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**MASTER**  
**Didactics and Applied Linguistics**

**Teaching Issues in an ESP Context and Course Design**

**The Case Study: Tutors and 1<sup>st</sup> Year Master Student in  
Computer Science Department for the Academic Year 2016/2017**

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## **Abstract**

Teaching English for specific purposes has extended and varied its areas to become a fundamental subject to be taught at universities in their various departments. The research is conducted to deduce the difficulties English language teachers are facing when attempting to deliver an ESP course for 1<sup>st</sup> year master students at the Computer Science department for the academic year 2016/2017. It aims to testify the learners as well as the English language teachers' awareness of the needs and objectives behind the ESP course. A triangular approach is adopted to collect both quantitative and qualitative data that this research is in need of. Data is gathered through three tools namely: the observation of the teaching/learning process, the questionnaire that is distributed for the students and the structured interview which is designed for English language teachers at the aforementioned department. The results indicate that teachers of English lack experience in teaching in general, and they have no ESP training, for that reason they are not aware of the objectives or the peculiarities of the ESP course and Needs Analysis. Students manifest a great deal of awareness about the importance of the learning of this international language that is English.

## **Dedications**

*To my parents I dedicate this humble work, and to all my  
family members*

## **Acknowledgements**

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## **List of Acronyms**

- AR:** Action Research
- CNP:** Communication Needs Processor
- EAP:** English for Academic Purposes
- EBP:** English for Business Purposes
- EEP:** English for Educational Purposes
- EFL:** English as a Foreign Language
- EGP:** English for General Purposes
- ELT:** English Language Teaching
- EMP:** English for Medical Purposes
- EOP:** English for Occupational Purposes
- ESP:** English for Specific Purposes
- EST:** English for Science and Technology
- FLT :** Foreign Language Teaching
- ISI :** Ingénierie de système Informatique
- GE :** General English
- NA :** Needs Analysis
- SIG :** Système d'Information Geographique
- TSA :** Target Situation Analysis

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## General Introduction

English as considered the language of Science; due to: historical, economic, and social aspects, it has become a concern of many scholars. Since the late 1960s, ESP has been one of the predominant fields in which researchers have laid stress on, by the fact that ESP has many branches mainly EAP (English for academic purposes) and AOP (English for Occupational purposes) and sub-branches as EBP (English for business purposes); EST (English for Science and Technology; EMP (English for Medical Purposes) ...etc. These varieties show that people differ in their needs of English, and since the Modern Education focuses on the learners and their needs and wants, ESP comes to support that idea of having various needs and preferences.

ESP is a challenging field to conduct, and noticing that at the level of the Master's degree, students of Computer Engineering department at Mostaganem university, English is taught as a compulsory subject, this led the researcher to conduct an inquiry to comprehend the role of the language teacher at this department and his challenges to design ESP courses that need to be tailor made for a certain category of learners, that is a stimulating task besides the lack of teacher specialists, that makes it a responsibility for the English language teacher to cope with such circumstances.

Attending one of the lectures of ESP with Master's students of Computer Engineering, the thing that can be noticed is the small number of student at each group; there were two groups namely: SIG (Système d'Information Géographique) and ISI (Ingénierie de système Informatique), the teacher was speaking all the time, pointing at students who hardly answer, the lecture was based on making the difference between the use of "between" and "among" for the one hour and a half. One example was written on the board and the two main elements: between and among.

Deducing the main difficulties facing the language teachers at the department of Computer Science is the major aim for which this inquiry is conducted. In addition to that, learners' critical thinking and awareness of the use of learning English is put under this investigation.

The main issues to be discussed in this research are: (1) reasoning whether the teachers are aware of the objectives and their task at the department of Computer Science at Mostaganem university. (2) identifying what challenges are facing the teachers of English language at the

department of Computer Science, (3) deducing whether the students are aware of the importance of studying English, and what then their needs are.

To answer these questions, some hypotheses are suggested below:

The English language teacher may not be aware of the objectives and aims of teaching ESP. The lack of knowledge about the subject matter and the so the absence of the cooperation between the English teacher and teacher specialist may widen the gap between the learners' needs and the courses designed and can cause lots of problems at the level of teaching/learning process. The students of Computer Science 1<sup>st</sup> master may be aware of their needs, and the speaking and reading skills may be the important needs.

the study aims at conducting a skills audit that can help designing the course, for that reason and for checking the validity of the data collected, triangular strategy is used to collect both quantitative and qualitative data, the observation was done on both teachers and students, then a questionnaire of 12 open and close questions The structured interview for the teachers.

The first chapter is devoted for the overview of literature in which some notions of ESP according to scholars and practitioners. In addition to that, the ESP course designing is identified. The second chapter aims at gathering data from both participants i.e. teachers and students, then analysing the data. The third chapter deals with discussion of the finding, limitations, then suggestions for improvement and for further studies.

The study is conducted on 1<sup>st</sup> year Master's students of Computer Engineering at Mostaganem university to collect quantitative and qualitative data.

# CHAPTER ONE

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## Perspectives in Defining ESP and ESP Course Design

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## **1.1 Introduction**

In the globalised world, education in its widely interpretation, has been a crucial issue. And teaching foreign languages is not an exception. Moreover, ESP has become a concern of many scholars since its rise in the 1950s. That concern was built upon many reason:

The demand of a brave new world due to the evolution of science and technology going along with the oil crisis, the revolution in linguistics, and the shift from teacher-centeredness to learner-centeredness. This chapter is devoted to cover briefly the ESP rise, different perspectives towards what ESP is, and the challenge that the teaching/learning process is confronted to while designing, proceeding and presenting an ESP course.

## **1.2 ESP: Reasons of Evolution**

ESP as a branch of ELT tree, has become a concern of so many fields in which English is needed for certain purposes. The emergence of ESP is provoked due to historical, economic, social, political, and linguistic factors and became an international language.

ESP has emerged in the time when learners needed English for their work mostly, not for the sake of mastering all the language skills, but to be competent in certain areas rather than others, and that has provided gaining time and maintaining intrinsic and extrinsic motivation. The demands of a brave new world, the revolution in linguistics and the emphasis on the learners' needs are the main reasons leading to ESP rise according to Hutchinson and Waters (1987).

The first reason leading to the evolution of ESP is the end of the world war two in 1945, there has been a revolution in science and technology in the USA, English was its precious currency to sale its products, and since that needed communication, America has approached to train English teacher specialists to provide learners of rich oil countries with the English they needed, and this has empowered the language and so America's economy leading up to a political prominence. The second reason is the revolution in linguistics, in which language usage was taken into consideration, and since learners in a certain ESP course need the English language for a certain usage rather than others that can be a concern of other category

of learners. The last reason according to Hutchinson and Waters (1987) is the focus on the learner's needs, the learner centeredness. Educational psychology has evolved with the focus on the learners' various learning styles and preferences, interests and motivations, the idea is that teachers build their ESP course upon the learners' needs and the content builds on their special field of interest.

### **1.3 Perspectives in Defining ESP**

There have been different perspectives defining the term ESP. this latter has been defined as an approach and not a product, as Hutchinson and Waters have claimed: "ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning" (1987). Through their definition they lay stress on the needs of the learners that build the courses to be delivered. They claim that there are no precise standards to follow in teaching ESP, they have stated: "ESP is not a particular language or methodology, nor does it consist of a particular type of teaching material" (1987). Robinson in her definition to the term ESP insists on three elements: the limited time period in which the adult learners who share the same needs are to be taught, i.e. adult learners, limited time, and homogenous class (1991). She has added that NA (Needs Analysis) should be done in order to determine how, what and who to teach (1991). Strevens (1988) and Dudley-Evans and St John (1998) have defined ESP in terms of absolute and variable characteristics. Being inspired by Strevens' definition, Dudley and St John have introduced the absolute characteristics as follow:

- ESP is designed to fit specific needs of the learners,
- ESP uses the underlying methodology and activities of the field it serves,
- ESP focuses on the language uses to perform these activities in terms of grammar, lexis, register, study skills, discourse and gender.

The variable characteristics:

- ESP may be related to or designed for specific disciplines,
- ESP may use, in specific teaching situations, a different methodology from that of General English,

- ESP is designed for adult learners, either at a tertiary level institution or in a professional work situation. Simultaneously, it can be for learners at secondary school level,
- ESP is generally designed for intermediate or advanced students,
- Most ESP courses assume some basic knowledge of the language system

What does noticeably distinguish this definition from that of Strevens is that the later has presumed that ESP is in contrast with GE, other scholars claim that there is no clear notion that indicate when GE ends and when ESP starts. Hutchinson and Waters pointed out that an awareness of the needs is what makes distinction between ESP and GE. What is recognised for ESP course designers and scholars is the insistence on the importance of conducting a Needs Analysis for the purpose of accomplishing certain aims and objectives.

Viewing different perspectives defining the concept of ESP; Hutchinson and Waters (1987), Robinson (1991), Strevens (1988) and Dudley-Evans and St John (1998), what can be noticed is that ESP focuses on the learners' needs, targeting certain skills for certain categories distinct of others, and that the ESP course needs a dynamic evaluation and alteration so that an ESP teacher can change materials or methodologies depending on their learners' specific needs, wants, lacks, motivations, learning styles, and even circumstances. The psychological education has been given a significant consideration in the process of ESP teaching/learning. This can be found in GE classes, but it is given less importance since learners are supposed to be learners of the language in its widely interpretation. Some scholars set apart GE from ESP and others maintain that there is no clear distinction between those interrelated branches.

## **1.4 ESP vs GE**

What distinguishes ESP from GE is: "the awareness of the needs" Hutchinson & Waters (1987, p.53), though the learning occurs when there are needs be it General English or ESP course, working on the specific needs is what ESP practitioners insist on rather than just knowing the needs or presuming the same standard needs of the language learners.

The working definitions of ESP has included the needs as an important component in the teaching process to be focused on, and this makes of the learners the centre of the teaching

process. Widowson (1981, p.89) pointed out that once: “the learners’ needs are accurately specified”, the ESP teacher can use those specifications to: “determine the content of a language programme that will meet those needs”. One thing to be noticed is that ESP is meant to design suitable courses for learners in which the content is relevant to their field of interest, while GE takes the language mastering as a whole to be taught and the content varies in which there is no specific jargon to count on frequently. Harding (2007, p.6) declared that: “the sense of the purpose gives the language work immediacy and a relevance which is perhaps not always found in other sectors of ELT, particularly of the ‘General English’ variety”. This means that specifying the purpose helps tailoring suitable courses and materials. ESP; as Widowson (1983) pointed out; focuses on ‘training’: how to use the language in the specific content, while GE does on ‘education, Harding (2007, p.8-9) claimed that: “the type of ESP learners who come to ESP are often demotivated by courses of general English. These learners have entered ESP courses because they expected that language-based work would not owe to practical or manual skills in lessons...”

