MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH



BADJI MOKHTAR ANNABA UNIVERSITY

جامعة باجى مختار عنابة

UNIVERSITE BADJI MOKHTAR-ANNABA

FACULTE LETTRES ET LANGUES

كلية الآداب واللغات

Département d'Anglais

قسم اللغة الانجليزية

Ecole Doctorale

مدرسة الدكتوراه

ESP Teaching and Learning: Problems and Prospects

A Case Study of Third Year Students at the Department of Biology, Khenchela University Centre

Dissertation Submitted to the Department of English Language in Partial Fulfilment of the Requirements for the Magister Degree in Sciences du Language.

Submitted by:

Supervised by:

BENOUMELGHAR Soraya

Dr. Bahloul Amel

Board of Examiners:

Chairman: Pr. Hocine Nacira

Badji Mokhtar University- Annaba

Supervisor: Dr. Bahloul Amel M.C 'A'

Hadj Lakhder University- Batna

Examiner: Dr. Hamlaoui Naima M.C 'A'

Badji Mokhtar University- Annaba

Academic Year 2012

Dedication

To the memory of my aunt Foubida

May Allah grant her peace

and

give her blessings

Dedication

To my grand father and grand mother, may Allah grant them long life

To my aunt Naima to whom I owe a lot

To my parents, uncles and aunts

To Amine & Slimane who rescued me in my hardest moments

70 Mouna, Samira, Djidji and Karima

70 Azdine, Sofiene, Mustapha, Nacer and Josef

70 Dalila and Midou

70 Anis and Kimou

7o tonton Hamza and Fateh

To my best friend Anissa

Acknowledgments

First and for most, I would like to express my gratitude to Dr. Amel Bahloul for accepting to supervise this work and for her guidance and orientation without which this work would have been much more difficult to finish.

I am immensely indebted for the role of Dr. Sara Merrouche whose suggestions and support were of great help.

I also wish to express my most sincere gratitude to the board of examiners for having accepted to examine and evaluate my work.

My thanks also go to the Biology department staff namely Mr. Omar Zeiouche.

I also express my thanks to my teachers namely Nacereddine Friteh and Salim Ouniss for their advice and encouragement throughout the years of my thesis.

Last, but not least, I would like to thank all those who have shown me their support and help.

List of Abbreviations

- **BA:** Bachelor of Arts
- **CNP**: Communication Needs Processor
- **EAOP**: English for Academic and Occupational Purposes
- **EAP**: English for Academic Purposes
- **EBE**: English for Business and Economy
- **EFL**: English as a Foreign Language
- **EGAP**: English for General Academic Purposes
- **ELT**: English Language Teaching
- **EOP**: English for Occupational Purposes
- **EPP**: English for Professional Purposes
- **ESAP:** English for Specific Academic Purposes
- **ESP**: English for Specific Purposes
- **ESS:** English for Social Studies
- **EST:** English for Science and Technology
- **EVP:** English for Vocational Purposes
- **GE:** General English
- **L.M.D**.: Licence Master Doctorate
- **LSP:** Language for Specific Purposes
- **MA:** Master of Arts
- **NA:** Needs Analysis
- **NEA:** National Education Association
- NNS: Non Native Speakers
- **PSA**: Present Situation Analysis
- **TSA:** Target Situation Analysis
- **UNESCO**: United Nations Educational, Scientific, and Cultural Organization.

- **USA**: United States of America

List of Figures

-	Figure 1: Simplified Tree of ELT (Hutchinson & Waters, 1987)	15
-	Figure 2: Subcategories of English for Specific Purposes (Johns, 1991)	16
-	Figure 3: Subcategories of English for Specific Purposes (adapted from Jordan,	1997)
		17
-	Figure 4: Taxonomy of Needs (Hutchinson and Waters, 1987)	36
-	Figure 5: Methods of Collecting Data for NA (Jordan: 1997)	42
-	Figure 6: Learners' Distribution according to Gender	70
-	Figure 7: Learners' English Learning Years at the University	71
-	Figure 8: Learners' Attitudes towards the English Language	72
-	Figure 9: English Language Importance	73
-	Figure 10: Interest in Learning English outside the University	75
-	Figure 11: The Use of Documents Written in English	77
-	Figure 12: The extent of Use of Documents Written in English	78
-	Figure 13: Students' Difficult Skills	79
-	Figure 14: The Ability to Read Materials Written in English	81
-	Figure 15: Difficulties when Reading Articles Written in English	82
-	Figure 16: Students' opinions about the Course	83
-	Figure 17: Class Attendance	85
-	Figure 18: Students' opinions about the English Learning Period	86
-	Figure 19: Interest in ESP and Time Allocation	87
-	Figure 20: English Teacher's Background	89
-	Figure 21: the Adequate Teacher for the ESP Course	90
-	Figure 22: Teachers' Distribution according to Sex	92
-	Figure 23: Academic Qualification	93

-	Figure 24: Experience of English Teaching at the University	94
-	Figure 25: Experience of English Teaching at the Biology Department	94
-	Figure 26: Status of the Teachers	95
-	Figure 27: Teachers' Previous ESP Training	96
-	Figure 28: Kind of English Taught	97
-	Figure 29: Time Allocation and Students' Needs	98
-	Figure 30: Relation between Teaching Difficulties and Class Size	99
-	Figure 31: Materials Designed for Students	100
-	Figure 32: Pre-testing Students	102
-	Figure 33: Collaboration with Biology Teachers	104
-	Figure 34: Policy of the Biology Department	105
_	Figure 35: Students' Achievement	107

List of Tables

-	Table 1 : Rosenberg's (2004) comparison between Business English and GE	11
-	Table 2 : Content of First Semester LMD English Programme	57
-	Table 3 : Content of First year LMD Biology Licence Programme	61
-	Table 4 : Content of Second year LMD Biology Licence Programme	61
-	Table 5 : Time Table (3 rd Year L.M.D –Biochimie – S6)	63
-	Table 6 : Time Table (3 rd Year L.M.D –Microbiologie – S6)	63
-	Table 7 : Time Table (3 rd Year L.M.D –amelioration des Plantes – S6)	64
-	Table 8: The Representativity of the Questionnaire	68
-	Table 9: Learners' Distribution according to Sex	69
-	Table 10: Learners' English Learning Years at the University	70
-	Table 11: Learners' Attitudes towards the English Language	71
-	Table 12 : English Language Importance	72
-	Table 13: Interest in Learning English outside the University	74
-	Table 14: The Use of Documents Written in English	76
-	Table 15: The extent of Use of Documents Written in English	77
-	Table 16: Students' Difficult Skills	79
-	Table 17: The Rank of Skills in order of Importance	80
-	Table 18: The Ability to Read Materials Written in English	80
-	Table 19: Difficulties when Reading Articles Written in English	82
-	Table 20: Students' opinions about the Course	83
-	Table 21 : Class Attendance	85
-	Table 22: Students' opinions about the English Learning Period	86
-	Table 23: Interest in ESP and Time Allocation	87
-	Table 24 : English Teacher's Background	88
-	Table 25: the Adequate Teacher for the ESP Course	89

-	Table 26: Teachers' Distribution according to Sex	92
-	Table 27 : Academic Qualification	92
-	Table 28: Experience of English Teaching at the University	93
-	Table 29: Experience of English Teaching at the Biology Department	94
-	Table 30: Status of the Teachers	95
-	Table 31 : Teachers' Previous ESP Training	95
-	Table 32 : Kind of English Taught	96
-	Table 33 : Time Allocation and Students' Needs	98
-	Table 34 : Relation between Teaching Difficulties and Class Size	99
-	Table 35: Materials Designed for Students	100
-	Table 36 : Pre-testing Students	102
-	Table 37: the Rank of Skills in order of Emphasis	103
-	Table 38 : Collaboration with Biology Teachers	104
-	Table 39 : Policy of the Biology Department	105
-	Table 40 : Students' Achievement	107
-	Table 41: Reasons behind Unsuccessful Achievement in English Teaching	108

Abstract

With the spread of globalization has come the increasing use of English as the language of international communication. More and more people are using English in a growing number of occupational and educational contexts. However, many English language users encounter problems when using English in given settings. This study attempts to provide insights into current practices in the teaching/learning of ESP in the Biology department in Khenchela University Centre. Its aim is to search for the different reasons that lead to unsuccessful achievement and to students' difficulties when faced with materials of their specialty written in English. For this purpose, it seemed necessary to briefly review the relevant literature related to the field of ESP and further to present the current situation of ESP teaching/learning in this department. The descriptive method seemed to be adequate for such investigation using the questionnaire and the structured interview as data collection tools. The questionnaire was addressed to third year Biology students and the interview was held with English teachers who have taught in this department. Analysis of the questionnaire and the interview revealed that, in addition to both teachers and students who represent a significant factor in the ESP teaching/learning process, other factors such as the lack of a designed material and the negative attitude of the institution towards the ESP module played an important role in lessening both the teaching effectiveness and the quality of learning.

Table of Contents

•	• Dedication	•••••
•	• Acknowledgements	
•	• Abstract	
	List of Abbreviations	
	List of Tables	
	List of Figures	
	General Introduction	1
i.	Statement of the Problem	1
ii.	Aims of the Study	
iii.	Hypotheses	
iv.	Methodology Design	
v.	Data Collecting Tools	
vi.	Structure of the Dissertation	
	Part One: Literature Review	
Ch	apter One: English for Specific Purposes	
<u> </u>		
	Introduction	6
I.	1. English for Specific Purposes	6
	1.1.Definition of English for Specific Purposes	
	1.2. English for Specific Purposes Versus General English	
	1.3. Factors that Led to the Emergence of English for Specific Purposes	
I.	2. English for Specific Purposes Types.	
	2.1. English as a Restricted Language	
	2.2. English for Academic and Occupational Purposes	
	2.3. English with Specific Topics	18
I.	3. The English for Specific Purposes Teacher	18
	3.1. Roles of the English for Specific Purposes Teacher	
	3.2. Training of the English for Specific Purposes Teacher	
	3.3. Problems of the English for Specific Purposes Teacher	
		2.4
I.	4. Factors influencing English for Specific Purposes Teaching and Learning	
	4.1. The Role of English	
	4.2. Resources and Administrative Constraints	
	4.3. The Learner.	25

	4.3.1. Age	25
	4.3.2. Level	26
	4.3.3. Motivation	26
	4.3.4. Attitudes to Learning	27
	4.3.5. Linguistic Aspects	27
	Conclusion	28
Ch	apter Two: Needs Analysis	
	Introduction	29
II.	1. Needs Analysis	29
	1.1. Definition of Needs Analysis	
	1.2. Historical Development of Needs Analysis	
	1.2. 1. Register Analysis	
	1.2. 2. Rhetorical or Discourse Analysis	
	1.2. 3. Target Situation Analysis	
	1.2. 4. Skills and Strategies	
	1.2. 5. A Learning-Centred Approach	
II.	2. Types of Needs Analysis	
	2.1. Target Needs	
	2.1.1. Necessities	
	2.1.2. Lacks	
	2.1.3. Wants	
	2.2. Learning Needs	35
II.	3. Approaches to Needs Analysis	37
	3.1. Target Situation Analysis	37
	3.2. present Situation Analysis	38
	3.3. Learning Centred Approach	38
	3.4. Strategy Analysis Approach	38
	3.5. Means Analysis Approach	39
II.	4. Data Collection Procedures	39
II.	5. Sources of information	42
II.	6. Steps in Needs Analysis	43
II.	7. Importance of implementing a Needs Analysis	45
II.	8. Criticism on Needs Analysis	46
	Conclusion	47

Part Two: Field Work

<u>Chapter Three:</u> the Situation of English for Specific Purposes at the **Department** of Biology

	Introduction
III.	1. English Language Teaching in Algeria48
	1.1.The Status of English in Algeria48
	1.2.Approaches to English Language Teaching in Algeria49
	1.3. From Theory to Practice: a Critical View50
	1.4. The Training of ESP Teachers53
III.	2. English Licence Programme
	2.1. Classical English Licence Programme54
	2.2. LMD English Licence Programme
III.	3. The Situation of English for Specific Purposes in Biology Department at Khenchela
	University Centre59
	3.1. The Reform LMD and the Biology Department59
	3.1. 1. Biology Licence Programme61
	3.2. The Teaching/Learning Context of English for Specific Purposes in Biology
	Classes
	3.2.1. Time Allocation62
	3.2.2. Group Size64
	3.2.3. Teaching Materials65
	Conclusion66
	napter Four: Analysis and Results of Students' Questionnaire and Teacheterview
	Introduction67
IV.	1. The Descriptive Statistical Method67
IV.	2. The Students' Questionnaire
	2.1. Description of the Questionnaire68
	2.2. Analysis of the Ouestionnaire

IV.	3. Teachers' Interview	92
	3.1. Analysis of the Interview	
IV.	4. Findings of Students' Questionnaire and Teachers' Interview	109
	4.1.Lacks in the Language Teacher's Profile	110
	4.2. Shortage of Time	110
	4.3.Pedagogic Considerations	110
	4.4. The Negative Attitude of the Institution towards the ESP Subject	111
IV.	5. Suggestions and Recommendations	112
	5.1. The Prerequisite of an Efficient Trained ESP Practitioner	112
	5.2. Collaboration between Language and Subject Teachers	112
	5.3.Proposal for an ESP Programme	113
	5.4.The Institution Attitude towards English	
	Conclusion	113
	General Conclusion	114
	Bibliography	

Appendices

General Introduction

Traditionally, the aim of linguistics had been to describe the rules of language usage, that is, grammar. However, new studies shifted attention away from defining the formal features of language usage to discovering the ways in which language is actually used in real communication (Widdowson, 1978). One finding was that the language we speak and write varies from one context to another.

In English Language Teaching, this gave rise to the views that there are important differences between the English of Commerce, Science and that of Engineering. The idea was that if language varies from one situation of use to another, it should be possible to determine the features of specific situations, and then make these features the basis of the learner's course.

i. Statement of the Problem

As long ago as 1957, UNESCO reported that nearly two thirds of the world's professional engineers cannot read English. This has meant that not only are undergraduates all over the world obliged to read an increasing proportion of textbooks in English but also that 'success in graduate work is becoming more and more related to the ability to read the appropriate literature in English and to take part in international conferences where the greater part of the contacts take place through the medium of English' (Ewer and Lattore, 1967).

The technological and scientific development of many English- speaking countries as England and the U.S.A has made of English an international language. It is now spoken almost all over the world. This has led to the publication of a large body of documents written in this language. In order to have access to these documents and participate in international conferences for information exchange, a good number of scientists and researchers seek to learn English. Realising the fact that keeping abreast of the latest scientific and technological developments requires access to documents available in English, many countries, among which Algeria, have given much importance to the learning/teaching of English.

Graduate students are required to read written documents in English in relation to their different fields of study. Thus, reading academic texts (such as textbooks and articles) seems to be the greatest requirement for students in most educational situations where English is taught and used for specific purposes. The Licence Master Doctorate (L.M.D) system that is followed in Biology departments in Algerian universities requires a 'memoire' to be written for their licence degree. These students need to read many articles written in English to enrich their research works.

Third year Biology students at Khenchela University Centre often encounter difficulties to meet this need. Interviews with some of these students revealed that most of them avoid documents written in English and rely, instead, on references in Arabic and/or French. An interesting question we try to answer through this research is: What kind of problems do students of Biology encounter when reading documents in English and what are the different factors that influence their level in English?

ii. Aims of the Study

This study aims at shedding light on the different problems graduate students encounter when dealing with English references. It seeks solutions for an adequate interesting English course.

It highlights the teaching conditions of English for Specific Purposes (ESP) in the Algerian university and seeks to increase teachers' awareness about their students' needs and interests. Particular focus is put on the Biology Department at Khenchela University Centre.

iii. Hypotheses

We hypothesize that third year students of Biology at Khenchela University Centre lack interest in learning English and the short time devoted to English teaching is a factor that leads to this lack of interest.

We also hypothesize that teachers of English at the Biology department at Khenchela University Centre might lack awareness about their students' needs and may not have been trained in how and what to teach according to these needs. They might even not be teachers of English but rather Biology teachers who deal with the English session.

iv. Methodology Design

a) Choice of the Method

In order to explore the actual and immediate problems third year students in the biology department are facing, we opted for the descriptive method which will permit us to identify the needs of these students and moreover to collect the needed data about the subject under investigation. An experimental study would be of no usefulness if we consider that nothing new would be tested and that we will only report and analyse conditions of the current situation.

b) Population

To obtain information regarding the situation of ESP course at the biology department in Khenchela university centre, we will deal with two samples chosen from the following population:

- 1- The teachers of English at the department of biology (about four teachers). In regard to their small number, sampling will be of no need. This small sample might be explained by the fact that English is taught only during the third year, hence a small number of teachers is needed to cover the English course.
- 2- Third year students of the biology department (1/5 of the whole population) as it is difficult to work on the whole population.

v. Data Collecting Tools

To answer the research questions, quantitative data from students' questionnaires as well as teachers' interviews will be collected.

• The Questionnaire

The questionnaire is used as the main source of data and seems to be the most appropriate tool for many considerations like the large number of the population under study, its guarantee of the respondents' anonymity, and the short period of time if compared to the interview.

• The Structured Interview

The interview may be regarded as a more reliable instrument. It is designed for teachers of English in the Biology department at Khenchela University Centre. It is an adequate means since it allows personal explanations. Teachers would clarify the teaching conditions in the department of Biology. They would show the problems they face when teaching ESP. Hence, we might suggest some solutions.

vi. Structure of the Dissertation

The dissertation consists of four chapters; the first two chapters are theoretical in issue, while the third and fourth ones are practical.

Chapter one defines ESP from different perspectives. It highlights the difference between ESP and General English. It explains ESP origins and its branches.

Chapter two introduces the concept of Needs Analysis and discusses its relevance to ESP teaching and learning.

Chapter three investigates the situation of ESP in the Algerian University, with special emphasis on the department of Biology at Khenchela University Centre.

Chapter four analyses the results of the field work, that is, the questionnaire and the interview findings.

Chapter One: English for Specific Purposes

Introduction

Despite the global dominance of English in the fields of science and technology, international

business, and among aviation and marine navigation professionals, English for Specific Purposes (ESP)

is often underestimated by learners and teachers whose attitudes towards ESP teaching are often

characterized either by condescension or reluctance. This is manifested in the belief that often prevails

among teachers that ESP is for those who lack control over the English language teaching skills and lack

experience. A good example of this situation is 'English in other departments' at the university level

where teaching this component of the students' curriculum is generally assigned to junior staff

members, that is hourly teachers whose employment is limited to hours and are not permanent teachers,

and where it is a 'slot-filling' subject in the teachers' time table. This underestimation may be due to the

fact many teachers are not aware of what it means to be an ESP teacher, and what it takes to be

successful in this field.

The aim of this chapter is to shed light on some of the major aspects of ESP and ESP teaching. It

provides a literature review of what is ESP, what factors led to its emergence, and what influences its

teaching and learning.

I. 1. English for Specific Purposes

1.1. Definition of English for Specific Purposes

ESP, referred to as English for Specific / Special Purposes, arose as a term in the 1960's as it

became increasingly acknowledged that General English courses did not meet learners and employers'

needs. The dust has not yet settled in the area of ESP and no one would expect the ESP community to

have a clear idea about what ESP means.

ESP is a branch of applied linguistics that focuses on relating the teaching and learning process to learners' needs. Widdowson (1981), a linguist and an early pioneer of the approach describes the general concept of ESP through specifying learners' needs for a language; if these needs can be accurately specified, then this specification can be used to determine the content of a language program that will meet those needs.

Mackey and Mountford (1978:2) define ESP as the language needed for 'a clearly utilitarian purpose'. The purpose they refer to is defined by learners' needs which could be academic, occupational or scientific. These needs determine the content of the ESP curriculum to be taught and learned. Mackey and Mountford *op.cit* also define ESP as the special language that takes place in specific settings by certain participants. They state that these participants are usually adults. They focus on adults because adults are usually highly conscious of the reasons behind attaining English proficiency in a determined field of specialization, and because adults make real use of a special language in special work settings.

