engineering students' present/target situations English language needs?
3. Is there any significant difference between the perceptions of B. Sc. Electrical Engineering undergraduates in terms of their own present/target situations English language needs?

Null Hypotheses

1. Due to the nature of the first research question, no hypothesis is formulated.
2. There is no significant difference among the four groups of participants (1. undergraduates, 2. graduates, 3. domain experts, and 4. employers) regarding their perceptions of B.Sc. Electrical Engineering students' present/target situations English language needs.

3. There is no significant difference between the perceptions of B. Sc. Electrical Engineering undergraduates in terms of their own present/target situations English language needs.

1.6. Definition of the Key Terms

The followings which might be used frequently in this thesis are the key terms;

1. ESP
2. Needs Analysis (NA)
3. Target situation analysis (TSA)
4. Present situation analysis (PSA)

ESP is an approach to language teaching in which all decisions as to content and method are based on the learners' reasons for learning, (Hutchinson and Water, 1987); moreover, Johns and Dudley – Evans (1991) expressed that "ESP requires the careful research and design of pedagogical materials and activities for an identifiable group of adult learners within a specific learning contexts" (p.298).

Needs Analysis (NA) includes identifying educational/occupational present/target needs as well as evaluation of the present level of knowledge of the prospective learners from the related sources of information in systematic ways.