About the difference between ESP and GE, Hutchinson and Waters (1987, p.53) pointed out:

*The answer to this very reasonable question is ‘in theory nothing, in practice a great deal’. It is often argued that the needs of General English learner, for example the schoolchild, are not specifiable. This is an assumption that owes more to instructional inertia and the weight of tradition than to any reality, but it is a powerful force nevertheless. In fact, this is the weakest argument, because it is always possible to specify needs, even if it is only the need to pass the exam at the end of the school year. There is always an identifiable need of some sort.*

There is a confusion among scholars as when GE ends and when ESP starts, and about the clear distinction between GE and ESP since ESP builds on the learners’ background in GE. The use of EGP interchangeably with GE does not help to make the distinction since this term bears so many considerations, for that reason Strevens tended to use the term EEP (English for Educational Purposes) instead of using GE.

## **1.5 The ESP practitioner**

The ESP practitioner as Dudley-Evan and St John (1998) have maintained has five roles: teacher; collaborator; course designer and material provider; researcher and evaluator.

Teacher	<ul style="list-style-type: none"> <li>The methodology in the ESP settings is more specific. His role is to teach the language but not the student's specialty, and the methodology he use changes as the teaching becomes more specific.</li> </ul>
Course designer and material provider	<ul style="list-style-type: none"> <li>One of the ESP teacher's roles is designing the course and adapting materials for it when published materials are unsuitable, or writing his/her own materials in order to cope with the various levels of the students within the same class.</li> </ul>
Collaborator	<ul style="list-style-type: none"> <li>It refers to collaborative teaching between a subject specialist and language teacher. It is also worth mentioning the possibility team work between the English teachers themselves.</li> </ul>
Researcher	<ul style="list-style-type: none"> <li>He must be able to conduct a research to find out the students' needs and interests in order to design appropriate materials to suit their target objectives. It is very often a language-based and content – based research.</li> </ul>
Evaluator	<ul style="list-style-type: none"> <li>Evaluation is mainly referred to testing in order to evaluate learners' progress and achievement. However, in ESP setting is also referred to course evaluation. As ESP courses are all too</li> </ul>

	often ‘tailor-made’, their evaluation is crucial. Dudley-Evans
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**Table 1: The ESP Practitioner’s Role (Adapted from Dudley-Evans & St John 1998, Harmer 2011)**

So according to Dudley-Evans and St John (1998), the ESP practitioner’s role goes beyond only a teacher of the English language. He has the responsibility of designing an appropriate course that suits his particular learners’ needs; by which these needs are analysed, he has also the responsibility to decide on materials and approaches to deal with for the purpose of accomplishing and reaching certain goals. Since he must have the qualities of the general English teacher and expert knowledge of the particular field (Hutchinson and waters,1987), the ESP teacher needs collaboration between him and General English teachers and even teacher specialists. Alan Davies (1999) claimed that ESP teachers can ask teacher specialists for help about the suitable content for a particular field. He is a researcher; he needs to seek always to improve and be up to date and bring about ways and techniques that could maximize as much as possible learning. Evaluation has to cover the way of teaching, the material selection, the learning outcomes and any aspect that could affect the teaching learning process. The ESP practitioner is dealing with adult learners in which designing an effective course is crucial matching learners’ needs, wants, lacks and also their learning styles and preferences.

### **1.5.1 Material Selection**

Carver (1984) claimed that the ESP course is characterized by three features, namely: authentic material, purpose-related orientation and self-direction. Materials in ESP need to be authentic, subject area related and up-to-date as Bojovic (2006) believed they need to be. The specific vocabulary or jargon of the specific field of the learners is the core component of the ESP lessons. The materials need to expand from the prior and the contemporary experiences of the learners, and there should be feasibility for the learners to use these materials that essentially tend to focus on the communicative language use. Due to potential English teachers’ lack of experience in the subject area of their learners, the material selection can provide them with the fundamental principles to be tackled. Jeremy Day and Mark

Krazanowsky (2011) have suggested that if a course books is not adequate for the learners' specific needs, the teacher may use different materials from various courses utilizing a 'blended learning platform' (such as [www.english360.com](http://www.english360.com))", this is can be done through Internet, in which teachers can find ready-made supplementary materials, they just have to match them with the needs of the learners. There is a free Online series of Cambridge English for Engineering/ business/ nursing/ law...etc. and there are websites that provide lesson plans: <http://peo.cambridge.org/>

The teacher needs to be up-to-date using different resources and varying materials to maximize learning through involving as much as possible his learners: he can use the audio-visual materials, catalogues, pictures, and some devices related to the subject area.

Each step in ESP course design is related with the others stages, Khoshshima (2014) claimed that the materials selected by the teacher need to contribute in the achievement of the determined goals and objectives.

### **1.5.2 Difficulties in Teaching ESP**

Considering that EFL (English as a Foreign Language) is stimulating for both teachers and learners, the challenging task for the ESP teacher goes bigger the more freedom is given to the teacher to design suitable courses. There is no suggested syllabus, and here some teachers may fail to deliver courses other than those of General English when having no interest towards the subject matter.

The teacher's lack of knowledge about the subject matter may lead to a frustration, insecure feelings and a lack of confidence out of the conventional idea that the teacher should be more knowledgeable than his learners, and if the teacher is neither psychologically nor cognitively prepared to teach, it gotten impossible to recognize his learners' needs. The teacher is put in a situation where he should select texts and materials that are not too much above his learners' level so that problems can be caused for both the learners as well as the teacher, and should not be also so easy that can cause boredom, the level needs to be a little bit challenging, and to do so, the teacher has to conduct a needs analysis that is another challenge by which the adequacy of the course designed depends on.

For that reason, Hutchinson and Waters (1987) have suggested for the ESP teacher to have:

- Appositive attitude towards the ESP content.
- A knowledge of the fundamental principles of the subject area.
- An awareness of how much they probably already know.

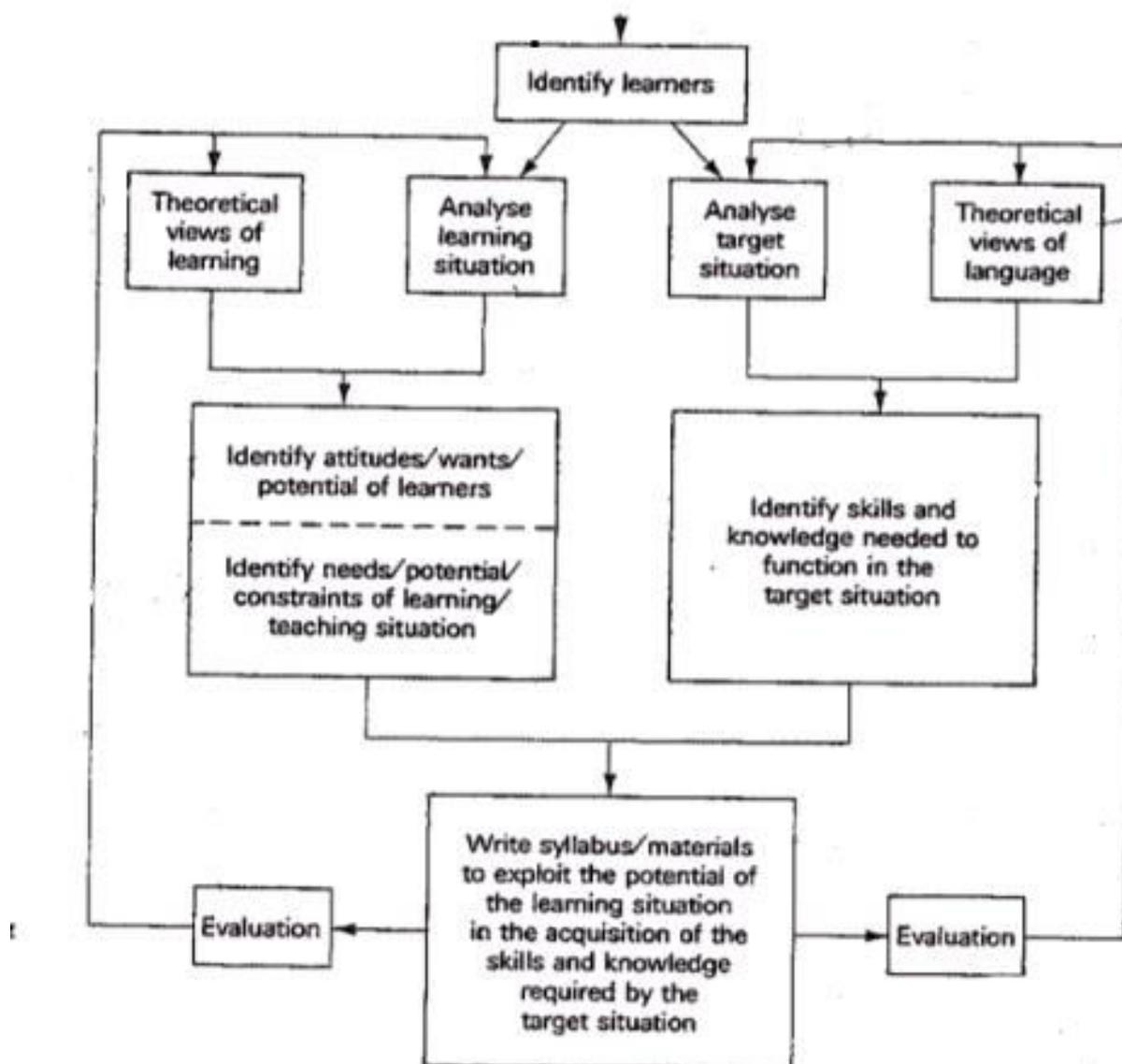
## **1.6 The ESP Learner**

The learners of ESP are assumed to be adult, and the courses they attend are to help them solve specific problems in specific context. In the learner-centred approach, the specific needs, wants and lacks of the learners are highly focused on. One important principle of the approach is learner self-direction, in which the learner himself can decide on the way to study, as Carter claimed that self-direction is one of the three characteristics of ESP course in which the: “... point of including self-direction... is that ESP is concerned with turning learners into users” (1983, p.134), he added that teachers have to teach their learners about the different ways and techniques of learning (1983). What can motivate the learners and can help the teachers as well to design an effective course is that the learners field of study is usually their choice (1983), which means they are already interested in the subject area of the course.