Perren (1974) note that the terms 'special language' and 'specialized aim' are used interchangeably although they refer to entirely different notions. Mackey and Mountford *op.cit* explain that the only practical way in which we can understand the concept of 'special language' is as a restricted repertoire of words and expressions selected from the whole language because that restricted repertoire covers every requirement within a well-defined context, task, or vocation. On the other hand, a 'specialised aim' refers to the purpose for which learners learn a language, not the nature of the language they learn. Consequently, the focus of the word 'special' in ESP is on the purpose for which learners learn English and not for the specific jargon or registers they learn.

Robinson (1980) defines ESP courses as ones in which the participants have specific goals and purposes (academic, occupational, and scientific). She stated that those purposes must be understood as the driving force of the curriculum in a way that would help teachers and learners not to let irrelevant

materials be introduced in the course. She also refers to learners in their role of curriculum designers in order to make the curriculum more learner-centred.

According to Hutchinson and Waters (1987), ESP should be seen as an approach. It is an approach to language learning, which is based on learners' needs. They are of the view that the foundation of ESP is the simple question: why does this learner need to learn a foreign language? To answer this question, information is gathered about learners, the language required and the learning context. This is done through a process of needs analysis. On the basis of the information gathered, the language to be taught is determined.

Strevens' (1988) definition of ESP makes a distinction between 1) absolute characteristics and 2) two variable characteristics. In terms of absolute characteristics, the ESP course is:

- 1- Designed to meet specified needs of learners;
- 2- Related in content (i.e. in its themes and topics) to particular disciplines, occupations, and activities;
- 3- Centred on the language appropriate to those activities in syntax, lexis, discourse, semantics, etc.., and the analysis of this discourse; and
- 4- In contrast with General English.

In terms of variable characteristics, ESP may be, but not necessarily

- 1- Restricted to the language skills to be learned (e.g. reading only); and
- 2- Not taught according to any preordained methodology.

Dudley –Evans (1997) offers a modified definition for ESP, considered as an extension of the definition proposed by Strevens *op.cit*. In terms of absolute characteristics, Dudley –Evans suggests what follows:

1- ESP is defined to meet specific learners' needs;

- 2- ESP makes use of the underlying methodology and activities of the discipline it serves; and
- 3- ESP is centred on the language appropriate to those activities in terms of grammar, lexis, register, study skills and discourse.

In terms of variable characteristics, he suggests that

- 1- ESP may be related or designed for specific disciplines;
- 2- ESP may use, in specific teaching situations, a different methodology from that of General English;
- 3- ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level;
- 4- ESP is generally designed for intermediate or advanced students;
- 5- Most ESP courses assume some basic knowledge of the language systems; and
- 6- ESP can be used with beginners.

A comparison of Strevens' and Dudley–Evans' definitions reveals that the latter removed the absolute characteristic that 'ESP is in contrast with General English' and added more variable characteristics. Dudley –Evans asserts that ESP is not necessarily related to a specific discipline and that it is likely to be used with adult as well as young learners.

The division of ESP into absolute and variable characteristics is helpful in resolving arguments about what ESP is and what it is not. From Evans' definition, we can see that ESP can be but is not necessarily concerned with a specific discipline, nor does it have to be aimed at a certain age group or ability range.

From the above-mentioned definitions, it can be deduced that ESP takes into consideration specific needs of the learners in a particular context. Its focal point is that English is not taught as a subject separated from the learners' real world; instead it is integrated into a subject matter area important to the learners.

1.2. English for Specific Purposes versus General English

ESP can be differentiated from General English in various ways. Hutchinson and Waters (*op.cit*: 53) state that there is no difference between the two in theory; however, there is a great deal of difference in practice. ESP differs from GE in that the words and sentences learned and the subject matter discussed in the former are all relevant to a particular field or discipline. The design of syllabuses for ESP is directed towards serving the needs of learners seeking for developing themselves in a particular occupation or specialization in a specific academic field.

GE teaching is essentially the English language education in which learners are introduced to the sounds and symbols of English, as well as to lexical/ grammatical/ rhetorical elements that compose spoken and written discourse. There is no target situation in this kind of language learning. Rather, it focuses on applications in general situations: appropriate dialogues in restaurants, hotels, airports, etc.

GE is viewed as a level that precedes higher-level instruction in ESP. This latter is that kind of language teaching that builds upon what has been acquired earlier in GE with a more restricted focus. It aims at acquainting learners with the kind of language needed in a particular domain, vocation, or occupation. This indicates that there is no fixed ESP methodology that can be appropriate in all situations, and particular needs of learners belonging to a particular domain impose a certain methodology of teaching.

Another difference between ESP and GE education lies in the learners and their purposes for learning English. ESP students are adults who already have some familiarity with English and are learning the language in order to communicate a set of professional skills and to perform particular job-related functions. ESP and GE differ also in the scope of the goals of instruction. In GE, all four skills, listening, reading, speaking and writing, are stressed equally. However, in ESP, a needs assessment determines which language skills are most needed by learners and the syllabus is designed accordingly.

In the 'English Teaching Professional Magazine', Rosenberg (2004: 23) considers when ESP/Business English and GE overlap. He asked a group of teachers of the English language to brainstorm the differences and similarities between GE and Business English. The diagram below shows a number of the ideas that teachers have come up with.

Business English	General English	What they have in common
*specialised vocabulary	*Free-time activity	*Grammar and functions
*Motivation related to job	*More freedom in deviation from plan	*General vocabulary
*Teach negotiation and presentation techniques	_	*Anxiety about capabilities
*Students very goal	*More time for game	*everyday English
oriented	*More relaxed atmosphere	*travel vocabulary
*More serious	*Songs	*survival English
*Business correspondence	*Literature	*four skills
	*General writing skills	

Table 1: Rosenberg's (2004) comparison between Business English and GE

1.3. Factors that led to the Emergence of English for Specific Purposes

Hutchinson and Waters *op.cit* identified three key factors which, they believe, led to the emergence of ESP: the demands of a brave new world, a revolution in linguistics and focus on the learner.

The new world has its beginning in the mid 1940's (end of the Second World War) and continues up till now. This is an age of competition resulting from immense progress in science and technology. To have access to scientific and technological advancements, a great number of non-native speakers (NNS) learn English as most research, in the post-war, has been carried out in English speaking countries especially the United States because of its economic expansion as the following quotes reveal:

Immense power is now centred in the hands of American academic gatekeepers; Wayt Gibbs (1995) calculated that, in 1994, 31 percent of all papers published in the world's leading journals emanated in the United States and even five years later that percentage has probably moved upward.

Swales (2000: 67)

In term of economic strength, the countries, where English is the first language, are by far the richest.... The economic power of these countries (most notably the United States) and the accompanying trend in using English for international business are strong reasons for NNSs to want to learn English.

Flowerdew and Peacock (2001: 9)

The importance of English can be judged by the phrase 'English English everywhere' used by Swales (*op.cit*:67) while describing the spread of English. Its spread and significance created 'a new generation of learners who knew specifically why they were learning a language' Hutchinson and Waters (*op.cit*: 06) but did not have time for long-term English course and preferred short, cost-effective and purpose specific intensive courses in English.

The second reason behind the emergence of ESP was a revolution in linguistics. Most of the work of linguists in the 60's and 70's moved toward the focus on the ways in which language is used in real communication settings, contrary to the works of traditional linguists who aimed to describe the features of language. The idea was that the language we speak and write differs from one context to another, i.e., there are important differences between, for example, the English of commerce and that of engineering, and by determining the features of each specific situation (context) it would be possible to make these features the basis of courses to meet learners' needs.

The third reason mentioned by Hutchinson and Waters *op.cit* has to do with psychology. More attention was given in the 70's to the means through which a learner acquires a language and ways in which it is learnt. Hence, there was a shift of focus from methods of language teaching/learning to the

different learning strategies, skills, needs and interests employed by different learners. This, consequently, led to a focus on learners' needs and designing specific courses to better meet individual needs.

I. 2. English for Specific Purposes Types

Under the umbrella term ESP, there are many sub-divisions. As Belcher (2006:134) says, ESP now encompasses an "ever-diversifying and expanding range of purposes". Robertson (1995) sees that the ESP expansion into new areas is due to an ever-increasing 'glocolized' world by economic and markets expansion. Flowerdew (1990) attributes its dynamism to the market force.

Carver (1983) identified three types of ESP: 'English as a Restricted Language', 'English for Academic and Occupational Purposes' (EAOP), and 'English with Specific Topics'. A discussion of each will be presented in the following lines.

2. 1. English as a Restricted Language

The language used by air traffic controllers or by waiters are example of English as a restricted language. Mackey and Mountford (*op.cit*) clearly illustrate the difference between restricted language and language in the following words:

.... the language of air-traffic control could be regarded as 'special' in the sense that the repertoire required by the controller is strictly limited and can be accurately determined situationnally, as might be the linguistic needs of a dining room waiter or air- hostess. However, such restricted repertoires are not languages, just as a tourist phrase book is not grammar. Knowing a restricted language would not allow the speaker to communicate effectively in novel situations, or in contexts outside the vocational environment.

2. 2. English for Academic and Occupational Purposes

The second type is EAOP. Hutchinson and Waters *op.cit* have developed a 'Tree of ELT' in which the subdivisions of ESP are clearly illustrated. ESP is broken down into three branches: English for Science and Technology (EST), English for Business and Economy (EBE) and English for Social Studies (ESS). Each of these subject areas is further divided into branches: English for Academic Purposes (EAP) and English for Occupational Purposes (EOP). An example of EOP for the EST branch is 'English for technicians' whereas an example of EAP for the EST branch is 'English for medical studies'. The following figure is a simplified diagram of Hutchinson & Waters *op.cit* 'tree of ELT'.

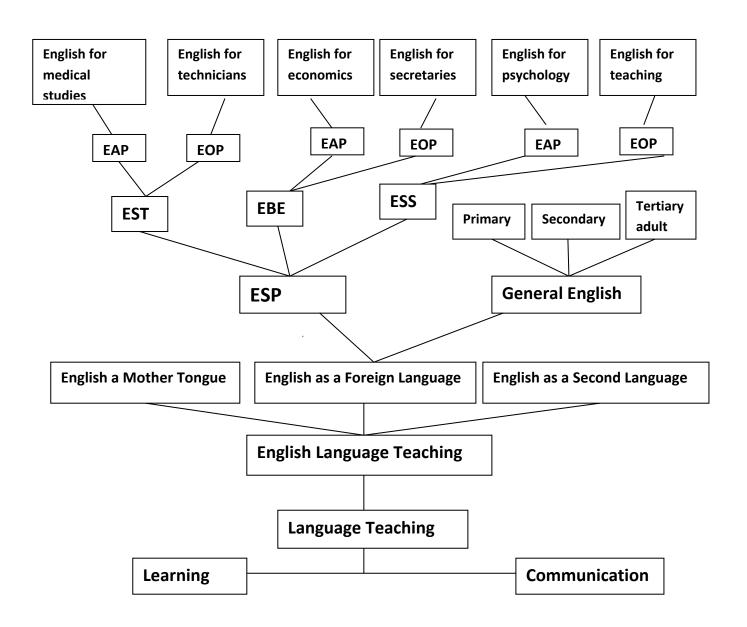


Figure 1: Simplified Tree of ELT (Hutchinson & Waters, 1987

Hutchinson & Waters (*op.cit*: 16) do note that there is not a clear-cut distinction between EAP and EOP: 'people can work and study simultaneously; it is also likely that in many cases the language learnt for immediate use in a study environment will be used later when the student takes up or returns to a job'.

Johns (1991) provides the following model:

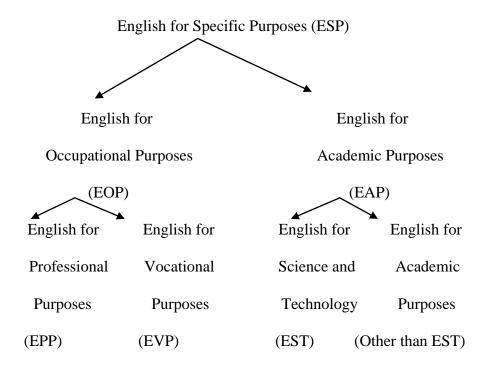


Figure 2: Subcategories of English for Specific Purposes (Johns, 1991)

ESP, therefore, encompasses two major types: EOP and EAP. Courses in EOP train individuals to perform on the job, using English to communicate. This type would be useful for airline pilots, for instance, or hotel staffs that need English for their professional duties. EAP, on the other hand, addresses a particular subject such as business and engineering. It features a common core element known as 'study skills' such as academic writing, listening to lectures, note taking, making oral presentations which enable one to succeed in English language settings.

Jordan (1997) states that ESP has two main strands: English for Occupational/ Vocational/ Professional purposes (EOP/ EVP/ EPP) and English for Academic Purposes (EAP). Figure 4 shows Jordan's divisions of ESP, in which *Doctors*, for instance, are set under the EOP/EVP/ EPP category while *Medicine* is listed under English for Specific Academic Purposes (ESAP):

Under EVP/EPP, material has been devised for trainee doctors to give them practice in doctor-patient interaction in casualty consultations (a very restricted situation) (...). For students studying to be doctors, a book and cassettes have been prepared, under ESAP to give practice in reading text books, listening to lectures and so on. (Jordan, 1997: 04)

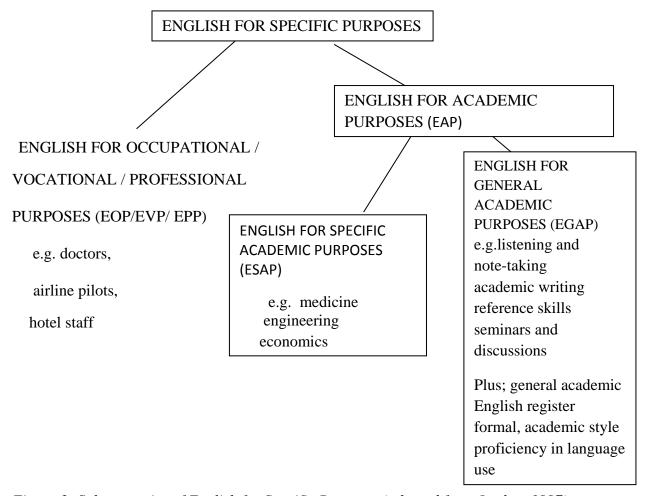


Figure 3: Subcategories of English for Specific Purposes (adapted from Jordan, 1997)

2. 3. English with Specific Topics

This is the third type of ESP. It differs from the other types in the sense that focus shifts from purpose to topic. In other words focus is on topics that are in agreement with the anticipated future English needs of learners, such as scientists requiring English for postgraduate reading studies, attending conferences or working in foreign institutions.

I. 3. The English for Specific Purposes Teacher

3. 1. Roles of the English for Specific Purposes Teacher

Since ESP courses are of various types, depending on the specific field or profession, teachers of these courses need to play different roles and acquire certain knowledge. Thus, some authors like Swales (1985) and Dudley –Evans (1998) use the term 'practitioner' rather than 'teacher' to emphasize that ESP work involves much more than teaching. Dudley-Evans describes the true ESP practitioner as needing to perform five different roles:

- 1) Teacher;
- 2) Collaborator;
- 3) Course designer and material provider;
- 4) Researcher; and
- 5) Evaluator.

In order to meet the specific needs of the learners and adopt the methodology and activities of the discipline, the ESP practitioner must first work closely with field specialists. In addition, the teacher, in an ESP course, is not the primary knower of the content of the material; in fact, students may know more about the content than the teacher. Hence, s/he has the opportunity to draw on students' knowledge of the content to generate communication in the classroom.

Furthermore, it is believed that subject-specific work is often best approached through collaboration with subject specialists. The fullest collaboration is where a subject expert and a language teacher team teach classes because 'team working reduces the gap between science and language' (Hansen & Hammen: 1980). It implies a mutual interest on the part of both teachers, that is to say, each one draws on the other's experience with the common goal that both perspectives should be to the advantage of the learner's education. Such cooperation aims at teaching the students the language and skills associated with their particular subject and its content (content-based). Hence, the specialist checks and comments on the content of teaching materials that the ESP teacher has prepared. In addition, when the students see that their subject teachers take the ESP classes seriously, they might be more interested in the ESP course.

It is rarely possible to use a particular textbook without the need for supplementary materials because 'no textbook is likely to be perfect' Robinson (1991). Hence, the ESP practitioner is always required to design courses and provide materials. This involves selection of published materials, adapting material if it is not suitable, or writing it. Hyland (2006:97) suggests five ways of adapting materials. These are:

- Adding, supplementing, or extending what a textbook offers with extra readings, tasks, or exercises;
- Deleting repetitive, irrelevant, potentially unhelpful or difficult items;
- Modifying, rewriting rubrics, escapes activities or explanations to improve relevance, impact or clarity;
- Simplifying, rewriting to reduce the difficulty of tasks, explanations, or instructions; and
- Reordering and changing the sequence of units or activities to fit course goals.

The use of authentic materials in the classroom is significant. When considering the use of authentic materials, Widdowson quotes:

It has been traditionally supposed that the language presented to learners should be simplified in some way for easy access and acquisition. Nowadays, there are recommendations that the language presented should be authentic.

Widdowson (1990:67)

Students would benefit from exposure to language used in real context. In fact, authentic materials are highly motivating giving a sense of achievement and encourage further reading.

The ESP practitioner is also viewed as a researcher. With the shift toward a learner-centred approach, strong research has been carried in the field of ESP. There is a growing interest in investigating the language and skills involved in the different branches of ESP. Hence, teachers need to be in touch with research. Teachers carrying out a needs analysis, designing a course, or writing teaching materials need to be capable of incorporating the findings of research in their work.

In addition, the ESP practitioner is often involved in the testing of students and the evaluation of teaching materials in order to test the effectiveness of the ESP courses. Tests are conducted 1) to assess whether students have the necessary language and skills to undertake a particular academic course, and 2) to assess the level of their achievement, i.e., how much learners have gained from the course.

Robinson (*op.cit*, cited in Jordan, *op.cit*:.122) suggests that the ESP teacher must be, above all, flexible; in her words, he must have "the flexibility to change from being a general language teacher to being a specific purpose teacher, and the flexibility to cope with different groups of students, often at very short notice."

Kennedy and Bolitho (1984 cited in Jordan, *op.cit*:122) made a list of the 'likely requirements' of an ESP teacher:

- Develop a working knowledge of the students' subject, for example, via team-teaching;
- Deal with the pastoral problems of students a long way from homes and families;

- Forge links with the institutions which the students will proceed to; and, sometimes, prepare the students for specific entry requirements of English language exams.

Hutchinson and Waters *op.cit* see that the ESP teacher is not required to learn specialist knowledge but s/he needs three characteristics:

- A positive attitude towards the ESP content;
- Knowledge of the fundamental principles of the subject area; and
- An awareness of how much they probably already know.

In other words, s/he is not supposed to become a teacher of the subject matter, but rather an interested student of the subject matter. The teacher's knowledge, when teaching ESP, becomes dynamic. Many ESP teachers get surprised at how much knowledge of the subject matter they 'pick up' by teaching the materials or talking to students.

ESP teachers are not specialists in the field; but in teaching English. Their subject is English in the profession but not the profession in English. They help students, who know their subject better than the teachers do, develop the essential skills in understanding, using and/or presenting authentic information in their profession.

3. 2. Training of the English for Specific Purposes Teacher

In her article "Teaching Foreign Language for Specific Purposes: Teacher Development", Milevica Bojovic, an MA lecturer in the faculty of agronomy in Serbia, suggests that most teachers' training courses contain three basic elements: Selection of teachers; General professional training as an educator and teacher; and Special training as a teacher of a foreign or second language.

To begin with, not all English teachers would be adequate ESP teachers. Pre-training and/or post-training selection procedures are important to assess teacher's educational capacities, qualifications, teaching experience, subjects and grades he has taught, subjects and grades he is qualified to teach, etc.

The teacher has a responsibility that lasts for thirty years or more. Hence, such procedures are significant to bring adequate teachers to given areas in such a long period of time.

General professional training involves what all teachers need to know regardless of which subject they teach. They should be introduced to disciplines as the child psychology and development, and social psychology. They are required to have knowledge about the different kinds of schools of thought and the main features of history of education the country where he will teach.

ESP practitioners have to be trained as teachers of a foreign/ second language. This special training relates to skills, information and theory.

The skills component includes three different skills:

- The Command of the language the teacher is teaching, i.e., h/she should grasp a good body of language ,that would be adequate for the class purposes;
- The Assimilation of great body of effective techniques, i.e., the flexibility to use diversified activities; group work exercises, use of tape and camera recordings, etc.; and
- The management of learning, i.e., knowing how to assess from moment to moment progress of each individual in the class.

The information component includes different types:

- Information about education, i.e., about the different approaches to the task of language teaching;
- Information about the syllabus and materials to be used; and
- Information about language, which covers knowledge of the normal stages in the infant's acquisition of his mother tongue, relation between speech and writing, language and thought and many other topics.

Through the theory component, the language teaching profession makes connection with theoretical studies in several disciplines such as linguistics, psychology, and social theory.

3. 3. Problems of the English for Specific purposes Teacher

Even though, the main issue for the ESP teachers relays often in the insufficient knowledge of a specialist field, the ESP practitioner may encounter other problems. Johns (1981) made an analysis of questionnaires from about 100 EAP teachers from all over the world. These problems they usually face are:

- Low priority in time tabling;
- Lack of personal/professional contact with subject teachers;
- Lower status/grade than subject teachers; and
- Lack of respect from students.

I. 4. Factors influencing English for Specific Purposes Teaching and Learning

Many factors interfere in the implementation of ESP programmes, and hence influence the learning and the teaching of it. Although teachers may not have to design syllabuses themselves, it is important to be aware of the factors that affect the course they have to teach. Hutchinson et al *op.cit* suggest four types of factors that affect the ESP course to be designed. These are the role of English; resources and administrative constraints; the learner; and linguistic aspects.

4. 1. The Role of English

Exposure to the English language is of much significance for learners who want to learn it.

• In the community ESP programmes, generally, vary according to students' exposure and familiarity with English in their community. In some communities, the role of English, where it is used as a medium of communication in business, government and education, is much more

extensive than where it plays a restricted role as a medium providing access to science and technology.

• In the institution the role of English may differ according to students' needs of English in their programmes. They may see the need for English if it is demonstrated that they need it to study other subjects in the curriculum. On the other hand, English may be seen as an additional subject in the curriculum.

4. 2. Resources and Administrative Constraints

The circumstances, in which teaching takes place, are of much importance in facilitating the teaching task. The size of classes, for instance, is of major importance. Large size classes make the use of certain language teaching materials and methods difficult. They also minimize the opportunities of teacher-student communication and use of the language. In addition, they reduce the ability to check all students' written assignments and correct them in the classroom. The ease of access to materials and the availability of audio-visual aids also facilitate the teaching-learning process. The quantity of instruction is reflected by the amount of time given to the English course and whether the time available is to be spread out over a period of time or used intensively in a shortened period. Many learners show more interest to modules related to their speciality because of the amount of time devoted for them and neglect short-time given courses thinking that the less time given to these courses reflect their nonnecessity.

4. 3. The Learner

Even though, ESP learners may belong to the same language group, educational, and cultural background, they inevitably have different age; level; level of motivation; and attitudes to learning.

4. 3. 1. Age

In fact, many ESP learners are adults and know why they are learning English. They are goal-oriented people who do not want to learn English because they are interested in it, but because they need it as an instrument that will help them to reach their study and work goals. Knowles (1990) interprets adulthood in terms of maturity, ability to make appropriate judgements based on experience and autonomy. They develop their learning strategies that make language learning easier and faster.

4. 3. 2. Level

An ESP class may include multilevel learners, who may excel and be able to operate perfectly in their field in their own language but not in English. These learners might be exposed to different educational background and this reflects their different levels. Therefore, the teacher will have a single class in which there are very advanced learners as well as some who are unable even to write their names. Hence, the teaching task would be very difficult if not impossible.

4. 3. 3. Motivation

Krashen and Terrell (1983:17) assert that "All human beings can acquire additional languages, but they must have the desire or the need to acquire the language, and the opportunity to use the language they study for real communicative purposes."

Roe (1977) suggests three levels of motivation to learn English. *Level one*, the highest level, when English is required to obtain a degree or a desirable job; *Level two*, to improve exam grades or influence positively career prospects; and *level three* where English could increase the student's status, be useful if he goes abroad, or widen his knowledge. This system of levels assumes *instrumental motivation* (where English is seen as a means to achieving some practical or professional purposes) to be more important to success than the *integrative motivation* (where the learner identifies with the social or cultural aspects of learning English).

4. 3. 4. Attitudes to Learning

A student's previous English learning experience may influence his attitude toward an ESP course. If the learning of English was not successful in the past, there may be a negative feeling toward continuing with something that was faced with failure. Besides, the idea of independent learning, presents problems to some students who lack a display of autonomy in learning. Many students believe that the teacher is the fount of all wisdom. They do not believe they can learn unless they are in a classroom with a teacher. In addition, their ESP learning does not stop with the end of the ESP course, but rather they need to continue their learning of ESP even after. Hence, a degree of autonomy is important to carry such need.

4. 3. 5. Linguistic Aspects

The selection of the linguistic content of the language to be used for particular purposes depends on an adequate and appropriate description of the language characteristics of that which the learner is required to handle.

Mackey and Mountford (1978: 08)

There are three questions to be answered in any ESP situation; what sort of English will the learner need? What is his purpose in learning? How specific is his need? These questions can be answered by looking at various aspects of the learning situation and the language to be learnt by the students. The learner, for instance, may need to be taught a certain vocabulary since each speciality has its own vocabulary.

Conclusion

Since the end of the Second World War, ESP received much attention among linguists. This attention is justified due to the dominance of English in many fields. Each of these fields requires its unique way of teaching based on the needs and the purposes of the learners.

If the ESP community hopes to grow, it is vital that the community as a whole understands what ESP actually means.

Chapter Two: Needs Analysis

Introduction

"ESP begins with the learner and the situation"

Hamp-lyons (2001)

As it is suggested in this citation, a good starting point for designing an ESP course is an understanding of students' needs. Many problems in EFL classes are the result of teachers not paying attention to learners' interests and ignoring students as a source of essential information. Knox (1986) argues that the most valuable information you can obtain in order to help people learn something is what

they already know about the subject.

In fact, students' analysis can give two kinds of information; the first reflects learners' possession, i.e., what they already know, and second, represents what learners want to achieve. In order to discover who the learners are, what they already know, and what they want from the class, a method called

'Needs Analysis' (NA) is important to be conducted.

This chapter reviews literature on NA. It introduces the concept of NA, its types, approaches, and procedures of data collection. It provides its steps and shows the importance of its implementation.

II. 1. Needs Analysis

1.1. Definition of Needs Analysis

Needs Analysis (NA) (also known as needs assessment) has a vital role in the process of

designing and carrying out any language course. It was established in the mid 1970's as course

designers came to see learners' purposes as the driving force behind ESP.

The term "Needs Analysis" was originated by Michael West in the 1920's, when he

was trying to establish the way learners should learn English. In the field of language program

planning, NA is the first step in developing a language curriculum (Brown, 1995). It is a

systematic process of gathering information that will serve as the basis for developing a curriculum which meets the learning needs of a particular group of students. Nunan (1988), as well, defines NA as the techniques and procedures for collecting information to be based in syllabus design. For Jordan *op.cit* NA is the requirement for fact-finding or the collection of data about, for instance, the students, the subject to be studied, etc.

According to Hutchinson and Waters (*op.cit:*53), NA started mainly in the field of ESP. Nevertheless, they argue that as far as NA is concerned, there should not be any difference between ESP and GE. They state that:

It is often argued that the needs of the general English learner, for example the school child, are not specifiable... In fact, this is the weakest of all arguments, because it is always possible to specify needs, even if it is only the needs to pass the exam at the end of the school year. There is always an identifiable need of some sort. What distinguishes ESP from General English is not the existence of a need as such but rather an awareness of the need.

Richards, Platt & Weber (1985) describes NA as the process of determining the needs for which a learner or a group of learners requires a language and arranging the needs according to priorities...it makes use of both subjective and objective information. By *subjective* information, it stresses the psychological, cognitive, cultural and affective factors categorised in terms of:

- 1) Individual differences (introversion-extroversion, risk-taking, cognitive style); and
- 2) Learning style (psychological, cognitive, sensory differences).

On the other hand, *objective* information refers to identifying learners' real world communication requirements so that courses could be designed preparing users for their intended use of the target language.

The importance of conducting a needs analysis exercise lies in the fact that through it, curricula designers can learn hand two important things:

- 1) What general and specific language proficiency learners have; and
- 2) What general and specific language proficiency learners need to acquire.

Once curricula designers discover these two important learner-related facts, then they can write the course objectives, make decisions on what to include in the syllabus or what functions, topics, vocabulary should be given emphasis over others.

1.2. Historical Development of Needs Analysis

Hutchinson and Water (*op.cit*:09) summarise the development of NA into five phases: 'Register Analysis', 'rhetorical or Discourse Analysis', Target Situation Analysis', 'Skills and Strategies', and 'Learning Centred Approach'.

1.2.1. Register Analysis

In the first phase of ESP history, the focus was on the sentence level and called 'Register Analysis'. This stage took place mainly in the 1960's and early 1970's. It was associated in particular with the work of Peter Strevens (1964), Jack Ewer (1969), and John Swales (1971). The syllabuses and teaching materials in this phase were based on the analysis of scientific and technological language. Researchers identified the lexical and grammatical features of academic and professional registers and then organized their courses around the lexical and grammatical features of these registers. A good example of such syllabus is "a Course in Basic Scientific English" by Ewer and Latorre op.cit. Even though, the analysis aimed at producing a syllabus that highlights some language forms, that students would meet in their science studies, over other language forms they would not meet, register analysis revealed no distinction between grammar of Scientific English and that of GE, with some focus on particular forms such as the present simple tense.

1.2.2. Rhetorical or Discourse Analysis

The second phase was characterized by a switch from register analysis and the grammatical and lexical level of the sentence to the study of discourse or rhetoric analysis. Hutchinson and Waters *op.cit* emphasized the attention that should be given to the understanding of how sentences are combined to produce real meaning. Robinson (1981:53) defines the term *Discourse Analysis* as "the study of stretches of language, whether spoken or written" to help students process, utter and write more than singe sentences when they encounter real discourse and have to create it in their actual job or study situations, i.e., learners need to be met by courses that teach them how sentences are combined and used to perform accurately and proficiently in specific communicative settings.

1.2.3. Target Situation Analysis

The term 'Target Situation Analysis' was, in fact, used by Chambers (1980) in one of his articles. For Chambers (*ibid*: 29), Target Situation Analysis "is communication in the target situation". For Hutchinson *op.cit*, the target situation is one in which learners will use the specific language they are acquiring. He also said that during this stage, ESP curricula focused on identifying those special target situations for determined groups of learners in order to analyse the linguistic features common to those situations. Robinson *op.cit* states that a Target Situation Analysis can be defined in terms of NA that focuses on students' needs. The dominant figure of this phase was Munby (1978) who presented detailed procedures and the most highly developed model for examining learners' needs which he called "the Communication Needs Processor" (CNP). CNP is the basis of Munby's approach to NA. It establishes the profile of needs through eight parameters. The parameters specified by Munby are:

- 1- Participant, which includes information about the learner such as age, sex, language background, etc.
- 2- *Purposive domain*, which establishes the type of ESP, and then the purpose that the target language is used for at the end of the course.

- *3- Setting*, that includes information specifying the spatial and temporal aspects of the situation, and psych-social settings in which the language will be used.
- 4- Interaction, which identifies the learner's interlocutors and relationships obtained in the target language use
- 5- *Instrumentality*, that specifies the medium, i.e., whether the language to be used is spoken, written, or both; mode, i.e., whether the language to be used is in the form of monologue, dialogue, or any other; and channel of communication, i.e., whether it is face to face, radio, or any other.
- 6- *Dialect* that learners will have to understand or produce, i.e., the variety of the target language required.
- 7- *Communicative key*, that implies the manner in which the participants will have to do the activities, e.g. politely or impolitely.
- 8- Target level, i.e., level of linguistic proficiency at the end of the ESP course.

However, Hutchinson (1988) mentions some of the limitations of the Target Situation Analysis as he states that NA can tell us a lot about the nature and content of the learner's target needs, but it can tell us little or nothing about how to attain that target competence, and what the learning processes are.

1.2.4. Skills and Strategies

The fourth stage had been an attempt to look below the surface and to consider not the language itself but the thinking processes that underline language use, i.e., the focus is not so much on the surface forms of language, but in the underlying strategies learners use to deal with the external or surface forms, for example guessing the meaning of words from context, exploiting cognates, i.e., the use of words that are similar in both the mother tongue and the target language. In addition, there was no attention given to specific registers since the underlying processes and strategies are not specific to any subject register.

1.2.5. A Learning Centred Approach

In contrast to the previous approaches, a learning-Centred Approach considers the learners' learning needs at every step of the course design. Attention must be paid to these learning needs, and not just to the language needs, i.e., the surface and underlying forms of language, at the time of needs analysis. Here, the course designers must be aware of factors such as why learners want to learn, how learners learn, who they are, what resources are available, and other factors. Once these important students-related facts are discovered, then curricula designers can write the course objectives, and make them the basis of the syllabus to be designed.

II. 2. Types of Needs Analysis

Hutchinson and Waters op.cit identify two types of needs: 'Target Needs', and 'Learning Needs'.

2.1. Target Needs

Target needs refer to what the learner needs to do in the target situation. They look at the target situation in terms of *necessities*; *lacks*; and *wants*.

2.1.1. Necessities

These refer to what the learners have to know in order to function effectively in the target situation i.e. the type of need determined by the demands of the target situation.

2.1.2. Lacks

The authors believe that identifying necessities alone is not enough and that we also need to know what the learner knows already, as this helps us decide which of the necessities the learner lacks. In other words, we need to match the target proficiency against the existing proficiency, and the gap between them is the learner's lacks.

2.1.3. Wants

Learners' wants and their views about the reasons why they need language should not be ignored, as students may have a clear idea about the necessities of the target situation and will certainly have a view as to their lacks.

2.2. Learning Needs

Learning needs explains how students will be able to move from the starting point (lacks) to the destination (necessities). Hutchinson and Waters *op.cit* claim that it is naive to base a course design simply on the target objectives, and the learning situation must also be taken into account. They add that the target situation alone is not reliable indicator, and that the conditions of the learning situation, the learners' knowledge, skills, strategies, and motivation for learning are of prime importance.

The figure bellow illustrates Hutchinson and Waters' op.cit taxonomy of needs.

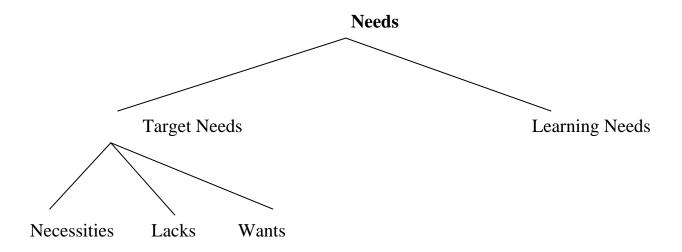


Figure 4: Taxonomy of Needs (Hutchinson and Waters, 1987)

Other scholars, for instance, Mackey and Mountford *op.cit* divide needs of learners into: *Academic needs* where English is required for future academic study, and *Job needs* where English is required in order to perform a particular practical job e.g. technicians requiring English in order to work

on a project in which English is used. On the other hand, Nunan *op.cit* classifies NA under two headings: '*objective*' needs and '*subjective*' needs. He states:

Objective data is that factual information which does not require the attitudes and view of the learners to be taken into account. Thus, biographical information on age, nationality, home language, etc is said to be 'objective'. Subjective information, on the other hand, reflects the perceptions, goals and priorities of the learner. It will include, among other things, information on why the learner has undertaken to learn second language, and the classroom tasks and activities which the learner prefers.

(Nunan, 1988:18)

'Objective' needs are diagnosed by the teacher on the basis of the personal data for the learners. In light of this data, the teacher can select or plan a suitable syllabus. Subjective needs are derived from the learners themselves.

II. 3. Approaches to Needs Analysis

Different models have approached the field of NA in different ways. Jordan (op.cit) indicates that the main two approaches in NA are the 'Target Situation Analysis', and the 'Present Situation Analysis'. Other approaches such as the 'Learning Centred Approach', 'Strategy Analysis Approach' and 'Means Analysis Approach' are seen as permutations of 'Target Situation Analysis' and 'Present Situation Analysis'.

3.1. Target Situation Analysis

TSA means what do students need to be able to do in English as a result of the course. For Chambers *op.cit*, TSA is communication in the target situation. This model started with Munby's *op.cit* model of the Communicative Needs Process (CNP). This model contains a detailed set of procedures for

discovering target situation needs. It is based on analyzing language communication in the target situation in order to provide a communicative needs profile for a specified group of learners. The CNP seeks to present a valid specification of the skills and linguistic forms that a group of learners need in the intended target situation.

The outcome of the processing data by means of Munby's model is, as Hutchinson and Waters *op.cit* say, what the learner needs to know in order to function effectively in the target situation. This model analyses the four skills (listening, speaking, reading and writing) seeking to generate a general profile of the language situation to be used as an input in course design.

3.2. present Situation Analysis

The term 'Present Situation Analysis' was first proposed by Richterich and Chancerel (1980). PSA deals with what are students' capabilities now, and what are the features of ESP course. In this approach, the sources of information are the students themselves, the teaching establishment, and the user-institution, e.g. place of work.

According to Jordan *op.cit*, PSA may be posited as a complement to TSA. If TSA tries to establish what the learners are expected to be like at the end of the language course, PSA attempts to identify what they are like at the beginning of it. Thus, NA may be seen as a combination of TSA and PSA.

3.3. Learning Centered Approach

Hutchinson and Waters *op.cit* advocate a Learning Centred Approach. They make a distinction between *target needs* (what the learner needs to do in the target situation), and *learning needs* (what the learner needs to do in order to learn).

3.4. Strategy Analysis Approach

As it is apparent from the name, this type of needs analysis has to do with the strategies that learners employ in order to learn another language. This tries to establish how the learners wish to learn rather than what they need to learn.

3.5. Means Analysis Approach

Holliday and Cook (1982) suggest Means Analysis to establish a workable course design. The focus of Means Analysis is to adapt language courses to local situations. It involves study of local situations: teachers, teaching methods, students and facilities, etc and discourages alien teaching and learning methodologies.

II. 4. Data Collection Procedures

Another important area is the methods or procedures by which NA is conducted. Jordan (*op.cti*:28) lists fourteen methods of data collection. They are stated in the following points.

- Advance Documentation that can be requested to get an idea about students' educational background, including courses they may have taken previously in the target language.
- Language Test at Home, i.e., students may be tested in their home country before they join a university or a course. This test should reveal their strengths and weaknesses, hence, decide on the period and type of language course needed. Such a test can be taken in many countries in approved centres, most of which are British Council offices.
- Language Test on Entry which is conducted on entry to the target institution. It can have a diagnostic value and identify learners' language weaknesses and lacks. Through such tests, the institution constructs a profile of learning difficulties. Such tests may take a variety of forms, ranging from multiple-choice questions on grammar and vocabulary to dictations, note-taking tasks, reading, comprehension, speech production checks, etc.
- Self-assessment through which students may assess themselves through various ways, such as questionnaires. They may complete a form indicating their ability at, for example, the four

skills on a rating scale ranging from very good to poor, or numbered which have to be ticked or circled.

- Observation and Monitoring may reveal Students difficulties by observation in English classes or in written home work assignments. This may show students' speaking and listening difficulties and note who are not self-confident. Watching or monitoring students in language laboratories may help to discover their oral/aural difficulties.
- *Class Progress Tests* may also give information. These are tests often given every four weeks.

 They provide information on progress being made and areas of difficulties remaining.
- *Surveys* which are based on questionnaires. They have been established as the most common method. They are of significant help in drawing a profile of learners' needs, lacks, wants, learning styles/ strategies, etc. and at the same time make them aware of their needs, lacks, etc.
- *Structured Interview* consists of pre-planned questions to which the answers can either be recorded or written down. Mackey *op.cit*, strongly, favoured this method of gathering information; the questions will be all answered. In addition, questions may be clarified in case of misunderstanding and some important points may be arisen during the interview and which had not been foreseen during the designing of interview questions.
- *Learner diaries* (or journal) can be of significant help to gain insight into learners' learning experiences. They can be used as supplementary to end-of-course questions offering retrospective, qualitative information. They can also provide information about the items learners enjoyed, found difficult, did not understand, and sometimes with reasons given.
- *Case Studies*, on which James (1984, cited in Jordan, *op.cit*:36) states that: "Students need help with what they find most difficult. What they find most difficult can only be discovered by observing them at work on the job."