## **1.7 The Factors Affecting and Contributing in the ESP Course Design**

ESP course design is a process in which the teacher takes into consideration several factors. There had been so many approaches adopted as attempts to design an effective course, and each approach came to revise the previous one, as Hutchinson and Waters (1987) claimed that a language-centred approach focused on the target situation performance in which the ESP course is determined, while a skills-centred approach came to claim that identifying the target situation is not sufficient, there should be an analysis of the target situation to know the steps leading up to the performance, it tends to analyse the skills and strategies that are required to cope in the target situation, considering the theoretical views of both language and learning, that leads to writing the syllabus and selection of appropriate

texts, to end up with the evaluation of those procedures within the use of the skills and strategies selected. Moreover, this was not enough as a learning-centred approach appeared to claim that: “we must look beyond the competence that enables someone to perform, because what we really want to discover is not the competence itself, but how someone acquires that competence” Hutchinson and waters (1987, p.9), which means that there are so many factors contributing in the ESP course design mainly the learner as a one criterion besides the material selection, the approaches to be adapted... etc. and this approach ends up with the evaluation of the learners achievement. Though it seems to be covering all the aspects needed to help the ESP practitioner, it might be difficult to implement it due to its complexity and time consuming, but it is still the approach that proved its effectiveness in ESP course design. The diagram indicates this approach in details:



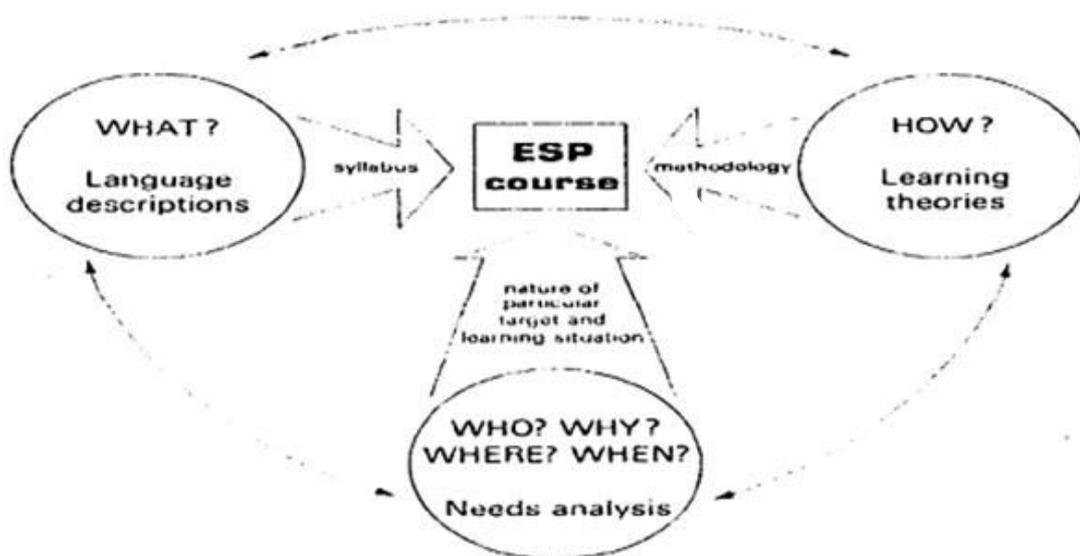
**Figure 1: A learning-centred approach to course design (Hutchinson and Waters, 1987, p.74)**

This diagram indicates the learning-centred approach to ESP course design according to Hutchinson and Waters (1987). This approach has different stages that are interrelated, and it insists mainly on the ongoing process of analysis and evaluation. The first thing to do according for the ESP practitioner is to identify the category of the learners. After that he/she analyses the present situation of the learners and the teaching/learning situation, at the same time, he/she identifies the skills and knowledge needed to be acquired in the target situation. Next, the teacher writes a syllabus according to the previous data. After that, the evaluation to

what extent objectives are reached in order to decide on the success of the syllabus or its failure.

ESP course design is not just a series of lessons to teach technical language for certain category of learner, but rather it is built upon a data collected from multi-disciplinary areas.

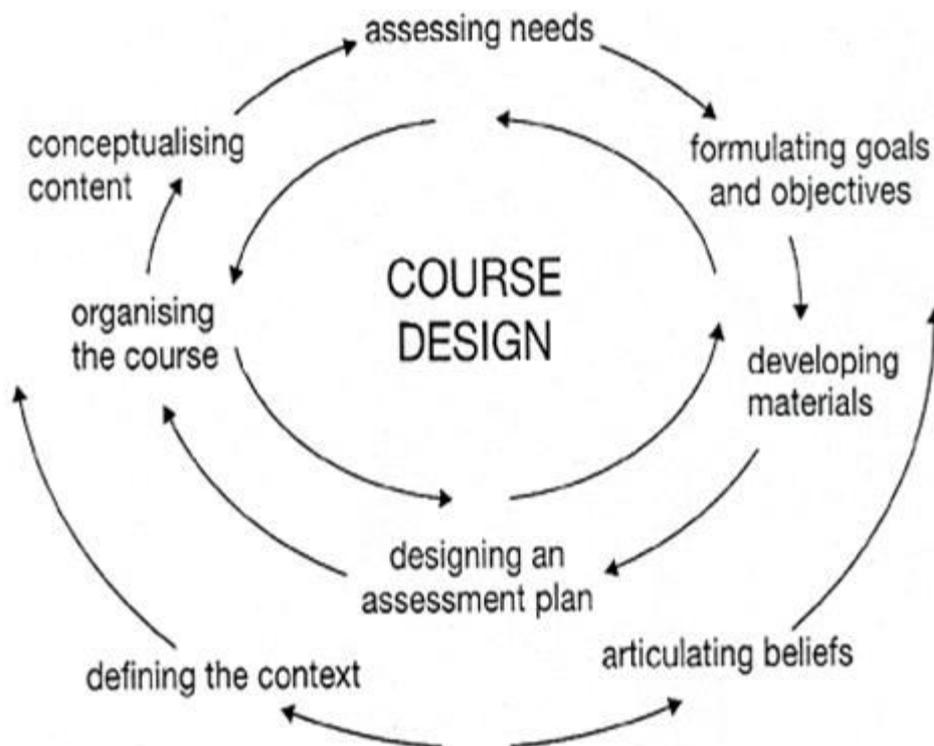
*Course design is the process by which the raw data about a learning need is interpreted in order to produce an integrated series of teaching- learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge. (Hutchinson & Waters 1987:65)*



**Figure 2: Factors Affecting ESP Course Design ( Hutchinson and Waters 1987, p.22)**

## 1.8 Steps in ESP Course Design

Graves (1996, qtd. in Xenodohidis, 2006) suggested some steps in the ESP course designing.



**Figure3: Graves' Model of ESP Course Designing (2000) (cited in Nation and Macalister, 2010, p. 136)**

### 1.8.1 Needs Assessment

Needs analysis (NA) is one of the basic pillars in ESP course design. Needs in ESP are specified, and this what makes from conducting a NA a must, in which all the coming steps rely on that procedure as the content, the methodology, and the objectives. Dudley-Evans and St John explained the needs analysis as: “the corner stone of ESP and leads to a very focused course” (1998, 122), they provide some useful questions to consider in the designing of ESP course, they are as follows:

- Should the course be intensive or extensive?
- Should the learners' performance be assessed or non-assessed?
- Should the course deal with immediate needs or with delayed needs?
- Should the role of the teacher be that of the provider of knowledge and activities? or should it be as a facilitator of activities arising from learner's expressed wants?
- Should the course have a broad focus or narrow focus?

- Should the course be ‘pre-studied’ or ‘pre-experienced’ or run parallel with the study or experience?
- Should the materials be common-core or specific to learners’ study or work?
- Should the group taking the course be homogenous or should it be heterogeneous?
- Should the course design be worked out by the language teacher after consultation with the learners and institution, or should it be the subject to a process of negotiation with the learners?

NA is the first step in ESP leading to the designing of the course, in which it provides the teacher with data to decide on the nature of particular target and learning situation, Richards (2001) claimed that NA is a stage in which the teacher used it to obtain data about the learners’ particular needs as being individuals having different language needs that should be taken into consideration when designing an ESP course. Needs analysis is carried out by several procedures namely interviews, questionnaires, case studies, observation...and so on, and the kind of info obtained is often dependent on the types of procedures selected.

NA aims to:

1. To find out what language skills a learner needs in order to perform a particular role such as sales manager, tourist guide or university students.
2. To help determine if an existing course adequately addresses the needs of potential students.
3. To identify a gap between what students are able to do and what they need to be able to do.

There are several perspectives towards what NA is, Chambers (1980) quoted in Basturkmen (2010, P.18) stated that: “Needs analysis should be concerned with establishment of communicative needs and their realisations, resulting from an analysis of the communication in target situation - what I will refer to as target situation analysis”, as Robinson stated as well: “a needs analysis, which focuses on the students’ needs at the end of a language course can be called a TSA.” (1991, p.8). Dudley- Evans and St- John (1998, p.125) conceptualized the NA as:

- A. Professional information about the learners: the tasks and activities learners are/ will be using in English for – target situation analysis and objective needs.
- B. Personal information about the learners: factors which may offer the way they learn
- C. such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English – wants, means and objective needs.
- D. English language information about the learners: what their current skills and language use are –present situation analysis – which allows us to assess (D).
- E. The learners' lacks: the gap between (C) and (A) – lacks.
- F. Language learning information: effective way of learning the skills and language in (D) – learning needs.
- G. Professional communication information about (A): knowledge of how language and skills are used in the target situation- linguistic analysis, discourse analysis, genre analysis.
- H. What is wanted from the course.
- I. Information about how the course will be run - means analysis.

This information can provide a clear view about the learners' situation and can help the ESP practitioner set a clearer target situation analysis.

Hutchinson and Waters (1987) claimed that Munby's model of NA or as he called it CNP (Communication Needs Processor) was a turning point in ESP development, because it consisted of all what an ESP practitioner needs to conduct for a needs analysis.

## **1.8.2 Formulating Goals and Objectives of the Course**

Setting aims and objectives is a stage that is determined by the analysis of the needs, in which the teacher can make decision about the goals that are possible and realistic to be reached in the determined time. The course design is built upon those goals which are restricted to the learners needs and consistent with the language content.

### 1.8.3 Conceptualizing the Content

The ESP practitioner needs to decide on the topic that should be related to the field of the learners and the language areas to be covered, this is can be identified through the NA. what can be seen as challenging for the ESP teacher is maintain the balance between the lesson to be taught and the language features in which the lesson is covered. Being an English language teacher in the first place, lacking enough knowledge background about the subject area, he may intend to focus more on the language features to cover his deficiency. This can be crucial and might have an effect on the level of learners' motivation.