This was James' conclusion after a case study made by him of a Brazilian student writing a thesis on his research in the Sociology of medicine. He extracted mistakes from the student's thesis and divided them into three categories and attached them to different causes.

- Final Test at the end of the course provides information on learning difficulties
- Evaluation/ Feedback, in addition to end-of-course test, is usually a final evaluation or feedback in the form of questionnaires that provide information on the evaluation of the course and help design or improve the next course.
- Follow-up Investigation which is generally carried out after a course has finished, with both students and staff. It often takes the form of questionnaire with students and reveals which parts of the course they found most and least useful. Questionnaires, in addition to interviews, may also be used with staff to show what their perceptions are of students' performance and the continued difficulties of the students.
- Previous Research which is another way to gather information.

Jordan's methods of collecting data are summarised in the following figure:



Figure 5: Methods of Collecting Data for NA (Jordan: 1997)

Researchers and teachers in the field of ESP select one or more than one method of data collection keeping in view the type of information to be gathered, population groups, available recourses, and time.

II. 5. Sources of Information

An important area in NA is the source of data collection. The most common ones are: learners; teachers; and documents relevant to the field of ESP research. Dudley-Evans *op.cit* lists eight sources: the learner; people working and studying in the field; ex students; document relevant to the field; clients; employers; and colleagues and ESP research. For Robinson (2000), sources of information include the students themselves; past students; and current and future employers or academic departments. Contemporary approaches "emphasise the active role of the learner in identifying the needs…and ongoing dialogue between the teachers and learners" Brindeley (2000:179).

II. 6. Steps in Needs Analysis

Jordan *op.cit* indicates that with so many approaches, procedures of data collection, sources of information, and other variables, there is a danger that one may feel overwhelmed. What is important, therefore, is to remember that there is no single approach to NA, and circumstances vary from situation to another. Indeed, choices in NA will be determined by time, and resources. For this, planning in advance is essential. Jordan *op.cit* sees that the starting point in NA is to pose some fundamental questions that will be of great importance in deciding which type of analysis is appropriate and the data needed. Jordan's suggested questions are:

- Why is the analysis being undertaken? (to determine the syllabus and content, to decide on materials selection, etc.)

-	Whose needs are to be analysed?
	✓ The students;
	✓ The sponsors, e.g. the institution, the country, the employer; or
	✓ The specialist department
-	Who performs the analysis? Who decides what the language needs are? (teachers; students;
	researcher; etc
-	What is to be analysed?
	✓ The target situations;
	✓ Deficiencies;
	✓ Strategies;
	✓ Means;
	✓ Constraints;
	✓ Necessities;
	✓ Lacks; and/or
	✓ Wants
-	How is the analysis to be conducted? (tests; questionnaires; interviews; etc.)
-	When is the analysis to be conducted? (before; at the beginning; the middle; or the end of
	course)
-	Where is the EAP (ESP) course to be held? (in the target country; in the student's own
	country; etc.)
After pos	sing these questions, it would be helpful to look at the steps involved in conducting a NA.
	- Purpose of analysis;
	- Delimit student population;
	- Decide upon the approach (es);
	- Acknowledge constraints/ limitations:

- Selecting methods of collecting data;
- Collect data;
- Analyse and interpret results;
- Determine objectives;
- Implement decisions (i.e., decide upon syllabus, content, materials, etc); and
- Evaluate procedures and results.

II. 7. Importance of Implementing a Needs Analysis

As the research to date holds, learners may have different needs. Robinson *op.cit* believes that needs analysts should be cautious in collecting information from various sources due to the multiplicity and diversity of the views on prerequisites for an ESP course. West (1992) maintains that "Needs as interpreted by the sponsors may indeed conflict with the needs felt by the learner." Hutchinson and Waters (1993) holds that the relationship between necessities as perceived by a sponsor or an ESP teacher, and what the learners want or feel can be at extreme poles. However, they suggest that learners' perceived wants and wishes should be considered carefully, and due to the objective and subjective reality of needs, each learning situation should be considered uniquely and systematically.

Bearing in mind a wide range of needs due to the influence of different social and cultural factors on students' learning, a NA is considered as a prerequisite in any course design. According to Knox (*op.cit*), a needs assessment enables researches to justify their assumptions to design a programme in terms of topics, materials so as to be responsive to the needs of participants. Such focus on satisfying learners' needs will help the learners to insist to learn and apply what they learn. Richards (1990) holds that the data to be collected from learners, teachers, administrators and employers in the planning process will help to identify general and specific language needs and content of a language programme. Besides, it will provide data to review and evaluate the existing programme.

Research to date emphasises the significance of a NA for devising a course, writing textbooks or course books. Yet, it is recommended that a needs analysis should be carried out during the life of each course, because 'as students become more involved with the course, their attitudes and approach may change' (Robinson, op.cit:15). Therefore, identification and analysis of needs should be a continuous process. This can help both administrators and teachers to introduce necessary changes, so as to promote learners in their progress throughout the programme.

II. 8. Criticism on Needs Analysis

Although NA is a prerequisite to ESP curriculum design, it has been criticized by many scholars. Brindeley *op.cit* points out that although NA enables course planners to collect information about the learners themselves, their language needs, and the learning environment, it is obvious that the collection and analysis of such a wide range of information can be very time consuming. Moreover, contemporary researchers emphasize that NA is an on-going process and needs to be continually refined. Therefore, it requires a lot of resources and time.

Widdowson (1983) indicates that a needs based approach will not develop in learners the ability to generate a spontaneous communicative language since such needs based courses are designed for particular situations. In addition, learners may not be able to judge their problems. It is even possible that they might not elicit information about themselves, and could interpret the questions asked to them in an inappropriate manner.

Even though the concept of NA has been criticized by a number of linguists, it is crucial to ESP course design as Brindeley (*op.cit*:440) quotes:

Despite the potential difficulties involved in collecting and interpreting information on learner needs, the idea of using NA as a basis for determining course content and methodology has met with wide acceptance, both in general language teaching and LSP context.

Conclusion

NA is an essential part of any language course. This phase of ESP program development provides a better understanding of students' needs and capabilities as English learners. Identifying these needs and capabilities involve the functions for which the students will use English. Hence, the results of this analysis will enable language course developers to develop courses that respond to learners' needs. In other words, an effective language course should be based on learner's needs.

Chapter Three: The Situation of English for Specific Purposes at the Biology

Department

Introduction

The fact that English has become the international language of science and technology is neither

unknown, nor disputed. The publication of major research is done in English. Books and articles in the

nature of science and technology are for the most part written by English-speaking authors, and even by

those non-native speakers of English seeking to reach a wider readership.

Although many university students in Algeria do not fully grasp the importance of English at an

early point of their studies, they feel it as an asset during their last year, particularly during the writing

of their theses or research papers since they need documentation published in English. Biology students

at Khenchela University Centre are not an exception.

This chapter is devoted to explore the situation of English teaching in this department. It points to

the content of the English licence programme in both the classical and the recently integrated LMD

system. It is an attempt to throw light on the Status of English and the ESP learning/teaching situation in

this department.

III. 1. English Language Teaching in Algeria

1.1. The Status of English

The English language enjoys great importance. It is the world's language not because it is the

most widely spoken language; Chinese would be more important in this case. Its importance springs

from its wide use rather than from the number of its speakers. It is this importance that is behind the

advent of ESP teaching all over the world, and that is why almost all the faculties in the Algerian

university are providing English language teaching.

As far as its linguistic map is concerned, Algeria enjoys linguistic diversity. The national language used in administration and media is Classical Arabic. Algerian dialectal Arabic derives its origin from Classical Arabic. It has been influenced by Berber and French, and it is spoken throughout the country with slight local differences.

Berber, which is the original language of the Maghreb, is still spoken in certain areas; especially in the Aurés to the East, in Kabylie in the Centre, in Mzab, and among Touareg in the South. Berber and dialectal Arabic are spoken in everyday life and informal situations.

The Algerian population was so deeply influenced linguistically during the French occupation that today more than forty years after the independence; the French language continues to play an important role in spoken as well as written domains. However, Classical Arabic is replacing progressively French in many domains such as education, politics, and administration. After the independence, the Algerian government began to generalize step by step Arabic under 'Arabization laws' since it is the native language, the soul of nationalism and associated with religion.

English, on the other hand, stands as a foreign language in Algeria. Algerian learners were meeting it only in the classroom. Nowadays, with the technological development, they might meet it on television and internet too. It is taught in all the Algerian faculties as a pedagogical support, for most of the documentation is in English and for scientific reasons because a great part of the scientific terms are in English.

1.2. Approaches to English Language Teaching

When teaching any language, the educational staff, that is responsible for designing and writing syllabus, has to share a common understanding of this language and of the way it should be taught. This understanding constitutes the approach.

Analysis of the ELT adopted approaches in Algeria entails the reference to two phases where two approaches have co-occurred: the Communicative Approach and the Competency-Based Approach.

After they had tried many approaches and methods, the Algerian syllabus designers and textbooks writers agreed upon the adequacy of the Communicative Approach. This choice is justified by the tendency that teaching is communication, as cited by Morandi (2002, cited in Medjahed, 2010: 73): "The first act of pedagogy is communication....Teaching implies a 'know how to communicate'. The first apparent element is the one of language, more exactly of discourse and of the logic it carries."

The Communicative Approach, on the other hand, aims at helping learners acquire communicative competence. This term refers to the learner's knowledge of the rules of grammar and his ability to use them appropriately according to the different social circumstances. The focus is then on the meanings conveyed rather than on the forms used.

The Competency Based Approach was introduced in 2002 in Algeria as a result of the educational reform in the primary, middle, and secondary schools. It tends to relate the learning skills to the outside environment. It aims at making the learner able to share knowledge and to cooperate with others.

1.3. From Theory to Practice: a Critical View

Syllabus designers are always trying to provide and develop an adequate course for English language teaching. However, in practice, there are negative aspects. This implies that either the theoretical suggestions; such as the teaching methodology are not appropriate to the Algerian context or they are not applied in the right way. These shortcomings include:

- 1- Centralized decision-making;
- 2- Lack of coordination between teaching aims and learners' needs; and
- 3- Absence of communication.

Teacher's constant contact with learners may result in discovering and defining their needs and learning problems. Hence, he is considered as one of the most important members of the educational staff. So, he is supposed to be the one who decides on the kind of methods and strategies to be used in each teaching situation. Since each situation is in itself different from the others and since there are individual

differences between learners even in the same classroom, the teacher needs to be free to teach the way he sees appropriate. However, this is not the case in Algeria. It is not the teacher who decides, but rather higher authorities.

The educational system is still highly centralized, although several suggestions have been voiced by skilled teachers, and are still being attempted towards decentralization. In vain, the general education policy is ultimately decided at the top.

Bouabdessalem (2001, cited in Medjahed, op.cit: 75)

Another shortcoming is related to learners who, most of the time, ask themselves why they learn such and such a thing. According to Robinson (*op.cit*), needs and learning objectives are closely connected in the sense that learners should know "what they have to be able to do at the end of their language course" (*op.cit*: 07). Learners, most of the time, do not know the aims of the curriculum. They come to the classroom to receive pieces of knowledge, memorize them in order to use them as an output in the exams. They do not know the use of what they learn in their real lives. On the other hand, teachers, most of the time, do not know what their learners need to know. Here, the gap widens between the two partners; i.e., the teacher and the learner who are supposed to work in collaboration to achieve success. Hence, learners' needs are by no means met as far as the syllabus is concerned. Baiche describes the secondary level syllabus in Algeria by stating that "the English syllabus in secondary education in Algeria is narrowly defined and restricted to a collection of functions that are randomly selected...."

Baiche quoted in Bouabdessalem (op.cit, cited in Medjahed, op.cit: 75)

The implementation of the Communicative Approach opens doors to refer to language as discourse. This involves analyzing language in use moving from language units to communicative acts; i.e., the content of the language course includes semantic notions and social functions, not just linguistic structures as mentioned by Marianne Celce-Murcia (1991:08) when she says that "Students regularly work in groups or pairs to transfer (and, if necessary, negotiate) meaning in situations where one person

has information that the other(s) lack" and "Students often engage in role-play or dramatization to adjust their use of the target language to different social contexts"

In a study done in Greece, Doukas (1996) reported that the Communicative Approach failed partly because teachers failed to apply it adequately. In most of the Algerian faculties, the teacher teaches grammar and possibly conducts certain discussions of general interest under the thought of improving learners' structural and communicative needs. At the department of Biology at Khenchela University Centre, almost no communicative activities are used to teach English. The focus is on terminology and word-to-word translation. The conclusion is that grammar-translation methodology is still monopolizing, which contradicts with the communicative methodology.

1.4. The Training of ESP Teachers

In Algeria, the 'Baccalauréat' holders enrolled in the English department spend a period of four years study to graduate and obtain the English 'licence' degree; presently, the LMD system is being introduced in the Algerian universities; the time required for a licence degree is reduced to three years. Students holding a licence degree may become English teachers in secondary or middle schools or undertake post graduate studies at university upon an admission test. It should be pointed out that during the graduation year, students are also required to choose between writing an extended essay which would stand for a small scale research, and attending teacher training sessions in a secondary or middle school that might be followed by writing a training report.

If one of the main requirements of an ESP teacher is some knowledge of the (scientific) topic he is teaching, this requirement is far from being met where most of ESP teachers are those students who graduated to become EFL teachers and who have no previous training as far as ESP teaching is concerned. Rather, they are given few hours in, say, the Biology department to teach ESP under the title "vacataire". In addition, most of them have a literary background. Furthermore, the allocation of the ESP module is in many cases, done as a stopgap measure where English language teachers, with magister and doctorate degree, of the English language department are oriented toward another

department to take charge of the ESP module as to complete the number of work hours they are supposed to teach. Thus, most ESP teachers had no previous experience in the teaching of ESP. Therefore, it comes that each teacher teaches this module in his own way.

In fact, in the whole country, there is no provision made for the training of ESP teachers at university level. It is left for each institution to recruit its own teachers, give them general guidelines, and leave them to decide on the teaching materials and evaluation methods. In some institutions, it is left for the subject matter teacher (e.g., biology teacher), who had previously studied in the US or Britain, to provide this teaching.

III. 2. English Licence Programme

In order to have sight on the English teachers' background in ESP teaching; a brief account of the curriculum of studies of the "Licence d' Enseignement d'Anglais" is worth mentioning. In fact, The Algerian universities, as the faculties of Languages and Letters are concerned, encompass, at the present time, two kinds of programme: the Classical Licence Programme which is vanishing by the replacement of the second new system called LMD (Licence, Master, Doctorate).

2.1. Classical English Licence Programme

The classical English licence programme is a four-year degree course at the end of which the graduate student may engage in an English teacher's career in secondary or middle schools, pursue a course of studies and research at post-graduate level, or teach English as an ESP course in other departments. It includes the following modules:

- 1- Oral Expression;
- 2- Phonetics:
- 3- Written Expression;
- 4- Grammar;
- 5- Linguistics;

6- British Civilisation;

7- American Civilisation;

8- Literature;

9- Psychology;

10-Psycho-pedagogy;

11-Didactics;

12-General Culture; and

13- Arabic.

The main aim of oral expression is to enable the learner to express himself in correct English on any topic within the range of his experience. The learner should acquire great ease in verbal expression by being able to use familiar structures in new situations. The learner should not necessarily reach a native speaker's accent and fluency. However, he should be able to maintain an intelligible conversation in different situations, and produce speech with accurate pronunciation of sounds, intonation, and stress.

Emphasis in the phonetics module is on making students aware of the different types of vowel and consonant sounds which are used in English, the importance of word and sentence stress, and of rising and falling intonation. Students should be familiar with names and functions of vowels and consonants in addition to oral practice that should take place in the language laboratory as far as the classroom. In addition to that, they should be aware of the aspects of connected speech such as weak forms and assimilation. Theses aspects help them understand why written English is so different from spoken English.

Written expression aims at developing the student's writing skill. In this matter the student learns the techniques of writing starting with the topic sentence and supporting sentences to develop a paragraph, and then move to more complex written forms as essays.

The teaching of grammar is concerned with reinforcing the grammatical knowledge acquired in the secondary school. It enables the student to write and speak correct English. This module is taught during the first two years only, even though, it is implicitly included in the teaching of written expression.

Furthermore, the learner deals with the scientific study of language, i.e. linguistics. This module is an introduction to linguistics, Harris' approach to structuralism, Chomsky's grammar, and linguistics in relation to other fields, etc.

The course of British civilization, which is introduced during the second year and lasts to the fourth year, starts with a description of the country and its early inhabitants, then proceeds through the different dynasties which ruled in Britain. Changes in the British parliament and trade unions are highlighted too. By the fourth year, students are given more information about the actual life in Britain. In addition to British civilization, a course about American civilization is available. It presents the different colonial periods America went through and highlights particular problems encountered by the American society.

Learners are also introduced to some of the traditions, wealth and variety of the Anglo Saxon and American literature as well as the African literature. The literature module offers an opportunity to study a wide range of topics and shows the relevance of literature to the current events of a given period of time. It aims to introduce students to a range of verse and prose forms from different periods of time.

The Psychology module, on the other hand, deals with developmental psychology. It focuses on the child's physical and psychological changes till the adolescence and highlights the significance of society and its influence in forming a person's personality. In addition, it prepares students for the fourth year course of Psycho-pedagogy. The latter prepares future English teacher to deal with the task of teaching.

Another module that is concerned with preparing students for teaching is didactics. It introduces them to the task of teaching through identifying this task and mentioning the characteristics of a good teacher. Language teaching methods, approaches and techniques are also introduced.

General culture module is taught during the first year only. It provides background information about the cultural patters of the English speaking countries. In fact, it prepares students to the second year civilization course by introducing them to the different customs, traditions, history, food, etc. of these countries. The Arabic literature module, on the other hand, tends to foster students' knowledge about Arabic language and discusses different topics and writing styles of different periods of time.

It seems that the classical English licence programme does not include modules that help to teach ESP, except for some universities such as Annaba university where an ESP module is available. This may explain teachers' lack of knowledge and experience when encountered with teaching English in other departments. However, some topics in oral expression and written expression may relate to ESP.