The teacher may use to teach either different and separated topics or to may use the same theme, the first way may lead the learners to encounter many vocabularies so they may lose interest and feel frustrated, the second also may lead learners to feel bored having the same theme all the time, this can be another angle in which the teacher has to consider.

Reilly (1998, cited in Xenodohidis,2006, p.20) provided some tips in the designing of the content:

- Define what the students should be able to do as exactly and realistically as possible, as the result of the instruction;
- Rank the syllabi in order of importance according to desired outcomes;
- Evaluate available resources and match them with the syllabi;
- Designate one or two syllabi as dominant;
- Review how combination and integration of syllabi types can be achieved and in what proportion;
- And translate decisions into actual teaching units.

### 1.8.4 Developing Materials and Activities

After determining the goals and objectives and conceptualizing the content, the ESP teacher needs to select materials that are relevant to those objectives and language content, and also to the different learning styles and preferences that can maximize learning as well as intrinsic and extrinsic motivation. Material selection is one other challenging point that the ESP teacher may encounter in designing suitable materials for particular students in a particular institution, this can be time consuming for several reasons as Hutchinson and Waters (1987) stated three main ones as follow:

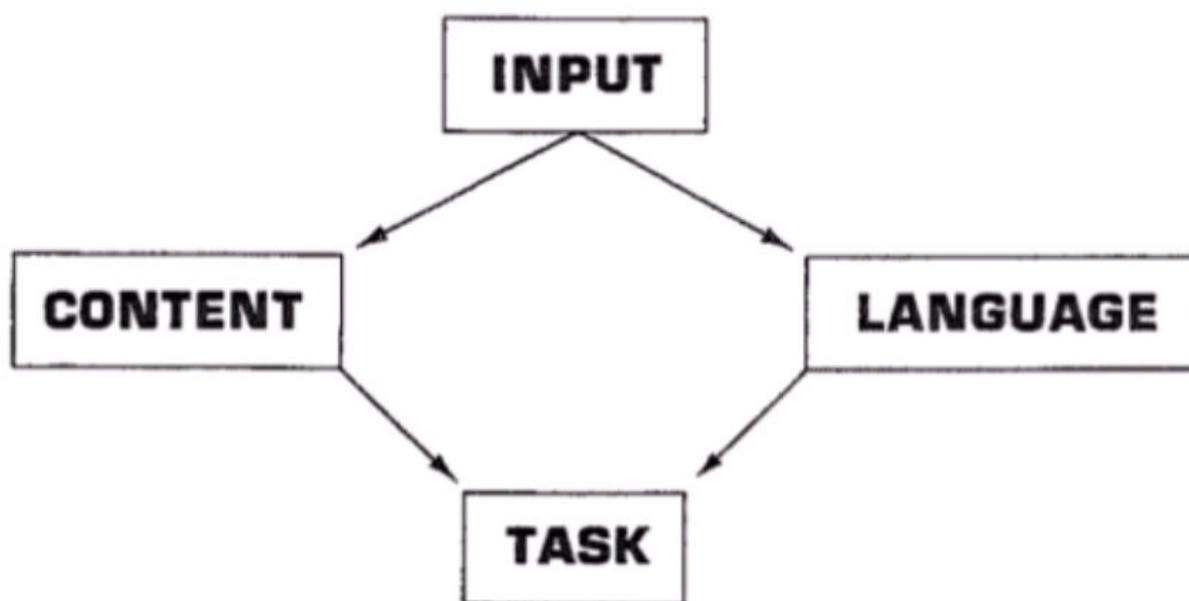
- The teacher may tend to provide suitable materials to fit specific needs of the learners that may not be available.
- Even if those materials are available, they may cost for the teacher.
- The materials may not be written for educational purposes.

Allwright believed that materials should teach learners how to learn, and this cannot be provided by the textbooks since they are not flexible (1982), Toms (2004) refused the use of general English course book to teach learners of ESP claiming that it can help only as an “ancillary” or less. On the other hand, O’Neill (1990) claimed that textbook can be helpful for both teachers and students in terms of availability, time and money. This contradiction can reveal a great deal about material selection, and that this stage can be stimulating to match it with the other stages that are interrelated, Dudley-Evan and St John (1998) claimed that materials should be consistent to the final objectives. Anthony (1997, p.3) claimed: “one of the main controversies in the field of ESP is how specific materials should be”. Authentic materials are of a great importance for learners’ motivation, in which the teacher may use the ICTs to involve learners of differed styles. Hutchinson and Waters (1987) provided a materials design model which consists of four main elements: First, the input that can be any piece of communication data relevant to the learners’ needs providing:

- Stimulus material for activities.
- New language items.
- Correct models of language use.

- A topic for communication.
- Opportunities for learners to use their information processing skills.
- Opportunities for learners to use their existing knowledge both of the language and the subject matter.

Second, the content focus in which the language is considered as a means for an effective communication. Third, some specific areas of language are covered studied and put in practice. Fourth, the task in which the language and content are implemented relies on the input.



**Figure 4: A Materials Design Model (Hutchinson and Waters. 1987)**

### **1.8.5 Organising the Course**

The steps mentioned above have a great role in the organization of the content and so the activities. when the teacher sets the objectives and goals of the ESP course, and then he decides on the materials suitable for the objective set, after that he chooses the right content, it remains only to organize those activities with the appropriate content to have a clearer course to be taught.

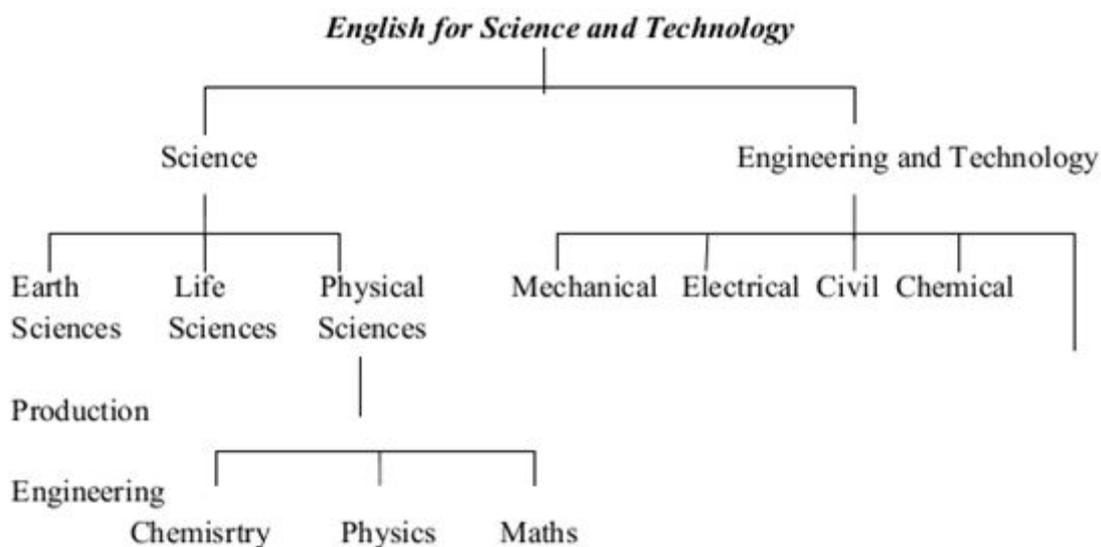
### **1.8.6 Designing an Assessment Plan**

Evaluation covers all the aspects contributing in the course design and the teaching/learning progress, though it is the last phase in ESP course, evaluation and assessment is an ongoing process that has an important role in determining the effectiveness of the course design and the progression at the level of learning, in which the ESP practitioner needs to be flexible and ready for any alteration needed.

Hutchinson and waters (1987) pointed out that since ESP courses are meant for specified objectives, evaluation is highly focused on, and evaluation needs to be done for both learners and the course: learner assessment .Course evaluation studies any aspect that may have an effect on the teaching/learning process how much it matches the aims and provides the teacher with experience to design further effective courses and avoid inappropriate aspects that may minimize learning, they added that course evaluation can be done throughout the whole course and even after, if possible, though it may be seen as a deficiency and cannot be appreciated by students: they may think that their teacher lacks confidence or lost, he is then unprofessional and asks for help.

## **1.9 English for Computer Engineering: A Branch of EST**

English is considered as an international language, and the evolution in science and technology led to orient that international language towards focusing on specific areas to be taught, and this gave birth to a subcategory of ESP besides EAP and EOP which is EST, as Kennedy and Bolitho (1984) claimed that the later contributed in ESP development since scientists and technologists needed to learn English that is related to their field. EST can be furthermore divided into sub-branches, as swales' diagram explains:



**Figure 5: Subcategories of EST (Swales. 1988, p. 89)**

## 1.10 Conclusion

In this chapter, different aspects have been denoted concerning the ESP evolution, the different perspectives towards defining the concept of ESP, besides the distinction between ESP and EGP. In addition to this, there has been a focus on the learner as well as the teacher's role in the process of teaching/ learning of ESP, and the different procedures in designing an effective course design taking into consideration the needs analysis, the material selection, the approaches to be adapted and adopted, and the deciding on principles and objectives in which the lessons are to be built upon, and assessment and evaluation of both the learners' understanding and so the teaching effectiveness. As a final section, the chapter has shown the contribution of EST in ESP evolution and the derivation of English for Computer Science from EST.

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## CHAPTER TWO

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### Tutors difficulties in Teaching ESP and Students' Attitude Towards the Lessons



## **2.1 Introduction**

There are many factors that contribute in the teaching learning process, mainly the teacher's way of teaching, the material availability and usage, students' attitudes towards the lessons, and others. In this chapter, the researcher intends to introduce the way data was collected from various informants and through different tools. Data was gathered from two tutors teaching English at the department of Computer Science at Mostaganem university through a structured interview, and thirteen 1<sup>st</sup> year master students was invited to answer a questionnaire, besides the observation of the whole process of teaching and learning by attending several lessons, data collected is translated into tables and charts for the purpose of analysing them in the next chapter.

## **2.2 Data Collection of Computer Science Students and English Language Teachers**

The researcher tends to use various types of tools for collecting data as observation of the classroom, for teachers and students in the department of Computer Science. Data is collected also through questionnaires and interview from both samples mentioned previously for the purpose of deducing the main issues concerning the difficulties of English language teachers at the department of Computer Science, and so the challenges facing the teaching learning process in this case.