2.2. LMD English Licence Programme

The LMD English licence programme is a three-year degree course. It has been recently integrated in the Algerian university. In the English department at Khenchela University Centre, it has been adopted since the university year 2009/2010. Table 2 shows the modules integrated in this new educational system during the first semester where ESP is integrated under the name of 'Langue de Specialité'.

matières	Contenus					
	Ecrit : Techniques de l'Expression Ecrite					
	 Accent mis sur les textes modernes et contemporains 					
3.641 11 11	(compréhension)					
Méthodologie de la	- Texte comme support : grammaire et techniques de l'écriture					
Langue Etrangère	- Apprentissage des techniques de l'écrit, soit l'étude des					
	différents types de textes mis à la portée des étudiants, comme					
	par exemple : le narratif, descriptif, argumentatif, prescriptif.					
	Oral : Techniques de l'Expression Orale					
	- Phonétique (apprentissage des sons/ Laboratoire).					
	- Construction de phrases orales à partir d'un thème défini.					
	- Contextes d'utilisation du langage.					
	- Productions langagières en situation de discours.					
Description de la	Origine et Evolution de la Langue					
Langue						
	Mambarratora (Thánia at Dustiona)					
	Morphosyntaxe (Théorie et Pratique)					
Initiation à la	Concepts linguistiques					
Linguistique	- Définition de la linguistique en tant que science du langage;					

	T				
Générale	- Objectifs de la linguistique;				
	- Linguistique et autres sciences voisines: philosophie,				
	psychologie, sociologie;				
	- Les sciences linguistiques et leurs composantes: phonétique,				
	phonologie, morphosyntaxe, sémantique, pragmatique;				
	- Concepts linguistiques: théorie de la communication, théorie				
	du langage, signe linguistique, double articulation, relations				
	syntagmatique et paradigmatique, diachronie et synchronie				
Phonétique de la	Phonétique (Théorie et Pratique)				
Langue					
Initiation aux	Histoire des Idées				
Cultures de la	- Les grandes étapes historiques : Idées et évolutions, études				
Langue	multidimensionnelles des différents mouvements de pensée et				
8	leur impact sur les sociétés.				
	Histoires des Aires Culturelles				
	- Histoire des aires culturelles comme génératrice des phases				
	historiques: Idées et mouvements correspondant aux différentes				
	étapes historiques.				
Introduction aux	Tradition des Genres Littéraires				
Textes Littéraires	- Introduction aux textes littéraires: traditions des genres				
	littéraires : Initiation.				
	- Identification des genres littéraires par le texte d'une manière				
	graduée.				
	Histoire des Formes d'Expression Artistique				
	- Textes littéraires et formes d'expressions artistiques.				
	- Introduction des différentes formes artistiques et leurs formes				
	correspondantes en littérature (Lecture sémiologique)				
Langues de	Epistémologie				
Spécialité	- Registre ; variété stylistique ; analyse du discours ; analyse des				
- F	besoins				
	Langues de Spécialité				
	- Communautés discursives ; la langue des affaires ; la langue de				
	la médecine, la langue des sciences, la langue du journalisme				
Méthodologie de la	2, <u>6,</u>				
Recherche					
Universitaire					
Langue Etrangère	Techniques de l'Expression Ecrite et Orale				
2	(Obligatoire: Français, l' Arabe)				
Sciences Humaines	, , , , , , , , , , , , , , , , , , ,				
et Sociales (option)					
T.I.C.E (option)	Choix de 2 options sur 3				
(option)	Choir de 2 options sur 5				
T *4* 4*					
Initiation aux Arts					
(option)					

Table 2: Content of First Semester LMD English Programme

Although the LMD English licence programme implies the teaching of ESP, no one can predict its outcomes at least in the next few years when the first group of students finishes the whole process.

III. 3. The Situation of English for Specific Purposes at the Biology Department, Khenchela University Centre

3.1. The LMD Reform and the Biology Department

The educational reform applied recently by the Algerian government, touched the university level as well. This reform intends to let the Algerian educational system go hand in hand with the international ones.

The application of the LMD system in Algeria is considered a step towards globalization because this Anglo-Saxon programme has proved its success in many countries of the world. In Algeria, it started to be applied in the academic year 2004/2005, and not all the universities agreed to start it be it a heavy responsibility. However, the biology department at Khenchela University Centre adopted it.

It is a three-level programme. It is made of the Licence with six semesters (three years of study and the equivalence of BA; i.e., Bachelor Degree), a Master degree of four semesters is the second phase, whereas the last phase is the Doctorate studies of three years of research.

Licence degree requires three years of studies. At the end of the second year, students may be oriented toward an academic or professional licence. The academic licence gives direct access to more specialized studies, whereas the professional licence permits a direct insertion into the professional world. In addition, third year students are required to write a memoire, through which they discuss a problem in the field of their speciality. The topics may be provided by the department or proposed by students themselves.

The second phase of the LMD system is the Master. Any student with an academic licence, under some conditions may pursue the master studies for two years. Students with professional licence may pursue it too, after having a professional experience. Hence, the student may deal with a research master, or a professional master. The former prepares students for scientific research; i.e., students are to

be oriented toward academic sectors. The second, on the other hand, is characterized by greater specialization in one of the available domains. The focus of this course is always professional.

The doctorate formation is limited to three years. It ensures a deepening of knowledge in the speciality, and training for research.

3.1.1. Biology Licence Programme

The biology licence programme is divided into six semesters. The following tables show the basic components of the first four semesters of licence in the Algerian biology departments.

	Semester 1	Semester 2		
	Chimie	Chimie		
	Biologie cellulaire	Biologie animale		
	Méthode de travail	Biologie végétale		
modules	Langue anglaise	Méthode de travail		
	Histoire des sciences	Langue anglaise		
	Géologie	Physique		
	Math, state, informatique			

Table 3: Content of First year LMD Biology Licence Programme

	Semester 3	Semester 4			
	zoologie	Botanique			
	Biochimie	Microbiologie			
	Génétique	Immunologie			
modules	Méthode de travail	Math, Statistique			
	Anglais	Ecologie générale			
	Biophysique				

Table 4: Content of Second year LMD Biology Licence Programme

By the end of the second year, students are oriented toward a number of specialities. Each student selects a speciality that he will study during his third year. Not all students' choices are accepted; however, access to any speciality is subject to conditions. Those specialities are:

- Microbiology;
- Biochemistry;
- Genetics;
- Ecology;
- Animals Biology; and
- Plants Amelioration.

According to the previously outlined programme, English is to be taught in the three years of the licence level. However, in the biology department at Khenchela University Centre, English is programmed only in one semester, in the third year. When asked about the reason, the head of the biology department at Khenchela University Centre replied that the staff had to choose one foreign language, either English or French since time allocation is not sufficient to have two foreign languages. Hence, the choice fell to French since all the modules are taught in this language and is more important than English, in his point of view. Accordingly, students will be less interested in the English language, and hence, less motivated to learn it.

3.2. The Teaching/Learning Context of English for Specific Purposes in Biology Classes

Some of the most important factors in education are time allocation, class size, and the teaching materials.

3.2.1. Time Allocation

One important feature of teaching/ learning is timing. In fact, in the design of a language course, the question of how many hours are allocated to the course in question has much to do with the level of attainment achieved in relation to it; i.e., the more time provided to teach a course, the better the learner is encountered with the language, hence, the much knowledge he will acquire. In addition, the number of hours devoted to teach a course may make of this course interesting or less interesting comparing

with other subject matters. An informal interview made with some biology students at Khenchela University Centre revealed that some of them are not interested in the English session. One of them explained by saying "I see it uninteresting since it is taught only during the third year and we have it just for one hour and half per week, otherwise the department staff would include it during first and second years and provide more hours for it, other subjects of our specialty are more interesting". Time allocation of the English language in the Biology department at Khenchela University Centre is shown in tables 5-6-7.

	8 -9 :30	9:30-11	11-12 :30	12 :30-14	14-15 :30	15 :30- 17
Dimanche	Bio- Statistique	Enzymo- appliquée	Anglais Scientifique		ТР	BioMol
Lundi	Technologie de la Biochimie	Enzymo- Appliquée	Bio Mol	TD Enzymo- appliquée	Bio- Statistique	
Mardi	Bio Mol	Technologie de la Biochimie	Voies métaboliques		Enzymo-	appliquée
Mercredi				Voies métabolique		
Jeudi	TP Voies	métaboliques				

Table 5: Time Table (3rd Year L.M.D –Biochimie – S6)

	8 -9 :30	9 :30 - 11	11-12 :30	12 :30-14	14-15 :30	15 :30- 17
Dimanche	Bio- Statistique	Microbiologie appliqué		TP	Immunologie	
Lundi	Immunologie	TP Microbio-	Environ	TP Microbiologie	appliquée	
Mardi	Microbio appliquée	Microbio- Environ	Biologie Moléculaire	Immunologie		
Mercredi	Bio- Statistique	Anglais Scientifique	Biologie Moléculaire			
Jeudi				TPBiologMolaire		Microbi Environ

Table 6: Time Table (3rd Year L.M.D –Microbiologie – S6)

	8 -9 :30	9 :30 - 11	11-12 :30		12 :30-	14-15 :30	15 :30-
					14		17
Dimanche	Eco- pédologie	Biotechno- végétale	Bioinformat	ique			
Lundi	Gêné amélioration plantes	Biotechnologi e végétale		Eco	pédologie	Bio-informa TP/TD	-
Mardi	Bioch végétale	Géné amélioration plantes 2	Anglais		Biotech	végétale	
Mercredi					Bioch végétale Génétique et amélioration de plantes 2		n des
Jeudi	Bioch	végétale			Ecopédologie		

Table 7: Time Table (3rd Year L.M.D –amelioration des Plantes – S6)

3.2.2. Group Size

One of the most important factors in education is class size. It does not refer to the physical size of the classroom. Rather, it refers to the number of students in the classroom.

The National Education Association (NEA) states that the optimal class size is 15 students. However, the Algerian university classroom is generally crowded. The classroom in the biology department at Khenchela University Centre is generally made up of 30-40 students. In this case individualization of language teaching will be difficult, that is, instead of seeing learners as individuals, each one with different attitudes, capacities, and motivation levels the teacher will see a mass of brains which must grasp whatever teaching course they are involved in. The fact of having a large number of students in small classrooms will hinder the possibility of working in groups and checking group works. Even if the teacher tries to divide his class into small groups, he will devote much time to control the class. Hence, the activity will not take place; as Wilkins explains (1974: 46):"Decisions about the methods to be adopted cannot be taken without regard for the number of pupils in the class and the conditions in which they are learning"

3.2.3. Teaching Materials

Another important factor in the teaching/learning process is the availability of teaching materials such as textbooks and exercise books. In fact, the absence of such materials will hinder the teacher from achieving the teaching objectives. One of the mistakes committed by some teachers is to decide upon the objectives to be reached and determine the methods to be applied and finally come to look for the materials to be used as Wilkins (*op.cit*: 47) states "The objectives themselves should be defined with an awareness of what the resources will permit"

In the Biology department at Khenchela University Centre, the lack of a textbook is one of the problems biology students encounter. In fact, there are many books written in English that are related to their speciality field, but no written textbook that serves their needs, i.e., a book that focuses on speciality related topics with emphasis on one or more needed skills, is handed. However, the materials they use are provided by teachers.

Conclusion

This chapter has discussed the situation of ESP in the Algerian university with a special emphasis on the department of biology at Khenchela University Centre. Knowledge background of ESP teachers is revealed through presenting the English licence programme they had as students, and shows to what extent this programme serves the requirements of ESP teaching. In addition, it sheds light on the biology licence programme, describes the situation of ESP, and shows the context in which ESP teaching/learning takes place.

Chapter Four: Analysis and Results of Students' Questionnaire and Teachers'

Interview

Introduction

The present work is designed in order to identify the ESP teaching/learning conditions in the Biology department at Khenchela University Centre and investigate whether third year biology students encounter problems with ESP learning. For that reason, we relied on the questionnaire and the interview as research techniques for eliciting data. The questionnaire is addressed to third year biology students, while the interview is addressed to ESP teachers in the biology department.

The questionnaire and the interview are set out to serve two main objectives. On the one hand, they aim at collecting some data that would shed light on the actual teaching/learning situation of the ESP course prevailing within the peculiar context of the biology department. On the other hand, both questionnaire and interview would serve to raise respondents' awareness of their preferences, needs, and lacks in teaching/learning ESP in their department.

IV. 1. The Descriptive Statistical Method

Since our study falls under the frame of quantitative studies whose aim is to present pictures of the group under investigation, we are going to analyse and present the results of the collected data relying on the descriptive statistical method as described by Allen & Davis (1978), which is the most commonly used to account for data collected by questionnaires or structured interviews.

Then, our results will be presented by percentages. The latter will be provided by the means of tables for the yes/no questions and by the means of histograms (chart pie) when it comes to the rest of close-ended questions. Of course, the open-ended questions will be followed by small comments summarizing the respondents' propositions.

IV. 2. The Students' Questionnaire

2.1. Description of the Questionnaire

In the biology department, ESP is taught during the third year for one semester. Hence, the learners' questionnaire is handed to the third year students of Biochemistry, Animal Biology, and Microbiology. Students of other specialities (Ecology, Genesis, and Plants Amelioration), would not be able to answer the questionnaire since they don't have exposure to the ESP course yet because of the lack of teachers.

The whole population under investigation numbered two hundred and ninety (290) learners. We took one fifth 1/5 of this population to form our sample, i.e., fifty eight (58) learners. The questionnaire was distributed randomly among the three mentioned specialities. Fifty five (55) questionnaires that represent 94,82% were answered and returned back. The remaining three questionnaires (5,18%) were not as it is shown in the following table.

	N	%
Questionnaires handed	58	100%
Questionnaires returned	55	94,82%
No answer	03	5,18%

Table 8: the representativity of the Questionnaire

The questionnaire is made up of six sections structured as follows:

Section One: General Information

This introductory section is meant to draw the portraits of the learners who are required to give personal information concerning them. (Q1) is about their gender and (Q2) investigates the number of the years during which ESP was studied during their license studies.

Section Two: Attitudes toward the English Language

This section contains five questions that aim to sort out learners' attitudes toward the English language. It tries to illustrate whether the learners like English (Q3), do they consider it important for them to learn it (Q4), justify their answer (Q5), whether they show an interest o learn it outside the university (Q6), if yes, in which way (Q7).

Section Three: Students' Needs

This section is made up of ten questions. It aims to explore students' needs for English and identify their problems when faced with English written articles. Thus, it tries to illustrate whether they use documents written in English (Q8), if yes, to what extent? (Q9), and what do they use them for? (Q10), whether they face problems with one of the four skills (Q11), which skill they think is most important for them as biology students (Q12), whether they can read materials written in English (Q13), if not, why? (Q14), what type of problems they encounter when reading them (Q15), whether their actual ESP course is satisfactory or not (Q16), and why? (Q17)

Section Four: Students' Interest in the English Class

This section highlights students' interest in the English class stressing the relation of time allocation with their interest. Is contains six questions. (Q18) argues if the learners attend the English class or not, and if they do not attend it, they are expected to justify (Q19). (Q20) enquires whether learners find the time allocated to the ESP course enough or not .(Q22) is about the link between the time devoted to the ESP course and interest in this course, whether the time provided makes the English language teaching/learning interesting or not, justifying the answer is required in (Q23).

Section Five: the ESP Teacher

This section contains three questions. It aims at shedding on the ESP teacher at the Biology department. (Q24) investigates whether students find their ESP teacher's background more literary or scientific, if they are to choose their ESP teacher, they would prefer an English specialist, a teacher of their speciality or someone who would satisfy both their scientific and linguistic needs (Q25), justification to their answer is required in (Q26).

Section Six: Suggestions

This section is left to learners to propose some ideas they find adequate to make their ESP learning more fruitful and beneficial.

2.2. Analysis of the Questionnaire

Section One: General Information

1- Gender

	N	%
Male	06	10,90%
Female	49	89,10%
total	55	100%

Table 9: Learners' Distribution according to Sex

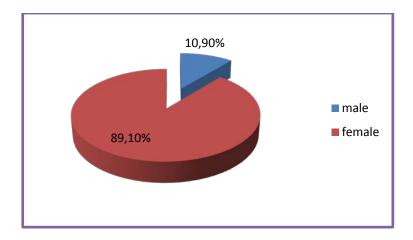


Figure 6: Learners' Distribution according to Gender

With regards to the sample under investigation, the female students outnumber males. We have recorded just 10, 90% male subjects, whereas the rest are of female sex (89,10%)

2- How long have you been studying English at the university?

	N	%
1 semester	55	100%
2 semesters	00	00
3 semesters	00	00
More	00	00
Total	55	100%

Table 10: Learners' English Learning Years at the University

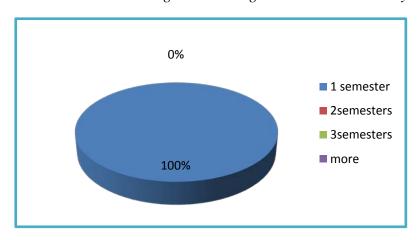


Figure 7: Learners' English Learning Years at the University

All the learners, as shown in figure 7, prove to have studied English only for one semester during their license career, as it is mentioned in the third chapter.

Section Two: Attitudes towards the English Language

3- Do you like the English language?

	N	%
Very much	35	63,64%

Not very much	10	18,18%
Rather like it	10	18,18%
Not at all	00	00
Total	55	100%

Table 11: Learners' Attitudes towards the English Language

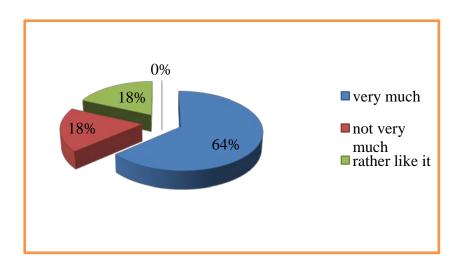


Figure 8: Learners' Attitudes towards the English Language

Since interest and motivation are key instruments to a better achievement, we are trying to identify third year students' appreciation of the English language. The results show that the majority (63,64%) of students like English very much, ten students representing 18,18% of the population seem to like it but not very much and the remaining 18,18% rather like it. No student seems to dislike it. It is obvious from the results that the majority holds positive attitudes towards the English language and this would be of a great importance for better achievement.

4- As biology student, how important is it for you to know English?

	N	%
Very important	47	85,45%
Less important	2	3,64%
Rather important	5	9,09%

Not at all important	00	00
No answer	1	1,82%
total	55	100%

Table 12: English Language Importance

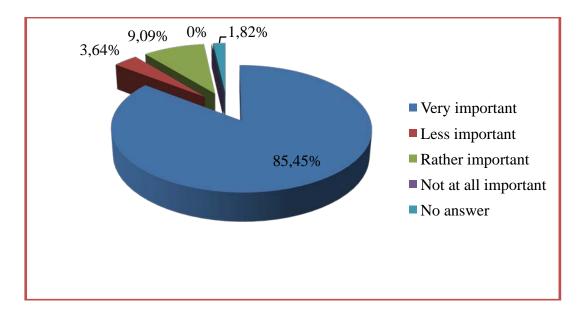


Figure 9: English Language Importance

This question aims at finding out whether or not students are aware of the role of English language in their field of specialty. The table shows that the majority (85,45%) think that English is very important especially in the scientific field nowadays. 9,09% think that it is rather important and 3,63% think it is less important and no student considers it as not important at all. One student did not answer this question.

5- Please, justify your answer

Through their answers to this open question, students provide different justifications. They can be gathered as follows.

Those who said English is very important:

- It is the language of the world.
- It is the universal language.

- Important for my studies.
- Much of the scientific articles are written in English.
- Almost all the websites are in English.
- I love it.
- Important in post-graduation (research).

Those who said English is less important:

- It is less important since we use French in our studies.
- When we graduate we will use Arabic or French in work, we will not need English.

Those who said English is rather important:

- No answer.

By analysing these answers, we find out that learners are aware of the role English plays in their speciality. They consider it important because they know it is the language of the world and need it much more to read scientific articles written in English. Others tend to think about future and the great help English would present when pursuing their post-graduate studies, whether by reading books or even to travel abroad where English dominates the scientific world. Learners who consider it less important suppose that French is more useful. These students hold the idea that since they carry their studies in the classroom using French, this latter would be more useful. This shows that French is still dominating in the Algerian Higher Education. Students who see English rather important gave no justification.

6- Are you interested in learning English outside the university?

	N	%
Yes	34	61,82%

No	21	38,18%
Total	55	100%

Table 13: Interest in Learning English outside the University

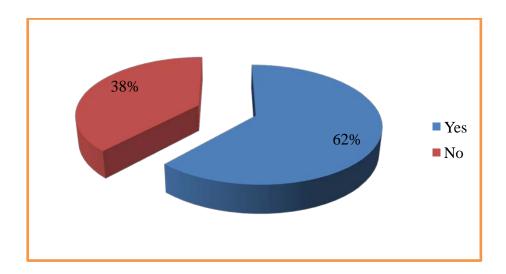


Figure 10: Interest in Learning English outside the University

This question emphasizes students' interest in learning English. The majority (61,82%) said that they tend to learn more English outside the course provided at the university. This proves students' high motivation to learn the language and high awareness of its importance. If this motivation is to be taken into consideration, results would be of great achievement. Students who answered 'no' (38,18%) represent those who do not consider it important, less useful comparing to French or important but they do not make efforts to learn it.

7- If yes, please explain how

This is another open question that requires the strategies or resources where from students try to learn more English outside the university. They can be represented in the following points:

- Watch movies/ videos.
- Chatting through net.
- Speak English with my friends.

- Read articles / scientific books.
- English paid courses.
- To have courses on internet.