### **2.2.1 Methodology and Research Tools**

The research is built upon a triangular approach in which the researcher depends on more resources for collecting data, in which a structured interview of 34 questions has been distributed for the teachers of English language at the Computer Science department, And a questionnaire of 12 open and close question has been circulated among the students of Computer Science of both masters: SIG (Système d'Information Géographique) and ISI (Ingénierie Système Information), who have been invited to answer a questionnaire concerning their difficulties in English and their opinion towards their current course of English, besides asking them to suggest some solution to improve the English lectures and to examine their level of awareness to the importance of this language. The teachers' interview is more focused on, since the teacher plays a great role in the effectiveness of the course and

learners' motivation, for the reason that the final results always rely on the teachers' delivery of the lessons, as well as his efforts to promote the right atmosphere for learners to well perform and get engaged. Both the questionnaire and interview were in an attempt to provide the researcher with qualitative and quantitative data by the open and close questions, the questionnaire is considered as a reliable tool since it saves time and effort in terms of distribution, collecting as well as analysing data.

Observation is another tool that is used besides the questionnaire and the interview for the purpose of checking the reliability of the answers in a more objective view. The observation is done both inside and outside the classroom. Observation inside the classroom helps the researcher have an idea about the lessons and the interactions; teacher/student, teacher/students, student/student, student/ students; the observer can easily recognize the absence of the various types of interaction except the dominant one which is the teacher/students or the traditional way of teaching (teacher centeredness). Through approaching students outside classrooms and even while answering the questionnaire, the observer can have an idea that may not be mentioned through the questionnaire or the interview, and he can interpret some answers and even attitudes by observing the circumstances of the students when answering so that to treat the issue from different angles.

### **2.2.2 Observation of Tutors' Methods of Teaching and Students' Feedback**

The Computer Science department at Mostaganem university consists of six English language teachers. Through attending English lectures ( which are compulsory) with 1<sup>ST</sup> year master students of both majors (SIG and ISI), the observer could notice the small number of students present, this can be a positive point for the teacher in terms of control and having all the students involved and engaged, the students were calm all the time, which refers to different interpretations: either students got bored or interested, but since the teacher was asking and answering by herself, this silence can be said to be out of lack of interest. Through observing few students answering the questionnaire, the researcher can notice the hesitation of students to answer open questions to avoid writing in English, while they seem interested; they discussed the answers orally with their classmates and they seemed interested and willing to learn that language as they do not have the chance to do it in their current lectures. The observer noticed also when distributing the questionnaire that some students are absent

because they are abroad, and this can assure the importance of the learning of English language at least for those who go abroad to contact others sharing the same field of study but differing in languages spoken.

The teachers are not specialized as ESP tutors; this may have a clear interpretation about the lack of the awareness from the administration part as well as the language teachers. The lessons provided were dealing with English in general, the sole thing that is related to the Computer Science is the content, but the activities do not focus on the specific jargon. The teacher keeps following the same type of tasks as reading the text, filling the gaps, true/ false sentences, pointing at students but only few of them answer.

### **2.2.3 Participants: English Language Tutors and Students at Computer Science department**

The participants in this research are of both categories: teachers and students. The teachers of English at Computer Science department were invited to answer an interview of 34 open and close questions to have an idea of their profile, the lessons provided, difficulties encountered when teaching ESP and their suggestions as solutions. The students' questionnaire was of 12 open and close questions concerning their background of English language and so their needs and attitudes towards the lessons.

### **2.3 Students' Questionnaire of their Needs' Awareness and the Analysis**

The questionnaire distributed to the students consists of (12) questions, to provide the researcher with an overview about the students of Computer Science master's degree year one; their background in English, their deficiencies in the micro and macro skills, their needs and wants from ESP courses.

Data is collected as follow:

**(1) Previous years students have studied English.**

Years	Students	Percentage
...≤7 years	0	0%
7<...≤10 years	0	0%
... > 10 years	13	100%

**Table 1.2: Students' Experience in English**

As it is shown in the table above that all the participants have a considerable background in English with more than 10 years, since they all have studied English in the middle school (4 years), then in the secondary school (3 years) then at university between (3) to (5) years.

**(2) Indicate your language skills in**

		High	Intermediate	Low
<b>Reading</b>	Number	6	6	1
	Percentage	46,2%	46.2%	7.7%
<b>Writing</b>	Number	2	10	1
	Percentage	15%	77%	7.7%
<b>Speaking</b>	Number	1	9	3
	Percentage	7.7%	69%	23%
<b>Listening</b>	Number	4	7	2
	Percentage	31%	54%	15%

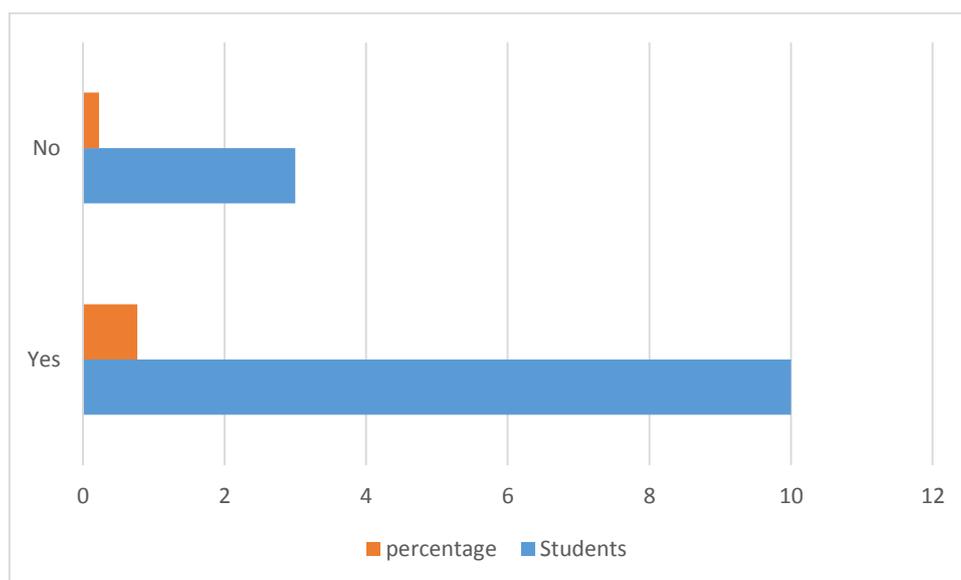
**Table2.2: Students' Self-assessment in the Four Skills**

Drawn from the table above, the researcher can notice that the students self-assess their proficiency in the macro skills: reading, writing, listening and speaking, the table signifies that the students have an intermediate level in the four skills in which (77%) of the students answer that they are intermediate in writing, and (69%) in speaking, (54%) in listening and (46%) in reading. (46%) of the informants are high skilled in reading, which is the highest percentage, while only (3) informants (23%) answer they are low in speaking skill, (15%) in listening, (1) one student answers he is low in writing, and one other student is low in reading. All in all, the data collected indicate that the students are sort of intermediate proficiency in the four skills.

**(3) Rating if students are interested in English.**

Yes/No	Students	percentage
Yes	10	77%
No	3	23%

**Table 3.2: Students' Interest in Studying English**



**Clustered Bar 1.2: Students' Interest Towards English**

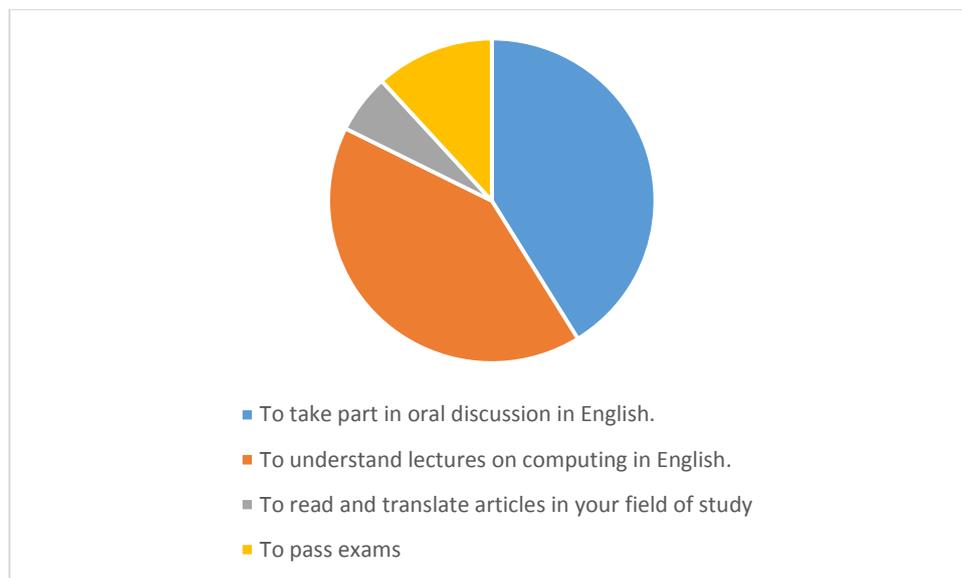
The table indicates that (77%) of the students are interested in studying English and (23%) of the students are not, this signifies that 10 students are motivated to learn English while (3) students are not.

**(4) if yes, why they want to study English.**

Why?	Students	Percentage
To take part in oral discussion in English.	7	70%
To understand lectures on computing in English.	7	70%

To read and translate articles in your field of study	1	10%
To pass exams	2	20%

**Table 4.2: Student's Reasons Towards Learning English**



**Pie Chart 1.2: Students' Reasons Towards Learning English**

The table shows the answers of only the category motivated to learn English who are interested, (70%) of the informants are interested because they answer: to take part in oral discussion in English, as well as to understand lectures on computing in English, only (20%) of the participants answer: to pass exams and (10%) answer to read and translate articles in the field of study. these answers can provide the researcher with an idea about the learners' wants that are mainly to communicate in English and to take part in lectures dealing with content of their interested field.