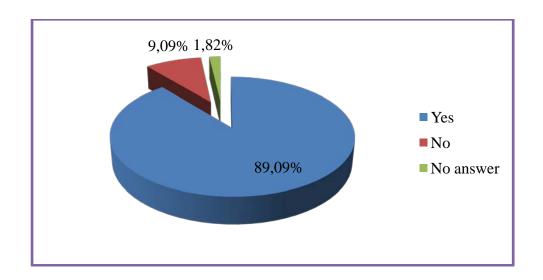
It seems that these students tend to improve their level in English through different resources where technology plays an important role. Internet, which is the controlling resource of information nowadays, provides such resources especially through chatting with native speakers, watching videos, get net courses, etc. other students go even to pay money in order to learn some English. This shows their willingness to learn it if to be provided with the adequate teaching/learning conditions.

Section Three: Students' Needs

8- Do you use documents written in English?

	N	%
Yes	49	89,09%
No	05	9,09%
No answer	01	1,82%
total	55	100%

Table 14: the Use of Documents Written in English



This question tries to investigate students' needs to ESP in their specialty. The overwhelming majority (89,09%) say that they use articles written in English, five students (9,09%) replied with 'no'. one student did not answer this question. Students who do not use documents written in English are those who rely more on articles or books written in French or Arabic and are weak in English.

9- If yes, to what extent do you use them?

	N	%
	- '	, ,
	4	8,16%
Very much		,
	44	89,79%
A little bit		05,7570
	1	2,05
No answer		2,00
	49	100%
Total	.,	10070

Table 15: the extent of Use of Documents Written in English

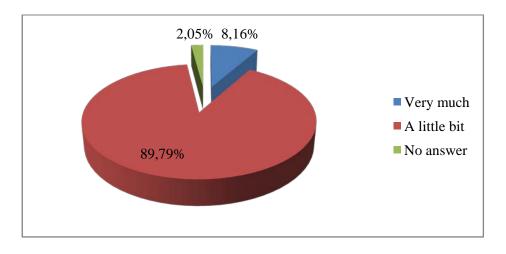


Figure 12: the extent of Use of Documents Written in English

This question is addressed only to the respondents who answered 'yes' to the previous question. Even though these students affirm that they use documents written in English but the majority (89,79%) use them a little bit. This might be explained by the fact that even if they hold positive attitude towards English and try to read in English but they still have difficulties.

10- What do you use them for?

This open question is addressed only to the students who answered with 'yes' in question 08, too.

These students say that they use documents written in English to:

- Get information in science and biology;
- Write research papers/ exposes/ essays
- Write a 'mémoire' submitted by the end of the third year;
- Get information that is not available in French; and
- Improve my skills and learn more.

According to their answers, it seems clear that students really need English to read specialty related articles. One of them goes even to say that he needs these documents to get information that are not available in French. This shows English significance as a source of data in science and biology.

11- In relation to the English language, which of the following skills do you find difficult?

	N	%
Reading	7	12,72%
Speaking	28	50,90%
Listening	11	20%
Writing	9	16,36%
Total	55	100%

Table 16: Students' Difficult Skills

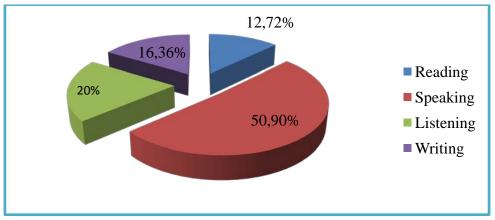


Figure 13:

Students' Difficult Skills

This question seeks information about the students' difficulties encountered in dealing with all four language skills. 50,90% of students think that speaking is the most difficult for them. The listening skill is in second position of difficulty with 20%, then comes the writing skill (16,36%) and finally reading with 12,72%.

12-Indicate the relative importance of each skill to you in your Biology studies (1= most to 4= least)

	Rank 1	Rank 2	Rank 3	Rank 4
Reading	30	7	5	8
	60%	14%	10%	16%
Speaking	3	16	10	21
	6%	32%	20%	42%
Listening	12	18	12	8
	24%	36%	24%	16%
Writing	5	9	23	13
	10%	18%	46%	26%

Table 17: the Rank of Skills in order of Importance

This question aims at ranking the English language skills according to the students' needs of ESP in their specialty. According to table 17, the reading skill marked the higher percentage of importance

(60%), then comes listening (24%), writing (10%) and finally speaking with 6%. This shows students' great need for the reading skill. In fact, reading is significant to biology students whose first need is to keep abreast with scientific development, in addition to factors such as preparing research works and memoires.

13-Do you feel that you can read materials of your specialty that are written in English?

	N	%
Yes	21	38,18%
No	33	60%
No answer	01	1,82%
Total	55	100%

Table 18: the Ability to Read Materials Written in English

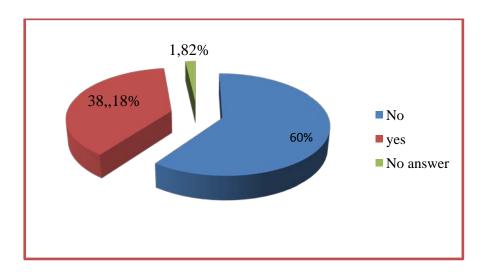


Figure 14: the Ability to Read Materials Written in English

According to table 18, it seems that the majority (60%) of students can not read materials of their specialty that are written in English. The rest (38,18%), except one student (1,82%) who did not answer this question, seem to be able. The reasons behind students' disability of reading such materials are mentioned in the next question.

14- If no, please explain why?

This is an open question through which students present the reasons behind the problems they encounter when reading materials written in English. They are as follows:

- I do not know scientific English.
- Not well formed in English.
- We study it only for one semester during the last year, so we have no background in English.

According to these answers, it is clear that students' problems with reading English articles go to the past. It might be they were not well formed before entering the university. In addition, instead of learning ESP since the first year to be familiar with scientific English, they get some sessions for one semester by the last year.

15- When you read articles written in English, do you find difficulties with

	N	%
vocabulary	9	16,36%
Grammatical structures	44	80%
No answer	2	3,64%
Total	55	100%

Table 19: Difficulties when Reading Articles Written in English

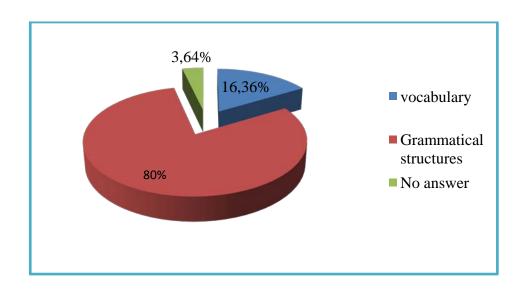


Figure 15: Difficulties when Reading Articles Written in English

In this question, the students are asked about the difficulties they face when reading English articles. The two options which appear in the question have been proposed on the basis of informal interviews and discussions with students. Some of them say that they understand the scientific words but cannot grasp the meaning of sentences. Others, on the other hand, do not find difficulties with grammatical structures but cannot understand some scientific terminologies. Reading the results on table 19, one can conclude that the overwhelming majority (80%) find difficulties with grammatical structures, whereas 16,36% see that vocabulary is the main obstacle.

16-To what extent does the English course satisfy your needs in your field of study?

	N	%
Completely	01	1,83%
Partly	20	36,36%
Not at all	31	56,36%
No answer	03	5,45%
Total	55	100%

Table 20: Students' opinions about the Course

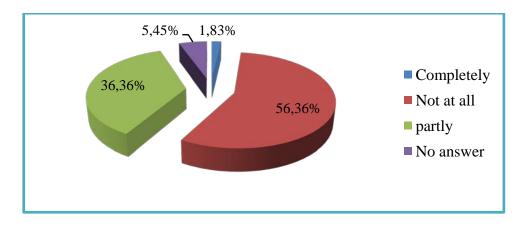


Figure 16: Students' opinions about the Course

According to the results shown in table 20, we see that the majority of students (56,36%). feel that the English course does not satisfy their needs at all. 36,36% of students say that it satisfies their needs partly. Three students did not answer this question and only one student assumes that the course presented is completely satisfactory.

17- Please, justify your answer.

In this question, students give justifications to their answers to the previous question.

Students who replied with: completely

- No answer.

Students who replied with: partly

- One session is not enough.
- It is a course in grammar only (tenses only).
- It is just initiation to English.
- Short time (1h30mn).

Students who replied with: not at all

- Time is not enough.

In addition to that the course presented is in the form of grammatical rules; it seems that the other students agree on the point that the time devoted to ESP is not sufficient.

Section four: Students' Interest in the English Class

18- Do you attend the English class?

3.7	24
N	%
	N

yes	52	94,54%
No	01	1,82%
No answer	02	3,64%
Total	55	100%

Table 21: Class Attendance

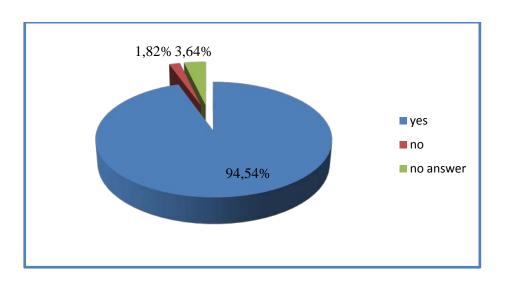


Figure 17: Class Attendance

This is an informative question about students' attendance of English classes. Almost all students (94,54%) said they attend regularly. One student answered with 'no' and two others did not reply to this question. In fact, the English course is compulsory and attendance is required of all students.

19- If no, why?

Only one student answered with 'no' in the previous question. When asked about the reasons, he gave no justification.

20- Do you think that the time allocated to the English course is

	N	%
Enough	03	5,45%
Not enough	49	89,10%

No answer	03	5,45%
Total	55	100%

Table 22: Students' opinions about the English Learning Period

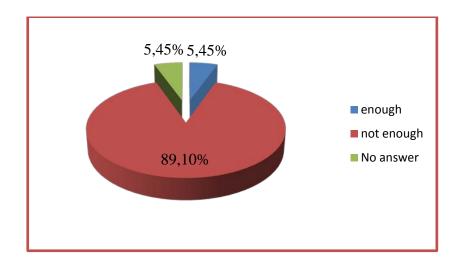


Figure 18: Students' opinions about the English Learning Period

In fact, time is an essential factor which must be taken into account when conducting an ESP course. Robinson (1989: 398) expresses this fact in "... ESP courses are constrained by a shortage of time." Hence, this question is conducted to see students' opinions concerning the time allotted for the English course. Table 22 indicates clearly that a large proportion (89,10%) of the sample think that the time provided for English learning is not sufficient. Three students (5,45%) see it enough and three others did not answer this question.

21-Do you think that the time devoted to the English course is enough to make it

	N	%
Much interesting	00	00%
Interesting	05	10%
Less interesting	28	50,10%

Uninteresting	08	14,45%
No answer	14	25,45%
Total	55	100%

Table 23: Interest in ESP and Time Allocation

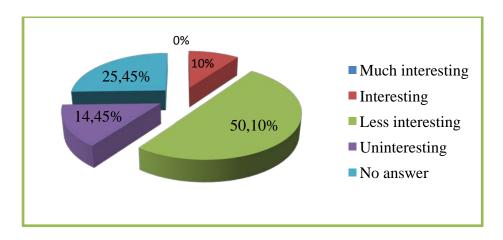


Figure 19: Interest in ESP and Time Allocation

This question makes correlation between the time provided for the ESP course and its effect on students' interest. Table 23 reveals that a good percentage (50,10%) of students think that the time provided to ESP makes the course less interesting, i.e., whenever there is a shortage of time comparing with other modules, interest will be reduced. 14,45% see that it makes it uninteresting and 10% agree on interesting. The remaining 25,45% did not answer. This may be due to the form of the question engendering either a lack of comprehension or perhaps unwillingness to answer it.

22- Please, justify your answer

Interesting

No answer.

Less interesting

- It is not a fundamental module
- It depends on other modules with more learning time, if it was important it would have more time.

- Other modules of our specialty are more interesting.

Uninteresting

- We are interested in modules with much time and high coefficient.
- We want to learn English but time is not enough, so it remains a far dream even when we love it.

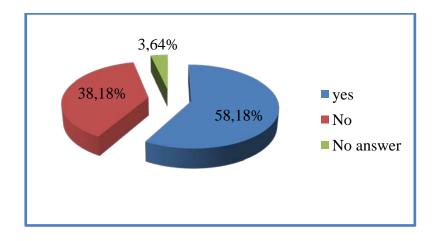
Justifications provided by students show that the number of hours provided for the ESP course is significant since students pay more attention to modules with much time and high coefficient. Although, they are interested in learning the language, time marks an obstacle in front of this dream, as it is expressed by one of these students.

Section five: Teacher

23-The English teacher's background is more literary than scientific (i.e., sometimes the teacher is not familiar with some specific topics and vocabulary of your specialty)

	N	%
yes	32	58,18%
No	20	38,18%
No answer	02	3,64%
Total	55	100%

Table 24: English Teacher's Background



Concerning this question, it is true that all teachers in the biology department are arts teachers except for those students' who answered with 'no' (38,18%). These students have one of their biology teachers as an ESP teacher. In an informal interview, this teacher said that he uses English only when talking to his supervisor (Italian), 'and he added: 'it is a kind of survival English'.

24- Who do you think would best meet your needs in ESP?

	N	%
English language specialist	01	1,82%
Biology teacher	10	18,18%
A language specialist in Scientific English	44	80%
Total	55	100%

Table 25: The Adequate Teacher for the ESP Course

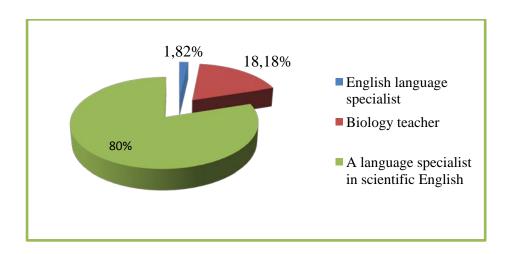


Figure 21: the Adequate Teacher for the ESP Course

This question seeks to reveal which of the three proposed teachers the students prefer as their ESP teacher. Table 25 shows that the majority (80%) prefers a language specialist in scientific English. 18,18% prefer their biology teacher whereas one student (1,81%) prefers the English language specialist.

25-Please, justify your answer

This open question provides justifications of the choice made in the previous question. These are as follow:

Those who prefer the English language specialist

- He pronounces correctly and knows the language more.

Those who prefer the biology teacher

- Since we are biology students, we need a biology teacher who is familiar with our specialty.

Those who prefer the language specialist in scientific English

- The English language specialist is more literary and the biology teacher lacks the language.

Hence, it would be better to have a teacher who is able to control both sides.

Section six: Further Suggestions

26-Do you have any further suggestions for making the English course more effective and useful to you as a Biology student?

In this section, students are left free to propose ideas they think would make the ESP course more effective and beneficial. Only 27 students replied to this question. Their suggestions are summarized in the following points.

- Provide scientific books written in English to read.
- Provide internet in the Biology department, since we pass the whole day at the university.

- Teach ESP since first year and provide more hours per week.
- Prepare and present some research works in English.
- Teach some modules in English not only in French.
- Give the ESP course more important by raising its coefficient.

IV. 3. Teachers' Interview

The Biology department staff includes four English teachers. Since the number of teachers is small, we opted to carry the interview with all of them. Interviews were conducted on an individual, face to face basis and took place in the teachers' room.

In fact, this is a structured interview, i.e., all interviewees are asked the same questions in the same order. It is formed of twenty three questions through which teachers are required to answer and justify some points related to their ESP teaching.

3.1. Analysis of the Interview

1- Gender

	N	%
Male	01	25%
Female	03	75%
Total	04	100%

Table 26: Teachers' Distribution according to Sex

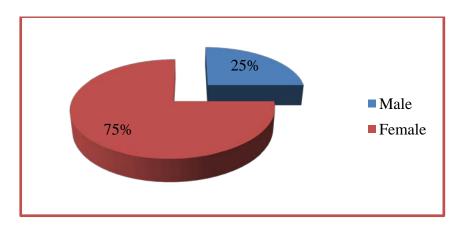


Figure 22: Teachers' Distribution according to Sex

Despite the small number of teachers, we notice that the female teachers outnumber the male ones (75% to 25%). This remains an informative question about teachers' gender.

2- What qualifications (academic) do you hold?

	N	%
Licence of English	03	75%
Magister in Biology	01	25%
Total	04	100%

Table 27: Academic Qualification

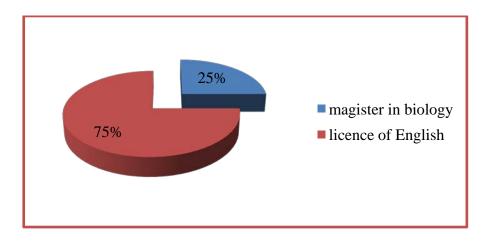


Figure 23: Academic Qualification

Table 27 indicates that 75% of the teachers have got a licence of English, while 25% have a degree of magister in biology. The majority (holding a licence degree) would find difficulties when

teaching biology students. They should not be able to tackle the ESP course with confidence as it is stated by Hutchinson & Waters (*op.cit*:160): "Many teachers who have trained for General English or for having the teaching of Literature may suddenly find themselves having to teach with texts whose content they know little or nothing about."

3- How long have you been teaching English at the university?

	N	%
1 year	02	50%
2 years	01	25%
3 years	01	25%
Total	04	100%

Table 28: Experience of English Teaching at the University

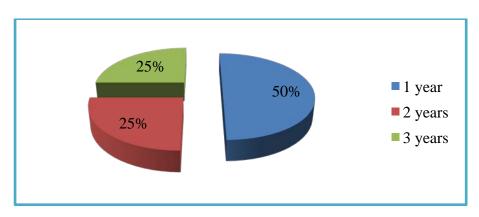


Figure 24: Experience of English Teaching at the University

This question investigates teachers' teaching experience at the university level. According to the results shown in table 28, their teaching experience is ranging from one to three years.

4- How long have you been teaching English at Biology department?

	N	%
1 year	02	50%

2 years	01	25%
3 years	01	25%
Total	04	100%

Table 29: Experience of English Teaching at the Biology Department

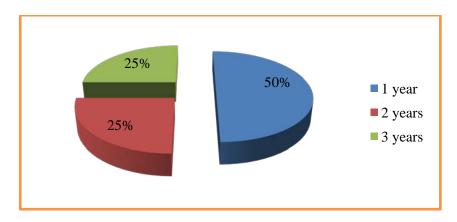


Figure 25: Experience of English Teaching at the Biology Department

According to the interviews we had with these teachers, we noticed that the period of teaching of each teacher at the Biology department is the same period he/she taught at the university level. This shows that these teachers have no English teaching experience in other departments.

5- What is your status at the Biology department?

	N	%
Part-time teacher (vacataire)	03	75%
Full-time teacher (permanent)	01	25%
Total	04	100%

Table 30: Status of the Teachers

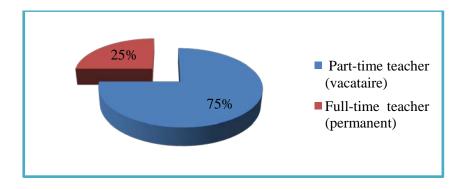


Figure 26: Status of the Teachers

The table above shows that the majority (75%) of the interviewees are part-time teachers, while the rest (25%) are permanent teachers.

6- Have you had any specific training in teaching ESP?

	N	%
Yes	00	00%
No	04	100%
Total	04	100%

Table 31: Teachers' Previous ESP Training

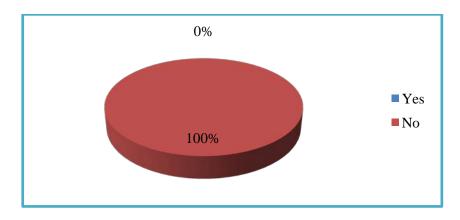


Figure 27: Teachers' Previous ESP Training

All the teachers said that they did not have any ESP training. This raises the point that ESP teaching may not have been taken seriously in the Biology department. The majority of these teachers is holders of licence degree and is not well equipped in terms of training to teach ESP to biology students and achieve the required results. This leads us to think about teachers' training as one of the major problems of ESP teaching/learning.

7- If yes, please specify

No one answered with 'yes' in the previous question.