**(5) what areas students think they need English for.**

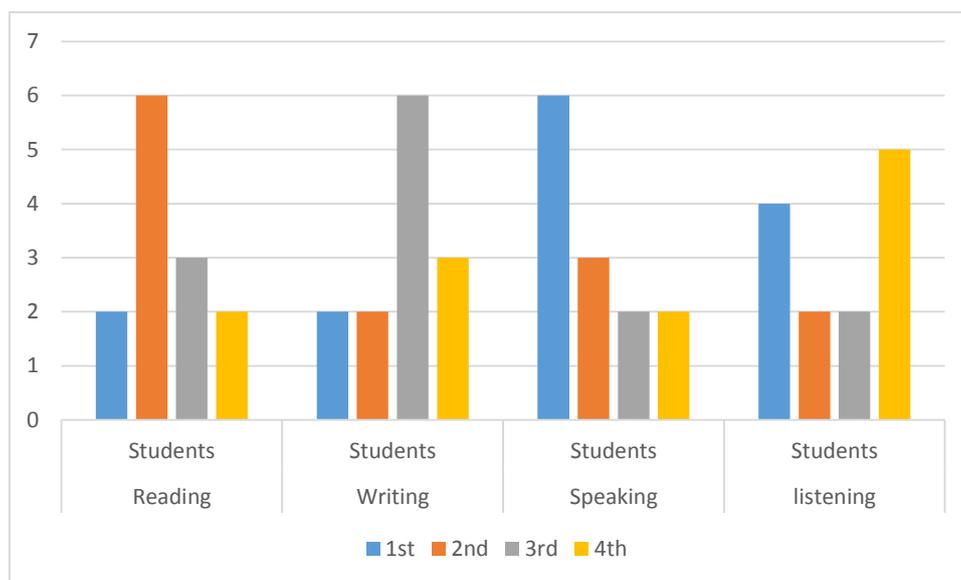
The areas	Students	Percentage
In your post-graduate studies	10	77%
In your future works or career	10	77%
In everyday life	8	62%

**Table 5.2: English Needed Areas**

The table shows that students are enough aware of the use from studying English and the areas in which they need it, (77%) of the informants need English in their post-graduate studies, (77%) needs it in their future work or career, and (62%) need to use it in everyday life. This shows that the various options are important for the students to consider and also reveals a great deal of awareness on the part of the informants.

**(6) Students classify the skills according to their needs.**

The skill		1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>
Reading	Students	2	6	3	2
	Percentage	15%	46%	23%	15%
Writing	Students	2	2	6	3
	Percentage	15%	15%	46%	23%
Speaking	Students	6	3	2	2
	Percentage	46%	23%	15%	15%
listening	Students	4	2	2	5
	Percentage	31%	15%	15%	38%

**Table 6.2: Classification of Skills According to the needs****Clustered column 1.2: Classification of Skills According to The Needs**

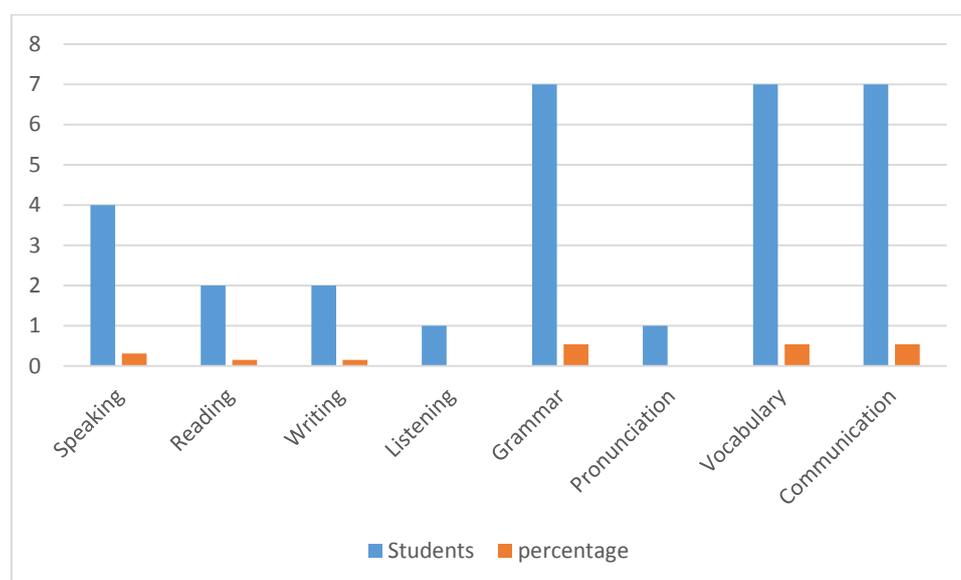
In this table students are asked to rank the four skills according to their needs.

- The speaking skill is ranked first by (46%) of the students, then the listening skill by (31%), after that the writing and reading skills by (15%) for each.
- The reading skill is ranked 2<sup>nd</sup> by (46%) of the informants, then speaking by (23%), after that writing and listening by (15%) for each.
- The writing skill is ranked 3<sup>rd</sup> by (46%) after that the reading skill with (23%), and (15%) for both speaking and listening.
- Listening is ranked as the 4<sup>th</sup> skill needed by (38%) of the informants, then the writing skill by (23%), after that the reading and speaking by (15%) of the informants.

This means that the students are in need of speaking and reading over writing and listening, this can be interpreted as a need of variation instead of just listening to the teacher then writing, these results have a great importance for the English teacher to know about and reconsider the teaching methodologies adopted.

**(7) Students' difficulties in?**

Difficulty in...	Students	percentage
Speaking	4	31%
Reading	2	15%
Writing	2	15%
Listening	1	7.7%
Grammar	7	54%
Pronunciation	1	7.7%
Vocabulary	7	54%
Communication	7	54%

**Table 7.2: Students' Difficulties****Clustered Column 2.2: Students' Difficulties**

The question tests the awareness of the students of their deficiencies, (54%) of the students have difficulties in grammar, vocabulary and communication, then (31%) of the informants have difficulties in speaking the language, treading and writing with (15%), after that (7,7%)

answer they have difficulties in listening. So the majority of the students answer they have difficulties in communicating

**(8) Students describe the actual course content.**

Six (6) students out of thirteen (13) have answered this question. (2) students answer by one word “good”, the other four students answer:

- not sufficient and we need it but the programme not helpful.
- we talking about CV and a resume and how to make a nice one.
- Bord (boring) not enough we need more than one hour in week.
- About informatics and all which have relation with computer.

The students who answer this open question have some confidence about their English despite making some mistakes and errors, but they trust their writing to describe the English course, and this manifests their interest in learning English, this does not mean that the other (7) students are not interested but writing might be one of their deficiency.

**(9) How students find their current English courses.**

The description	Students	Percentage
Favourable	9	69%
Unfavourable	4	31%

**Table 8.2: The Description of the Current English Course**

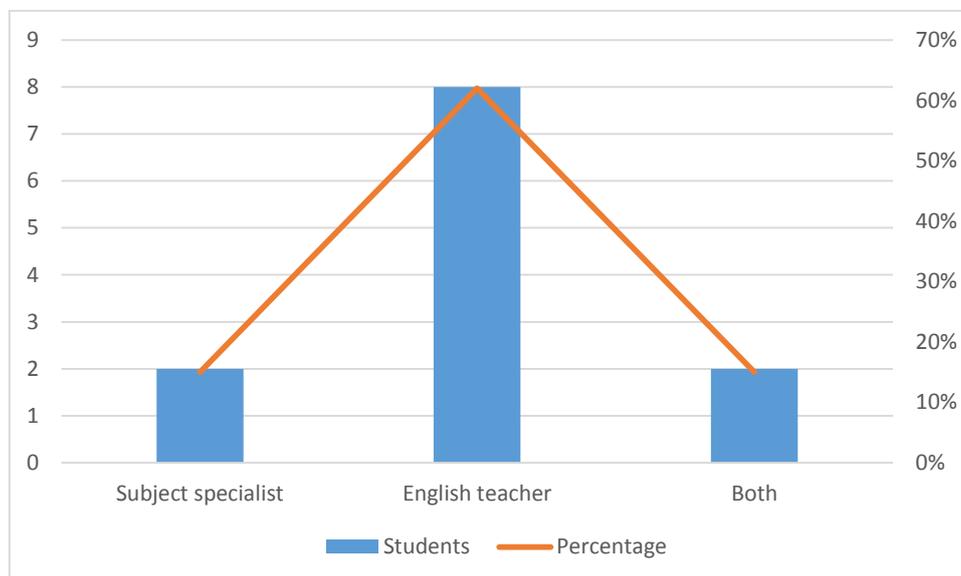
The table shows the attitudes of the learners towards the English course whether it is favourable or not favourable. (69%) of the informants find it favourable, while (31%) do not find it favourable, this means that about (2/3) of the students are satisfied with what they are taught and motivated, whereas (4) students are not motivated since they are not satisfied.

**(10) Students think English course would be better if taught by.**

By:	Students	Percentage
Subject specialist	2	15%

English teacher	8	62%
Both	2	15%

**Table 9.2: Recommended Teacher**



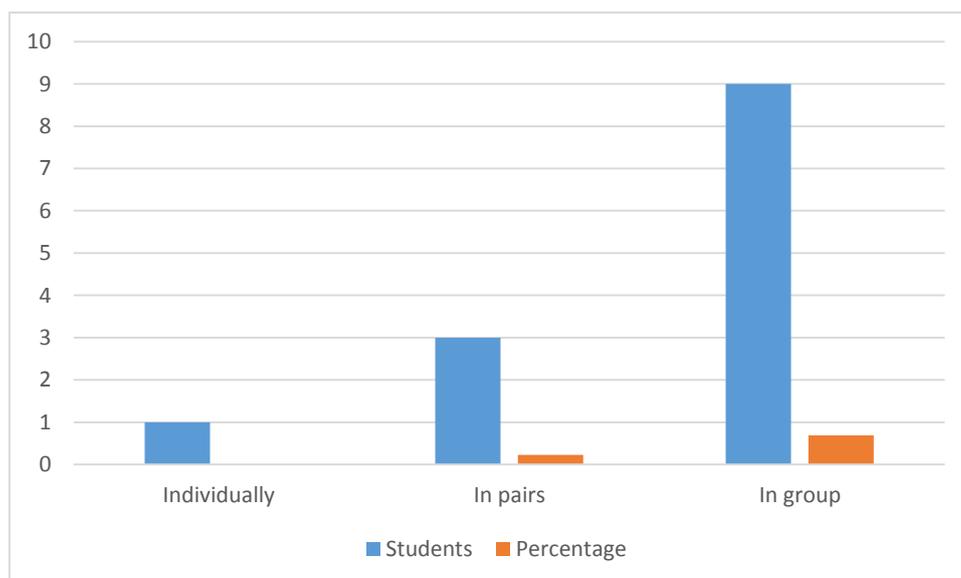
**Custom Combination Chart 1.2: Recommended Teacher**

The table shows that the students are in favour of being taught by a teacher of English with (62%) of the total informants, (15%) prefer the subject specialist, and (15%) see no difference between English teacher and the subject specialist, one student does not answer. This means that the students are more comfortable and feel secure with English teacher.

**(11) How students prefer learning activities.**

	Students	Percentage
Individually	1	7.7%
In pairs	3	23%
In group	9	69%

**Table 10.2: Learning Preferences**



**Clustered Column 3.2: Learning Preferences**

One student prefers the individual work, (3) informants (23%) prefer pair work, while the majority of them i.e. (69%) prefer working in groups, this is important for the English teacher to know his learners' preferences and needs to vary the tasks and types of activities since the learners have various interests and learning styles, another thing can be noticed is that the learners like to communicate within the English class and discussing in groups rather than doing individual work.