8- in the course of your present teaching, do you teach more

	N	%
General English	00	00%
English related to science and technology in general	01	25%
English more specifically related to biology	03	75%
Total	04	100%

Table 32: Kind of English Taught

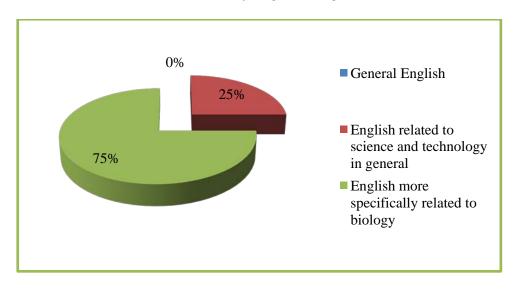


Figure 28: Kind of English Taught

This question proposes three possible options of the kind of English actually taught in the Biology department and table 32 summarises the results that have been recorded. 75% of the teachers interviewed said they teach English more specifically related to biology. The rest (25%) tend to teach English related to science and technology in general. No one teaches General English. This may contradicts with students' answers in question 23, when the majority (58,18%) claim that the English teachers' background is much more literary. In fact, in an informal interview with the Biology teacher who is actually teaching English in the Biology department, he said: "It happened to me to affect the module of scientific English to a Part-time teacher (graduate degree in English). In a pedagogic council

we discovered that he taught them songs in English and then he translated them into Arabic, and it is not the goal expected to reach for scientific English for biochemistry specialty"

9- Do you think that the time devoted to ESP teaching/learning at the Biology department is sufficient to cover students' needs for English?

	N	%
Yes	00	00%
No	04	100%
Total	04	100%

Table 33: Time Allocation and Students' Needs

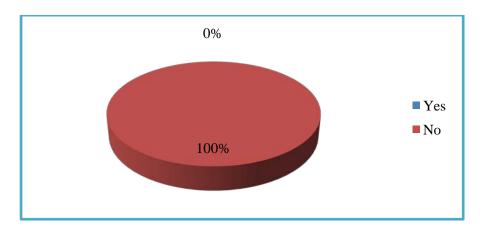


Figure 29: Time Allocation and Students' Needs

All the respondents (100%) to this question see that the time provided for ESP is not sufficient. This is compatible with students' answer in question 20 where the majority (89,10%) said that the time allocated to the ESP course is not enough to cover their needs.

10- Please, justify your answer.

Teachers' justifications are summarised in the following points:

- They need more sessions to improve their level.

- Students in the Biology department almost forget the language because of the cut with the language for two years. One semester at the end of the year would be used to awake their previous knowledge not to add a new ESP course.
- Initially, students need a lot of time to improve their understanding of general or basic English before going to work on articles in English and scientific texts in their specialty, so I think they should have at least 6 hours per week.

11- What is the average size of each class?

Teachers replied that the average size of their classes ranges from 25 and 30.

12-Do you think that the class size makes your teaching difficult?

	N	%
	11	70
Yes	01	25%
No	03	75%
Total	04	100%

Table 34: Relation between Teaching Difficulties and Class Size

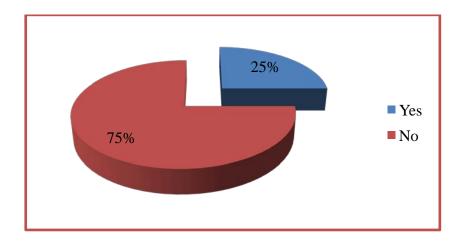


Figure 30: Relation between Teaching Difficulties and Class Size

According to the results shown in table 34, the majority (75%) of teachers do not consider that the size of classes imposes any kind of problems to their teaching, whereas the rest (25%) see the opposite.

13- Please, justify your answer.

Those who answered 'yes'

- I cannot control the whole class.

Those who answered 'no'

- As you know, the difficulty of teaching any module or subject is proportional to the number of students, but with 25 students, I think that the number is not the main problem.
- The average size of each class is acceptable.

According to teachers justifications, the problem with ESP teaching is not caused by the size of the class, except for the teacher who answered 'no' who cannot control the class.

14-Do you have any special materials designed for biology students?

	N	%
Yes	00	00%
No	04	100%
Total	04	100%

Table 35: Materials Designed for Students

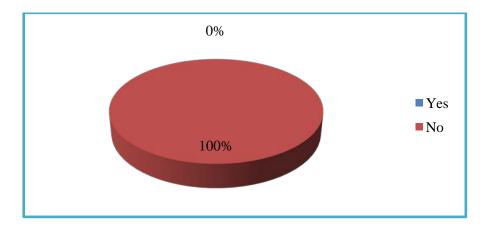


Figure 31: Materials Designed for Students

This question investigates whether any materials designed for Biology students are available. All the teachers (100%) say they do not have such materials. This may push them to teach with materials they choose and prepare themselves. The problem is that, how such teachers who lack knowledge as far as ESP teaching is concerned and are not aware of Biology students' requirements can prepare and propose such materials. Designing such materials requires research and analysis on students' needs and lacks.

15- If no, where do you get materials from? Do you use materials you prepare yourself?

This question emphasizes the point mentioned in the previous question concerning the lack of designed materials. According to teachers responses, all of them use materials they select or choose themselves. Their answers are summarized in the following points:

- Yes, I actually use materials I prepare myself.
- I rely on my personal efforts.
- I used to search for articles related to Biology on internet and books.
- In my opinion, I do not really need specific materials to teach scientific English. I think some English articles and scientific texts are sufficient.

In addition to the lack of designed materials, some teachers ignore their significance and rely on selected materials they find in some books or web sites.

16-In the beginning of the English course, do you make pre-tests for your students to test their current level to identify their needs?

	N	%
Yes	01	25%

No	03	75%
Total	04	100%

Table 36: Pre-testing Students

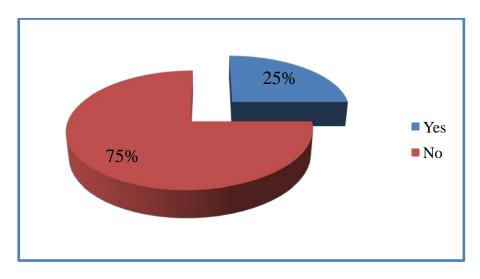


Figure 32: Pre-testing Students

The majority of teachers (75%) replied with 'no' to this question and the rest (25%) said 'yes'. It seems that the teachers are not aware of the importance of pre-tests in ESP teaching situations. Testing students' knowledge in the beginning of the ESP course helps to explore students' current level and find points of difficulty in English. Hence, try to pay more attention on students' lacks to obtain the expected results by the end of the course.

17- Which of the following skills do you tend to lay more attention? (classify in order of emphasis going from 1 for the most important to 4 for the less important)

	Rank 1	Rank 2	Rank 3	Rank 4
Reading	01	02	01	00
	25%	50%	25%	00%

Speaking	02	00	01	01
	50%	00%	25%	25%
Listening	00	01	01	02
	00%	25%	25%	50%
Writing	01	01	01	01
	25%	25%	25%	25%

Table 37: the Rank of Skills in order of Emphasis

This question aims at ranking the English language skills according to their importance in teachers' point of view and the emphasis they put on each skill. According to table 37, the speaking skill marked the higher percentage (50%) of emphasis, then comes reading and writing with the same degree of importance (25%) and finally the listening skill with 00%. This contradicts with the results obtained from students' questionnaire where they considered the reading skill as the most important for them as biology students. This is one of the major problems met when teaching/learning ESP. most of the time, teachers lack awareness about their students' needs. This is obviously shown in the results where students' requirements do not meet with teachers' emphasized ones.

18-Do you meet teachers of the Biology department to discuss your course according to the programme of specialty?

	N	%
Yes	00	25%
No	04	75%
Total	04	100%

Table 38: Collaboration with Biology Teachers

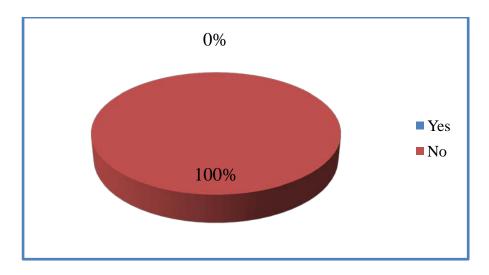


Figure 33: Collaboration with Biology Teachers

In this table 38, all the respondents have answered 'no'. The 'yes- option' has been completely avoided. Consequently, there is no co-operation at all between the language teachers and the subject biology teachers either to discuss or comment the language courses in agreement with the whole programme of specialty. Kennedy and Bolitho (*op.cit*: 13) put: "A further aspect concerns the role of the subject teachers, since any decision to use an ESP approach relating to a specific subject will inevitably demand some degree of co-operation between the language teachers and subject specialists."

19- Would you say that the department you teach in encourages English teaching/learning?

	N	%
Yes	01	25%
No	03	75%
Total	04	100%

Table 39: Policy of the Biology Department

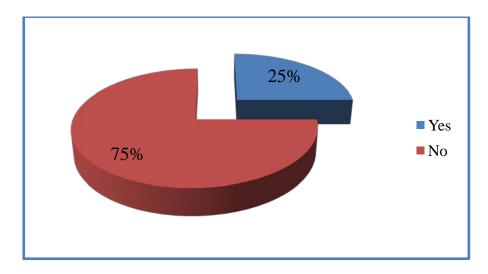


Figure 34: Policy of the Biology Department

The results of table 39 indicate that 75% of the interviewees answered with 'no'; and only 25% said 'yes'. The majority of the language teachers do not feel the interest of English of the institution. Robinson (*op.cit*:4) explains the role of the institution by the following: "In some cases, there is no absolute need for students to gain proficiency in English in order to cope with the work or study; they will manage well enough (or even very well) in their own language. However, there may be any an institutional (or even national) requirement to study English, usually because of the known role of English as an international language of communication, trade and research." Despite its important role in increasing interest in the language, it seems that the Biology institution does not encourage English teaching/learning. This is also proved in the head of department's words, when he said in an informal interview (when we asked him about the lack of English teaching during first and second years): "English is not really important for biology students. They will not use it or even need it in their studies. We opted to programme it for one semester because of ministry orders; otherwise we would not imply it in the whole programme. French is more needed."

20-Please, justify your answer.

In the previous question, teachers said that the institute they teach in does not encourage English teaching/learning. Only one out four teachers said the contrary. In this question, teachers are expected to justify their previous answers. These are as follows:

Those who answered with 'no'

- I think one obvious proof is that all the modules are taught in French. No such opportunity is given to English.
- The time devoted to English reflects the non-interest of the institution. It is as if the ESP module is additional, implied just to satisfy ministry requirements.
- I would say that the institute I teach in as all institutes in Algeria, doesn't encourage English teaching/learning, because I don't meet teachers of the Biology institute to discuss any course according to the programme of specialty.

The one who answered with 'yes'

- Because they motivate us as English teachers.

(Interviewer: who do you mean by 'they'?

Interviewee: the head of department and biology teachers.)

According to their answers, it seems that we fall again in the conflict between French and English. ESP teachers see that French is dominating and no chance is given to teach modules in English. Another problem is again the time devoted to English teaching/learning. Teachers think that one semester reflects the non-importance of English for the Biology institution and it is a module taught just to satisfy ministry requirements. Another teacher sees that this is reflected in the lack of collaboration between ESP teachers and subject teachers.

21-Do you think that Biology students reach the expected level by the end of the ESP course?

	N	%
Yes	01	25%
No	03	75%
Total	04	100%

Table 40: Students' Achievement

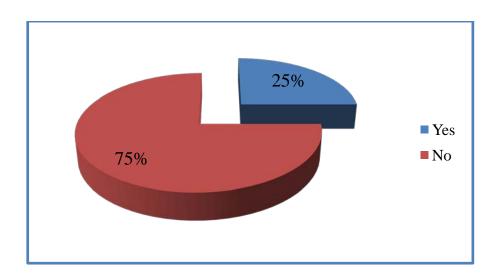


Figure 35: Students' Achievement

Three teachers out of four (75%) see that students do not achieve the expected results by the end of the ESP course. However, the fourth teacher (25%) sees the contrary. Reasons behind this are presented in the next question.

22- If No, is it because

1- You are not permanent at the Biology department	1 (33, 33%)
2- You do not have any experience in English related to	1 (33, 33%)
biology	
3- You do not understand the students' needs	00 (00%)
4- There is no collaboration between the language and	2 (66, 67%)
the specialty teacher	

Table 41: Reasons behind Unsuccessful Achievement in English Teaching

Table 41 summarizes the sums of teachers' choices to compare between reasons behind the unsuccessful achievement. The first choice received one (33;33%) out of three teachers, the same thing for the second choice. Whereas, the third reason does not receive any choice and the last one marks the

higher percentage (66,67%) with two teachers out of three. Thus, according to these results, the fourth option (There is no collaboration between the language and the specialty teacher) is the first reason which makes the fact that the work of the English language teacher does not correspond to the level of achievement expected. Then the first option (You are not permanent at the Biology department) and the second option (You do not have any experience in English related to biology) are the second main reasons. It seems that the third reason (You do not understand the students' needs) does not mark problems for better achievement in teachers' point of view.

23- Do you have any suggestions for making the English course more effective and more relevant to the students' needs in their field of study?

In this question, teachers are left free to propose ideas they think would make the ESP course more effective and beneficial. Their suggestions are summarized in the following points:

- I suggest proposing English courses every year and from the first year to improve the level of study at least for the basic English (students arrive to the university as they have never studied English).
- Adapt a program of basic English for the first and second years ensured by Anglophones (English graduates).
- Adapt an English program for scientific specialties ensured by specialists (biologists) who have mastered English.
- Set some specialty modules in English.
- Increment coefficients and the number of credits of the module to motivate the students and earn their interests.
- Increase the number of hours at each level (at least 3 hours per week).
- Train effective educators in scientific English.

IV. 4. Findings of Students' Questionnaire and Teachers' Interview

After analyzing both Students' questionnaire and teachers' interview, our primary objective in this section is to provide an objective interpretation of the findings issued from the experiment.

Through this work, we have stated the importance of adequate teaching /learning conditions for an effective ESP course. Unfortunately, the results which have been achieved proved that this course is not such an effective one due to many factors.

After the tabulations have been commented, it seems that a certain number of problems has emerged. In fact, the results have reinforced most of our hypotheses concerning such a case of ESP teaching/learning; that is; many aspects have not been taken into great consideration.

4.1. Lacks in the Language Teacher's Profile

The profile of the ESP teacher encountered has been one of the main causes of unsuccessful achievement among biology students. It may be due to the fact that most of the teachers lack knowledge concerning ESP teaching/learning, i.e., they are not trained to deal with such a case of teaching. Hence, they would take into consideration students' needs as a basis for the course. In addition, they are not bound with a programme they teach in. However, they are free to teach whatever they see adequate, and most of the time they fall in the gap of teaching what they had perceived when they were English students. Hence, the lack of training is listed under the major factors that lead to such failure in achieving the expected results.

4.2. Shortage of Time

Time allocation has proved to be another significant factor standing against a better achievement. In fact, the more time provided to teach a course, the better the learner is encountered with the language. However, it has been noticed that the time devoted to the English course is not sufficient to grasp the needed level and results. Even more, this influenced students' interest in the module. Although it has been proved that students are aware of the significance of English in their specialty, hold a positive attitude towards the language and seem to be eager to learn it, but the time allocated for the English

course led them to lean towards the other modules of their specialty with more time and higher coefficient. This emphasizes one of our hypotheses too.

4.3. Pedagogic Considerations

Another difficulty has arisen from the use of the four skills and from which of them to lay more emphasis on. It seems that both sources, namely the language teachers and the biology students do not share the same opinion about the priority of skills. For instance, the language teachers give much more priority to speaking, whereas students prefer to give priority to reading. This may due to that the majority of teachers lack awareness about students' needs. This is proved by the fact that the majority of teachers said they do not make pre-tests to define their students' needs. In fact, the pre-test is one of the major significant methods by which data about students can be gathered. It can have a diagnostic value and identify learners' language weaknesses and lacks. Through such tests, the teacher can construct a profile of learning difficulties. Here, another hypothesis, suggesting that teachers' lack of awareness about students' needs is considered as another factor behind unsuccessful achievement, has been proved.

4.4. The Negative Attitude of the Institution towards the ESP Subject

It has been noticed that the institution itself does not encourage the ESP teaching/learning. It has not been able on the one hand to specify to the language teacher the kind and content of programme to be taught and the final objectives for which this English course is put. Consequently, most English teachers have been left acting in the way they thought appropriate even if in some cases they were mistaken. On the other hand, this institution has not been successful in providing the minimum of acceptable conditions in order to help the language teachers in their task. This attitude is reflected in the way the language sessions are planned and included in the timetable. This is proved by the least importance devoted to the English sessions in comparison with other subjects of the biology curriculum.

IV. 5. Suggestions and Recommendations

After stating the interpretation of the findings of the experiment, it is obviously necessary to propose some tentative solutions for improvement.

5.1. The Prerequisite of an Efficient Trained ESP Practitioner

Our main preoccupation is oriented towards the ESP teacher who undoubtedly plays a significant role in the ESP teaching/learning process. A set of specified criteria should be imposed upon the language teachers by their own institution. These criteria, in fact, should be prerequisites so that the language teachers will be successful in their tasks. Not only an acceptable experience in EFL is needed but also a sufficient training in ESP is required as well. Adapting from general to specific English should be understood and accepted by most language teachers when they move to other departments and scientific subjects. Fortunately, nowadays, many English language departments are paying more and more attention to this aspect by implementing an ESP subject. Hence, future teachers can find in it a good opportunity to complete their knowledge.

5.2. Collaboration between Language and Subject Teachers

The principle of team-teaching and collaboration between the language and biology teachers should be put in practice and emphasized during the ESP process because it can have a positive influence on both parts.

The method of team-teaching can be helpful to the language teacher who generally knows little or nothing about the subject matter by referring to the scientific competence of biology teachers. On the other side, subject specialists can ask language teachers to solve language problems of their students especially when they use scientific documentation and authentic texts written in English.

5.3. Proposal for an ESP Programme

All the language teachers entering to the biology department, tend to teach whatever they see adequate. They are not constrained with a given programme based on biology students' needs. They even select materials they think are beneficial. In fact, to be a material provider is one of the characteristics of the ESP practitioner. However, this requires an ESP curriculum based on analyzing students' needs. Hence, analysing students' needs is required to provide an ESP programme.

5.4. The Institution Positive Attitude towards English

The Biology institution should give more importance to the English language teaching/learning. In fact, more time is required. Implementing English from the first year and raising the number of hours could lead to more confrontation with the language. In addition, a higher coefficient would attract students' attention and interest to work seriously as far as English learning is concerned.

Conclusion

This chapter presented an analysis of both students' questionnaire and teachers' interview and resulted in some factors that marked an obstacle in front of an effective ESP course. The suggestions proposed by the end of this chapter are of great significance in improving the ESP teaching/learning situation at the Biology department if taken seriously into account.

General Conclusion

The economic and political power of Britain and the United States in the last two centuries has enabled the English language to take on a dominating role in today's world. Its global use in fields such as publishing, science, technology, commerce and music makes it necessary to define it as a world language. Given such position, it seems that mastering this language is the only way to challenge developments of these countries especially in fields of science and technology.

Our country, following the perspective, promotes foreign language learning, especially English language learning to interact effectively with other countries in domains of trade and international commerce, and to have abreast with the scientific development. It seems that our students are aware of such role English plays and are eager to improve their level as English learners.

As far as our research is concerned, Biology students at Khenchela University Centre find difficulties when dealing with articles and books written in English for their studies and theses. Thus, we must find ways to improve their level, and we cannot do so unless the factors that lead to such deficiencies are known. To reach our objective, we opted for the descriptive method using the questionnaire and the interview as data collecting tools.

It is vital to indicate the position that each kind of participants occupies in the process of English teaching/learning in such a case study. First, if we consider the students, we can see that they express an urging demand of English. For these students, learning English is strictly for a utilitarian objective. In addition, the third year Biology students are the suitable example of students who have experienced the whole process of English training for three years. They are aware enough to justify their demand for English.

The Biology teachers also participate in this dynamic process by the fact that they ask students to check articles of their speciality written in English. In addition, they advise them to use documentation for their theses also published in English. The feedback of such requirements is written in French not

English. The ability of reading and writing in English is left for the language teacher. Both Biology teachers and students think that the language teacher understands the field of Biology and that he/she can provide the required specific scientific terminology and control the field of Biology in the English language.