#### **(12) Students' suggestions to improve English courses?**

What can be noticed from the answers of the informants on this open question is the hesitation of the students since (7) students do not answer at all, (5) answer with one word 'no', one student answers as follow: "more than one hour in week we need lessons of speaking and oral activities". the question is left unanswered by (54%) of informants and this reveals that the students may be satisfied with the current lessons, or they cannot answer out of fear to make mistakes, as for the participants who answer with one word 'no'. the student who suggests additional hours for English lessons seems then to be at least intrinsically motivated and wants to learn English.

## **2.4 Teachers' Interview of the awareness of ESP Course Objectives and the Analysis**

The tool devoted for teachers is the structured interview, that involves 34 open and close questions, the department of Computer Science at Mostaganem university consists of 6 teachers of English, the researcher could only do the interview with three of them. It intended to examine their awareness of the ESP course objectives and their challenges when delivering that course.

The questions were targeting mainly the English language teachers' profile, the status of ESP as a concept and as a disciplinary field, the teachers' evaluation of the lessons delivered and of the students' level, and the challenges facing those tutors besides their learners' needs.

The teachers who were concerned with the interview were all graduated from English department: one teacher holds a licence degree in English, the other one is a master degree holder (sociolinguistics and gender studies) and the third one is a fourth year student (classical system), they are all part time teachers. All the three teachers have no ESP training, since they are not specialized in that field, and even their experience as teachers is not that strong. One of them has only two months teaching at the department, the other teacher has started teaching at the beginning of the academic year, and the third one was teaching English at private schools. The tutors find difficulties in students' motivation and so their consciousness, though the answers of the students reveals a great deal of these latter's awareness, and this refers to an interpretation that teachers themselves are less aware or they ignore their students' needs and wants, and this can be due to the lack of training and the teaching experience in general. Teachers have no problem with students' number since they are not numerous; they are two groups: 17 (SIG) and 16 (ISI). Teachers reply that they bring some modification at the level of materials and text used, and since there is no provided programme, teachers have the absolute freedom to decide on the materials and methodology as well. This can be seen as a helpful technique for a teacher who is well prepared to teach, i.e. a teacher who has a solid training in the field of EFL teaching in general, and in the field of English for Computer Science in particular, however the informants declared they do not have such proficiency, that makes it\_ giving the freedom in the course designing \_ a hindering point instead. Teachers think that their students are in need of grammar and language basis, besides as they claimed they need speaking skills and writing as well as vocabulary, these answers depend on the tutors guessing, since they reply they do no kind of evaluation or testing at the beginning of the

academic year, except for the exams of the semester, all the three teachers do no NA and even have no idea about the significance of the term.

Students do not ask for extra knowledge or practice; as teachers respond, this can be due to several reasons: either teachers do not give the students a space to express their problems or attitudes towards the lessons, or the students give no importance to the English language lessons, but through their answers on the questionnaire, students seem interested since they suggest extra hours, though some claimed that English sessions are boring. When dealing with the four macro skills, teachers answers reveals that they use the same pace and same tasks, the same questions repeated, teachers admit they use always scientific texts claiming that the helping tools are not available.

Teachers find also difficulties in the sources they use, since they are not specialized in the field of Computer Science, sources cannot be that easy to find, or to specify among many. And students find a lot of difficulty in studying the content subject, this can reflect on the teachers' proficiency in terms of facilitating. Teachers themselves find difficulty to limit the content subject to be dealt with, and they are not interested in students' area of specialism.

Though the various difficulties facing the teaching learning process, teachers evaluate the current courses as helping in the improvement of the English language of the students, and find the lessons interesting, in addition they claim that it would be better if it those lessons include both language structure and subject content. Teachers agree on the importance of varying the tasks, though they admit using the same types each time here is a sort of contradictory. If teachers claimed that materials are not available, and they are not enough trained or experienced in teaching, besides they feel their students are not interested and bored. How come that the lessons are successful?

They tend to teach General English and so English related to Computer Science, that may be the sole source of motivation for the students.

All the participants tend to concentrate more on the general grammatical notions, besides the lexical items related to Computer Science, then on grammatical structures related to the respective field.

The informants were asked to classify the four skills according to the importance, the speaking skill was ranked first to be followed by the reading skill, then both listening and writing were ranked third. Though they do not do NA, teachers ranking the skills importance

was similar to that of students ranking the four skills according to their needs and automatically their prominence.

The main reasons given by the participants; which make the fact that their work as English language teachers do not correspond to the level of achievement expected mostly, were as follow:

- They are part time teachers.
- They do not have a reliable experience concerning teaching in general and ESP in particular.
- Teachers are asked to work on particular areas that may not correspond to the learners needs.

These answers reflect the fact that English is taught with no clear objectives decided by the administration, and without studying the situation of the learners and their particular needs by teachers, in which these objectives should be designed to be reached.

## 2.5 Conclusion

The data that is collected from teachers and students reveals the situation of the EFL teaching and learning in the department of Computer Science at Mostaganem university in Algeria, and data is analysed afterwards to deduce the main problems facing teachers and students' attitudes towards the lessons of English language.

The method of triangulation helps as a link between the quantitative and qualitative data collected by the different tools, and the answers of teachers and students with the observation. Students are aware of the importance of learning English, especially that they have the opportunity to go abroad for further studies, so they are motivated and at the same time frustrated because the lessons they attend do not correspond to their needs, lessons that do not target their learning styles and preferences. Teachers on the other hand, intend to show a picture of a successful course design, but the reality and data collected, especially from the observation manifested an uncompleted image of the lesson with a lack of almost the important pillar of the ESP course design mainly the NA.

The issue that part time teachers and non-specialized teachers cannot be qualified to teach ESP is highlighted to suggest some solutions for the purpose of diminishing as possible as there can be the teachers obstacles and maximizing the learning process.



## Content

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## CHAPTER THREE

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### Discussion of the Findings and Suggestions for English for Computer Science Course Design



### **3.1 Introduction**

In this chapter, the researcher aims at discussing the findings of the data collected and analysed in the previous chapter, recommendation is suggested to provide solutions for the issues derived from this inquiry, there are some approaches chosen according to the situation of FLT in the department of Computer Science at Mostaganem university, that cannot be generalized for all universities and situations in Algeria since the research is done in certain circumstances that may have an impact on the results and reliability of the data collected.

### **3.2 Discussion of the Findings**

The research findings depended on three tools, that was dedicated for English language teachers and 1<sup>st</sup> year Master students at the department of Computer Science faculty. The students' questionnaire helped the researcher to elicit the students' attitudes towards English language lessons delivered in their department, and it aided as a tool to assess themselves and reveal their needs and wants and even to suggest for improving the teaching learning situation. Teachers interview aimed at describing the teaching of ESP and the problems facing those teachers, and to what extent they are qualified to teach ESP, not being specialized in such field. The observation meant to reflect on the results gathered from previous sources, and intended to give a more realistic and objective view on the situation of teaching and learning.

The population selected for this research is thirteen (13) 1<sup>st</sup> year Master students majored in (SIG) and (ISI), from the department of Computer Science, at Mostaganem university. In addition, three (3) English language tutors were put among this study to have a clearer view on the situation in this department.

According to the analysis of the data collected from teachers and students' observation, students' questionnaire and teachers' structured interview, the researcher finds that there is a close relationship between the various data gathered, in which the observation confirms the students' answers that they have a sort of motivation to learn English and they are aware of its importance and their needs. On the other hand, teachers are not that aware of their students' needs and learning preferences, they are given the freedom to design an appropriate course,

but since they are not specialized in such field, they are not motivated and they make no effort to do a NA. teachers find difficulties in learners motivation, their level in English language, and grammar, while they admit they did no skill audit at the beginning of the academic year nor placement test or any sort of evaluating their level, that is why teachers feel frustrated. And teachers who are not motivated to teach ESP cannot blame their students for not being interested, as Harding (2007, p.8\_9) claimed that: “the type of ESP learners who come to ESP are often demotivated by courses of general English. These learners have entered ESP courses because they expected that language-based work would not owe to practical or manual skills in lessons...”.

Teachers have no contact with teacher specialists. All these aspects can answer the question of **whether English language teachers are aware of their task at the department of Computer Science at Mostaganem university**, teachers are not aware of their task since they lack experience and not having any ESP training, and also having no contact with teacher specialist.

What are the learners' needs? This question seeks to deduce whether the students are aware of their needs, and if they are motivated to learn English and so to know if their specific needs are identified by their teachers. **The students' answers confirm the hypothesis in which learners need speaking and reading skills over listening and writing, they need to communicate in English and, they need also to read articles related to the subject area.** Students are aware of their needs but the lack of interest on the part of the teacher may have a defect on their motivation. The last question is: what are difficulties of the English language teachers? Teachers find difficulties in learners' motivation, their level in English, their mixed abilities. These difficulties and others can reveal a great deal of lack of proficiency on the part of teachers. Teachers did no ESP training before, teachers who lack experience cannot succeed at the designing of the specific course that needs specific category of teachers (English for Computer Science teachers in this case), (Richards, 2001) claimed that in the designing of language courses, it is essential to know the kind of teachers the programme and the objectives to be reached depend on. Despite having freedom to do that, designing a course is a crucial challenge for the GE teacher, since it depends on the specific circumstances that are never identical. By asking the question: do you meet teachers of the Computer Science institute to discuss and comment your courses and their content according to the whole programme of speciality? All the teachers answer that there is no contact, this can be due to

the lack of interest from both parts, and to the lack of awareness about the purpose of meeting teacher specialists.

In the department of Computer Science at Mostaganem university, ESP teaching situation reflects an absence of responsibility, and it calls for a decision to be taken for the purpose of changing the status of English language teaching.

To sum up, the findings of the data collected manifested a great deal of awareness of the importance of learning English on the part of the learners. On the other hand, English language teachers at the department of Computer Science department are not aware about the objectives of teaching ESP.

### **3.3 Academic and Pedagogical Recommendations**

Teaching General English at university is not that easy task for an English licence degree holder, moreover, it gotten very challenging to teach ESP that is more complicated, specific and it needs more commitment on the part of the teacher to do more research about the specific field. However, Algerian universities allow licence or master degree holders (in English) by their different majors (psycholinguistics, sociolinguistics, applied linguistics, literature ...etc.) to teach ESP in departments other than English, this is due to lack of teachers specialized and also because the administrations do not give importance to English classes who do not seem aware of the objectives of teaching English for the various majors at universities.

For this reason, this research is concerned with the issue of the delivery of ESP courses by GE teachers and what the potential requirements needed in this situation for better achievements are.