When dealing with the language teacher, we have noticed that this latter belongs to one of both categories: either he/she a biology teacher who does not master the language or a teacher freshly graduated in General English and sometimes taught General English for a short period of time. However, both categories are not fully aware of the concept of ESP. Between a new teacher of General English and a biology teacher with a limited experience of ESP; we may deduce that it is difficult to reach a valuable level of attainment. The way that language teachers are accepted in the Biology department to teach ESP does not obey any specified criteria.

From the point of view of team teaching or collaboration between biology and language teachers, some of biology teachers are reluctant to share common interest with English language teachers to help them in their task. In addition, as they had previously been past students in biology, they consider the subject of English as a waste of time unless they feel its necessity in post-graduation when dealing with further research or for any occupational objectives. Adding to this, English teachers and biology students do not fall in a common opinion about what is appropriate for biology students. Teachers tend to stress skills that are not required by students who require a different language skill. This is due to the fact that no needs analysis has been carried out to draw a profile about students' needs; and on the basis of these needs, an ESP programme for Biology students can be provided.

When checking the program handled by the Ministry of Higher Education, we observe that the English language is planned to be taught for the three years of the licence level. This reflects the ministry awareness of the English language. However, this is not the case in the Biology department at Khenchela University Centre. English is taught for only one semester during the third year. In fact, when paying attention to the timetable which is planned for the different subjects of the curriculum, we

perceive that the subject of English occupies the less privileged place. Furthermore, the programmes of the biology subjects are devised by the Ministry of Higher Education. In the case of the English subject, there is no programme. This situation represents a real problem of programme content to the English teacher. Adding to this, the low coefficient of the English subject leads students to concentrate more on other subjects of their speciality with higher coefficients. Hence, the importance of the English subject is ignored: it has no effect on the success or the failure of the student.

The subject of the present paper is an overview of main problems connected with teaching ESP at the university level with special emphasis on the Biology department at Khenchela University Centre. Nowadays, it is still urgent to discuss what to teach and how to teach a foreign language taking into account the objective academic and professional needs of our learners. Our analysis of the ESP teaching/learning problems in the Biology department has led to many suggestions for better achievement if they are taken into account. However, this analysis has brought more questions than answers. We think that more thorough and consistent studies are necessary to overcome the difficulties of the English language teaching to the biologists.

Bibliography

- Allen & Davis. (1978). In Ghouar, N. Thesis Submitted of the requirements for the Magister degree.
 Badji Mokhtar University.
- 2. Baiche. In Bouabdessalam, B. (2001) .The Contribution of Motivation and Attitude to L2. In F.Z. Medjahed (2011). *Teaching English in Algerian Secondary Schools: State of the Art*. Oran: Department of Languages, ENSET.
- 3. Belcher, D. (2006). English for Specific Purposes: Teaching to Perceived Needs and Imagined Futures in Worlds of Work, Study and Everyday Life. In Brunton, M. (2009). *An Account of ESP with Possible Future Directions*. From: http://www.esp-world.info
- 4. Bojovic, M. (2006). *Teaching Foreign Languages for Specific Purposes: Teacher Development.* The Proceedings of the 31st Annual Association of Teacher Education in Europe. (487-493). Serbia: Faculty of Agronomy.
- 5. Bouabdessalam, B. (2001) .The Contribution of Motivation and Attitude to L2. In F.Z. Medjahed (2011). *Teaching English in Algerian Secondary Schools: State of the Art*. Oran: Department of Languages, ENSET.
- 6. Brindley, G. (2000). Needs analysis. In M. Byram (Ed.) *Routledge Encyclopedia of Language Teaching and Learning*. London: Routledge.
- 7. Brown, J. (1995). *The Elements of Language Curriculum: A Systematic Approach to Program Development*. New York: Heinle & Heinle Publishers.
- 8. Carver, D. (1983). Some Propositions about ESP. In *Key Issues in English for Specific Purposes* (ESP) Curriculum Development. The Internet TESL Journal October 2001, 10.
- 9. Celce-Murcia, M. (1991). Language Teaching Approaches: An Overview. New York: Newbury House.
- 10. Chambers, F. (1980). A Re-evaluation of Needs Analysis in ESP. *ESP Journal* 1 (1): 25-33. In Naveed, A. (2005). *Legal English: A Case for ESP*. Pakistan: Bahauddin Zakariya University.
- 11. Doukas, E. (1996). *Using attitude scales to investigate teachers' attitudes to the communicative approach*. ELT Journal *50* (3): 87–197.

- 12. Dudley-Evans, T. (1997). Genre models for the teaching of academic writing to second language speakers: Advantages and Disadvantages. From: eca. State. gov./.../engteaching
- 13. Dudley-Evans, T. & M. St John. (1998). *Developments in ESP: A Multi-disciplinary Approach*. Cambridge: Cambridge University Press.
- 14. Ewer, J. R. & G. Latorre. (1967). Preparing an English course for students of science. EnglishLanguageTeachingJournal.From: www.jiscjournalarchives.ac.uk/.../eltj.../XXI_1967
- 15. Ewer, J.R. & G. Latorre. (1969). A Course on Basic Scientific English. London: Longman.
- 16. Flowerdew, J. (1990). English for specific purposes: A Selective Review of the Literature. In Brunton, M. (2009). *An Account of ESP with Possible Future Directions*. From: http://www.esp-world.info
- 17. Flowerdew, J. & M. Peacock. (2001). *Research Perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press.
- 18. Halliday, M. A. K. McIntosh, A. & P. Strevens (1964). *The Linguistic Sciences and Language Teaching*. London: Longman.
- 19. Hamp-lyons, L. (2001). The Cambridge Guide to Teaching English to Speakers of Other Languages. Cambridge: Cambridge University Press. In Ouniss, S. (2005). *An Attempt to Identify Students' Needs in Learning English for Specific Purposes*. Batna: Hadj Lakhder University.
- 20. Hansen, A. G. & D. L.V. Hammen (1980): "The English Teacher and the Camera Team Teaching for Special Purposes". In *Team Teaching in ESP. ELT Documents 106*, (92-96) from : www.worldcat.org/title/elt-documents/.../4782319
- 21. Holliday, A. & T. Cooke (1982). An Ecological Approach to ESP. In Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.
- 22. Hutchinson, T. (1988). Making Materials Work in the ESP Classroom. In Chamberlain, D & Baumgardner, R (eds). ESP in the Classroom. ELT Docs 128. MEP/British Council. In Songhori, M.H. (2007). *Introduction to Needs Analysis*. Iran: Azad University of Baft, Kerman.
- 23. Hutchinson, T. & A. Waters. (1987). *English for Specific Purposes: A Learning Centered Approach*. Cambridge: Cambridge University Press.

- 24. Hutchinson, T. & A. Waters. (1993). *English for Specific Purposes*. Cambridge: Cambridge University Press.
- 25. Hyland, K. (2006). *English for Academic Purposes: An Advanced Resource Book*. London and New York: Routledge Taylor and Francis Group.
- 26. James, K. (1984). The Writing of Theses by Speakers of English as a Foreign Language: the Results of a Case Study. In Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.
- 27. Johns, A.M. (1991). English for Specific Purposes: Its History and Contribution. In Celce-Murcia, M (ed.). Teaching English as a Second/Foreign Language (67-77). Boston, MA: Heinle & Heinle. In Ouniss, S (2005). An Attempt to Identify Students' Needs in Learning English for Specific Purposes. Batna: Hadj Lakhder University.
- 28. Johns, T.F. (1981). Some Problems of a World-wide Profession. In Mc Dounough, J & T. French (eds). The ESP Teacher: Role, Development and Prospects. ELT Documents 112. In Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.
- 29. Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.
- 30. Kennedy, C. & R. Bolitho. (1984). English for Specific Purposes. Hemel Hempstead: Phoenix ELT. In Jordan, R. R. (1997). English for Academic Purposes: A Guide and Resource Book for Teachers. Cambridge: Cambridge University Press.
- 31. Knowles, M. S. (1990). The Adult Learner: A Neglected Species. Houston, TX: Gulf. In N. C. Sifakis. (2000). Communicative Teaching of English for Specific Purposes in the Adult Education Framework: Introducing an Integrative Two-Tiered Model. Greece: Hellenic Open University.
- 32. Knox, A.B. (1986). *Helping Adults Learn*. San Francisco: Jossey-Bass. In L. Medlin. (2009). *English for Specific Purposes (ESP): Nursing in the U.S. Hospital*. Chico: California State University.
- 33. Krashen, S.D. & T.D. Terrell. (1983). *The Natural Approach: Language Acquisition in the Classroom*. Hayward, CA: Alemany Press.

- 34. Mackay, R., & A.J. Mountford. (1978). *English for Specific Purposes: A Case Study Approach*. London: Longman.
- 35. Medjahed, F.Z. (2011). *Teaching English in Algerian Secondary Schools: State of the Art*. Oran: Department of Languages, ENSET.
- 36. Morandi, F. (2002). Pratiques et Logiques en Pedagogie. Paris: Université Nathan. In F.Z. Medjahed (2011). *Teaching English in Algerian Secondary Schools: State of the Art*. Oran: Department of Languages, ENSET.
- 37. Munby, J. (1978). Communicative Syllabus Design. Cambridge: Cambridge University Press. In Naveed, A. (2005). *Legal English: A Case for ESP*. Pakistan: Bahauddin Zakariya University.
- 38. Nunan, D. (1988) Syllabus Design. Oxford: Oxford University Press.
- 39. Perren, G.E. (1974). Teaching Languages to Adults for Special Purposes. In Turner, R. A *Note on 'Special Languages' and 'Specific Purposes*. November 1, 1980. Denmark: LSP Centre.
- 40. Richards, J. C. (1990). The Language Teaching Matrix. Cambridge: Cambridge University Press.
- 41. Richards, J. C., Platt, J. T., & Weber, H. (1985). *Longman Dictionary of Applied Linguistics*. Harlow, Essex, England: Longman.
- 42. Richterich, R., & Chancerel, J.L. (1980). Identifying the needs of Adults Learning a Foreign Language. In Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge: Cambridge University Press.
- 43. Robertson, R. (1995). Glocalization: Time-space and homogeneity-heterogeneity. In M. Featherstone, S. Lash & R. Robertson. Global Modernities. In Brunton, M. (2009). *An Account of ESP with Possible Future Directions*. From: http://www.esp-world.info
- 44. Robinson, P. (1981). The Contribution of Discourse Analysts to ESP and ESP Practitioners to Discourse Analysis. ELT Documents 112, 53-57. In Maleki, A. *ESP Teaching: A Matter of Controversy*. Iran: Zanjan Medical Sciences University.

- 45. Robinson, P. (1989). "An overview of English for Specific Purposes". In Coleman, H. (ed.): Working with Language: A multidisciplinary consideration of language use in work contexts. Contributions to the Sociology of Language 52, pp. 395-427.Berlin: Mouton de Gruyter.
- 46. Robinson, P. (1991). *ESP Today: a Practitioner's Guide*. Hemel Hempstead: Prentice Hall International.
- 47. Robinson, P. (2000). English for Specific Purposes. In Routledge Encyclopedia of Language Teaching and Learning, M. Byram (Ed). London: Routledge. In Naveed, A. (2005). *Legal English: A Case for ESP*. Pakistan: Bahauddin Zakariya University.
- 48. Roe. (1977). From First Year Magister ESP Course, presented by Derradji.S. (2009). Annaba: Badji Mokhtar University.
- 49. Rosenberg, M. (2004). Never the Twain Shall Meet. English Teaching Professional 11: (36–37).
- 50. Strevens, P. (1988). ESP after twenty years: A re-appraisal. In Tickoo, M. *ESP: State of the Art* (1-13). Singapore: SEAMEO Regional Centre.
- 51. Swales, J. (1971). Writing Scientific English. London: Nelson.
- 52. Swales, J. (1985). *Episodes in ESP*: A Source and Reference Book on the Development of English for Science and Technology. Oxford: Pergamon Institute of English.
- 53. Swales, J. (2000). Languages for Specific Purposes. Annual Review of Applied Linguistics, 20: (59-76).
- 54. West, R. (1992). Teaching English for Specific Purposes: Learner Centered Approaches. In Ouniss, S (2005). *An Attempt to Identify Students' Needs in Learning English for Specific Purposes*. Batna: Hadj Lakhder University.
- 55. Widdowson, H. G. (1978). *Teaching Language as Communication*. Oxford: Oxford University Press.
- 56. Widdowson, H. G. (1981). English for Specific Purposes: Criteria for Course Design. In *Teaching at the Workplace: Does it Boost Learners' ESP Vocabulary Knowledge*? Language in India. December 11, 2011. From: www.languageinindia.com.
- 57. Widdowson, H.G. (1983). Learning Purpose and Language Use. Oxford: Oxford University Press.

- 58. Widdowson, H. G. (1990). Aspects of Language Teaching. Oxford: Oxford University Press.
- 59. Wilkins, D.A. (1974). Second-Language Learning and Teaching. London: Edward Arnold.

Appendices

Appendix I: Students' Questionnaire

Secti	on One : General Information
1-	Gender
	Male
2-	How long have you been studying English at the university?
	1 semester
Secti	on Two: Attitudes towards the English Language
3-	Do you like the English language?
	Very much
	Rather like it Not at all
4-	As biology student, how important is it for you to know English? Very important Less important Not at all important
5-	Please, justify your answer.
6-	Are you interested in learning English outside the university? Yes No
7-	If yes, please explain how.

Section Three: Students' Needs
8- Do you use documents written in English?
Yes
9- If yes, to what extent do you use them?
Very much a little bit
10- What do you use them for?
10- What do you use them for:
11- In relation to the English language, which of the following skills do you find difficult?
11- In relation to the English language, which of the following skins do you find difficult:
Reading Speaking
Listening
12- Indicate the relative importance of each skill to you in your Biology studies (1= most to 4= least)
Reading
Speaking
Listening
Writing
13- Do you feel that you can read materials of your speciality that are written in English?
Yes No
res no
14- If no, please explain why.
15- When you read articles written in English, do you find difficulties with
Vocabulary Grammatical structures
16. To what autout does the English course satisfy years needs in second 5-14 of etc. 4-9
16- To what extent does the English course satisfy your needs in your field of study? Completely Partly Not at all
Completely — I ally [] Not at all []

17- Please, justify your answer.
Section Four: Students' Interest in the English Class
18- Do you attend the English class?
Yes No
19- If no, please explain why.
20- Do you think that the time allocated to the English course is
Enough
21- Do you think that the time devoted to the English course is enough to make it
Much interesting \square Interesting \square
Less interesting Uninteresting
22- Please, justify your answer.
Section Five: Teacher
23- The English teacher's background is more literary than scientific (i.e., some times the teacher is not familiar with some specific topics and vocabulary of your speciality)
Yes \square No \square
24- Who do you think would best meet your needs in ESP?
The English language specialist The Biology teacher A language specialist in scientific English
25- Please, justify your answer.

•••••	
Section Six:	Further Suggestions
=	have any further suggestions for making the English course more effective and useful to Biology student?
•••••	

Appendix II: Teachers' Interview

27- Gender
Male
28-What qualifications (academic) do you hold?
29- How long have you been teaching English at the university?
30- How long have you been teaching English at the Biology department?
31- What is your status at the Biology department? Part-time teacher (vacataire) Full-time teacher (permanent)
32-Have you had any specific training in teaching ESP? Yes No
33- If yes, please specify.
34- in the course of your present teaching, do you teach more - General English - English related to science and technology in general - English more specifically related to biology
35-Do you think that the time devoted to ESP teaching/learning at the Biology department is sufficient to cover students' needs for English?

36- Please, justify your answer.	
37- What is the average size of each class?	
20 D	
38-Do you think that the class size makes your teaching difficult?	
Yes No	
39- Please, justify your answer.	
40- Do you have any special materials designed for biology students? Yes No No	
41- If no, where do you get materials from, do you use materials you prepare yourself?	
42-In the beginning of the English course, do you make pre-tests for your students to to current level to identify their needs?	est their
Yes No	
43- Which of the following skills do you tend to lay more attention? (classify in order of experience from 1 for the most important to 4 for the loss important)	mphasis
going from 1 for the most important to 4 for the less important)	
Deading	
Reading Speaking	
Listening	
Writing	
44- Do you meet teachers of the Biology department to discu	

	Yes No No
45-	Would you say that the department you teach in encourages English teaching/learning? Yes \(\subseteq \text{No} \subseteq \text{No} \subseteq \text{Signature} \)
46-	Please, justify your answer.
47-	Do you think that your efforts in teaching ESP correspond to the level of achievement expected?
	Yes No D
48-	If No, is it because
	 You are not permanent at the Biology department. You do not have any experience in English related to biology.
	 You do not understand the students' needs. There is no collaboration between the language
	and the speciality teacher.
49-	Do you have any suggestions for making the English course more effective and more relevant to the students' needs in their field of study?

Résumé

Avec la propagation de la mondialisation est venue l'utilisation croissante de la langue Anglaise comme langue de communication internationale. De plus en plus de gens utilisent cette langue dans des contextes professionnels et éducatifs. Cependant, plusieurs d'entre eux rencontrent des problèmes lors de son utilisation dans des contextes précis. Cette étude tente sur les pratiques actuelles dans l'enseignement/ apprentissage de de fournir un aperçu l'ESP (Anglais pour Objectifs Spécifiques) dans le département de Biologie au Centre Universitaire de Khenchela. Son but est de rechercher les différentes raisons qui provoquent la non-réalisation de l'objectif de l'ESP et entre autre les difficultés des étudiants confrontés à des matériaux de leur spécialité écrits en Anglais. A cet effet, il semblerait nécessaire de passer brièvement en revue la littérature liée au domaine de l'ESP et par la même présenter également la situation actuelle de l'enseignement/apprentissage de l'ESP dans ce département. La méthode descriptive semblait être adéquate pour une telle investigation en utilisant le questionnaire et l'interview comme des outils de collecte de données. Le questionnaire a été adressé aux étudiants de troisième année de Biologie et l'interview a été réalisé avec des enseignants d'Anglais de ce même département. L'analyse du questionnaire-interview a révélé que d'autre facteurs tels que le manque d'un matériel conçu et l'attitude négative de l'institution vers le module d'ESP, et cela en plus des enseignants et étudiants qui représentent facteur important dans le un processus d'enseignement/apprentissage de l'ESP jouant un rôle dans la diminution de l'efficacité d'enseignement et la qualité d'apprentissage.

ملخص

مع انتشار العولمة, ازداد استعمال اللغة الانجليزية كلغة دولية للاتصال. المزيد من الأشخاص يستخدمون هذه اللغة في عدد متزايد من السياقات المهنية و التعليمية. و مع ذلك فان العديد من مستخدمي هذه اللغة بواجهون مشكلات عند استعمالها في بيئات معينة. هذه الدراسة عبارة عن محاولة إلقاء رؤى في الممارسات الحالية في تعليم/تعلم اللغة الانجليزية لأهداف خاصة في قسم البيولوجيا في المركز الجامعي خنشلة. هدفها هو البحث عن الأسباب المختلفة التي تؤدي إلى عدم تحقيق الأهداف المنشودة , إضافة إلى الصعوبات التي يواجهها الطلاب عند استعمال مؤلفات في اختصاصهم مكتوبة بالغة الانجليزية . لذلك بدا من الضروري أن نستعرض بإيجاز المؤلفات ذات الصلة بمجال اللغة الانجليزية لأهداف خاصة و كذلك عرض الوضع الحالي لتعليم/تعلم هذه اللغة في قسم البيولوجيا. يعتبر المنهج الوصفي الأمثل لهذا النوع من البحوث مستعملين الاستبيان و المقابلة كأدوات لجمع البيانات. وجه الاستبيان إلى طلبة السنة الثالثة بيولوجيا و عقدت المقابلة مع مدرسي اللغة الانجليزية في نفس القسم. كشف تحليل نتائج الاستبيان و المقابلة انه بالإضافة إلى كل من الطلبة و الاساثذة الذين لهم دور فعال في منهج تعليم/تعلم اللغة الانجليزية لأهداف خاصة هناك عوامل أخرى كعدم وجود دروس مصممة و الموقف السلبي للمؤسسة تجاه اللغة الإنجليزية لعبت دورا هاما في تخفيض كل من فعالية التعليم و نوعية التعلم.