#### **3.3.1 Suggestions for Students' Needs Targeting and Motivations**

Nowadays, technology becomes a must for all, and teachers are not an exception. In fact, teachers are more in need to be updated with technology that has great role in the facilitation of their work in terms of information, material adaptation, sources and even consulting and collaborating with other teachers from all over the world. In this research that focuses on the difficulties of GE teachers in the delivery of ESP courses, the researcher intends to provide some suggestions for approaches and techniques to follow among many others.

### 3.3.2 The Need for ESP Training

There is no difference between the GE teacher and ESP teacher in terms of being researchers, and teaching at university requires doing all the time research and, being up to date, and expecting to teach ESP is not an exception. According to the data analysed of questionnaires of teachers and students and the observation, teachers have no ESP training since they are all licence degree holders and not yet specialized in a particular field, in addition they do not do Needs Analysis, and applying the steps leading to ESP course design can help the teacher as well as the students. Starting with the important procedure in which the course is built upon, NA, after recognizing the category of the learners, NA can provide the teacher with the needs, lacks and wants of his students. Then, the teacher can test the reliability of the data collected through testing, this can be done through different types of tests at the beginning of the course:

1. Achievement test: a test measures how much of language someone has learnt with reference to particular course of study or program of instruction.
2. Diagnostic Test: is designed to show what skills/ knowledge a learner knows/ doesn't. It may be used to find out how much a learner knows before beginning a language course.
3. Language Aptitude Test: measures a persons' aptitude for 2<sup>nd</sup>/ foreign language learning and which can be to identify those learners who're most likely to succeed.
4. Placement Test: designed to place students at an appropriate level in a program or a course.
5. Proficiency Test: measures how much of language someone has learnt, it is not linked to a particular course, but measures the learners' general level of language mastery.
6. Progress Test: an achievement test linked to a particular set of teaching materials or a particular course of instruction, they could be given at beginning of a chapter or a term.

The teacher then decides on principles concerning the content language, the methodology and also motivation. Setting aims and objectives is the next step, in which the teacher sets goals to move from the present situation towards target situation, it is an important step that some institutions forget about it or ignore, in fact setting the aims and objectives determines the next steps leading to a successful course design tailor made for computing students, students at Mostaganem university Computer Science department seem aware of the objectives as:

- To take part in oral discussions in English.
- To understand lectures on computing in English.
- To read and translate articles in your field of study in English.
- To pass exam.

Identifying learners' needs can help language teachers in the designing of the ESP course. The teacher plans lessons and after the delivery, he tries to evaluate the teaching learning process, the students' progress, the material evaluation, the teaching way, the frequent use of ICTs, the content, and the objectives reached. Material selection and development in ESP is of a great importance, as Hutchinson and Waters (1987) claimed it has to track four basic features: suitability for the proficiency level; these materials should be related to the field of students' interest, relevance to learners' needs; in which materials serves those learners' necessities, creativity in tasks/activities and discursive strategies; materials should be updated and authentic dealing with real life situations in the particular field, and stimulation of the target speech acts; they should motivate learners to use the language and practice it.

After that, the teacher decides either to continue with the same pace or substitutes for another course depending on the evaluation. After following the procedures of ESP course design, the teacher needs to reconsider his way of teaching with taking into consideration his learners' various learning styles and preferences, here are some techniques and approaches that may cope with the needs deduced from the data analysed of first year master students at the department of Computer Science at Mostaganem university. Why NA is important in the journey of ESP course design?

Needs Analysis tends to weigh the state of the knowledge of the learner, his proficiencies and deficiencies in a certain area. It is used to help professionals to study the learning situation and to build upon a successful course. NA has an important role in bridging the gap between the present situation and the target situation, i.e. between what the learner already knows and what he doesn't know and needs to know as well, target situation analysis is highly

important since it takes the stakeholders and employers' needs into consideration in the ESP course design that should meet their needs.

Cawley (2009, p.3) stated that NA arranges for various data that helps designing a tailor made course, they are mainly as follows:

- Impact: Insights about how education and training can impact the audience;
- Approaches: Knowledge about educational approaches that may be most effective;
- Awareness: of existing programmes and of gaps in available training to enable efficient use of resources;
- Outcomes: information about the current situation that can be used to document outcomes;
- Demand: knowledge about the potential demand for future programmes and textbooks;
- Credibility: that the programme is serving the target audience, an important part of communicating greater competence and professionalism to funding authorities who want to know a programme or textbook's impact.

All these points provide a strong package to design a suitable ESP course in which the gap between what does currently exist and what is needed to be reached at the end of the programme is filled.

NA helps to decide on the approach, method or the technique that suits a certain circumstance rather than another.

### **3.3.3 The Teacher as a Researcher Approach**

Depending on the analysis of the data collected, there has been noticed that the language teachers whom this research is built upon, they lack experience and knowledge about the various methods and approaches for teaching. And they need to pursue their task as researchers and do some research about their job being EFL teachers first, and as ESP practitioners currently.

In her book 'Doing Action Research in English Language Teaching', (Burns, 2009) laid stress on the importance of doing action research (AR) which is assumed to provide a method for testing and improving educational practices, and basing the practices and procedures of teaching on theoretical knowledge and research organized by professional teachers. At the

level of teaching and learning it provides a method by which teachers and students can explore and improve their own classroom practice.

There are various definitions of AR by many scholars:

- ‘self-reflective enquiry’ undertaken by participants in order to improve the rationality and justice of their own social or educational practices as well as their understanding of these practices and the situations in which these practices are carried out. (Carr & Kemmis, 1986, p. 220).
- the study of a social situation with the view to improving the quality of the action in it. (Elliott, 1991, p. 69).
- a flexible methodology, not merely in terms of being eclectic in research methods, but more fundamentally in needing to adapt to the social and political situation in which it is employed. (Somekh, 1993, p. 29).
- small scale intervention in the functioning of the real world and a close examination of the effects of such intervention. (Van Lier, 1996, p.32).

Scholars agreed that AR is an approach that provides the researcher with an insight about the teaching situation and problems that might be ignored or not noticed before applying for it.

*a self-reflective, systematic and critical approach to enquiry by participants who are at the same time members of the research community. The aim is to identify problematic situations or issues considered by the participants to be worthy of investigation in order to bring about critically informed changes in practice. Action research is underpinned by democratic principles in that ownership of change is invested in those who conduct the research. (Burns, in Cornwell, 1999, p.5)*

This approach can help EFL teachers at the respective department to recover the situation of English language teaching and learning as well, since it pushes to investigate in the real life problems that the teachers may encounter during their practices.

### 3.3.4 The Teacher as a Student Approach

Teachers of ESP courses at the department of Computer Science; at Mostaganem university, lack experience and knowledge about the field, that provoked demotivation to them and their students on top. Scholars as Anthony (2007) and Hutchinson & Waters (1987) recommended to invest in this situation for the purpose of widening their knowledge. As (Anthony, 2007) suggested that: “teachers of ESP courses can capitalize on their non-expert status in the target field, by adopting a so-called "teacher as student" approach to course development”(2007, p.9), this can be a common deficiency between GE and ESP teachers, so GE teachers who deliver ESP courses do not need to feel unconfident with this issue, but rather as Anthony believed it should be a challenging feature that can an ESP course be built upon; by sharing the same learners’ needs, in which the teacher puts himself in the student’s status being specialism interested besides being English teacher. And this can help the teacher to have a clear idea about his learners’ needs, then he can balance between language structure and content.

Teacher as student approach helps the teacher to benefit from his learners when interacting with them, and from the material selected. Hutchinson & Waters (1987, p.163) argued that:

*One final point to note is that, as with learner needs, teacher knowledge is not a static commodity. Many ESP teachers are surprised at how much knowledge of the subject matter they 'pick up' by teaching the materials or talking to students.*

Teachers do not have to hide their weaknesses, but rather to discuss them with his/her learners, so that to complement each other. Teachers need to feel as a part in the team and not as an authoritarian power or source of knowledge. Teacher as student approach calls for student centeredness, and it encourages learners to assess themselves and share knowledge among them and even with their language tutor. Following this approach, the teacher can easily recognize his learners needs.

*It is important that teachers do not try to hide their weaknesses, but instead, discuss them openly with students. In many ways, they are just another member of the team; they can learn from students, but also contribute to increased student understanding by explaining the methods and strategies they used during class preparation. (Anthony, 2007)*

### 3.3.5 The Eclectic Way

Any EFL teacher needs to consider his learners' various learning styles and preferences, needs, lacks and wants, each situation requires a certain method and technique to adopt, even with the same teacher and learners. Eclecticism is believed to be a way of teaching and not an approach in which the teacher can adopt and adapt from various methods, techniques and approaches, since there is an acknowledgment of the necessity of taking the students' various styles and individual needs into account, it becomes stimulating for an ESP teacher

*... there has emerged a general movement toward eclecticism of picking and choosing some procedures from one methodology, some techniques from another, and some exercise formats from yet another. This approach seems to us to represent a reasonable response from the practising teacher who is typically concerned, on a day-to-day basis, with whether specific procedures or exercises seem to 'work' well for particular group of students, rather than whether the lesson format might fit into some theory. (Tarone & Yule, 1989)*

For Tarone & Yule, being an eclectic teacher requires being well trained and being knowledgeable about the various methodologies and approaches so that the teacher can decide on the appropriate method for a particular task to reach a certain objective. What makes the eclectic way unique is that it depends on the circumstances in which the teacher and his/her learners are in; each situation requires a specific method and technique and even a particular task, it "involves a philosophy of local solutions to local problems" (Tarone & Yule 1989: 10).

The eclectic way does not merely mean choosing and adopting for the purpose of varying, but rather it needs to consider the atmosphere and the situation that a particular method can work well.

The actual situation at schools and universities requires adopting for the eclectic way, since learners have different learning styles and preferences, classes have mixed abilities and students have various attitudes towards the foreign language. The teacher needs to focus on his learners' different types of motivation so that to decide on what to teach and even on what not to teach.

### 3.3.6 The Observation

Observation is a tool that helps the teacher when dealing with any approach in teaching. Eclecticism, and since it provides the teacher with the adequate knowledge about the learners' varying needs and circumstances; in order to choose and pick the right and appropriate method and technique, it is important to observe every aspect that may have an impact on the ESP teaching and learning. Observation in Action Research (AR) is distinct from that is done by teachers usually, as Burns (2009:57) claimed: "it is much more self-conscious", because it is:

- focused: you are seeking specific information about something, rather than looking in a general way;
- objective: you are aiming to see things as they really are and not just through a personal, subjective or intuitive lens;
- reflective: you are observing in order to see things from a position of inquiry and analysis;
- documented: you deliberately make notes or records of the information;
- evaluated and re-evaluated: you check out your own interpretations again later by yourself or collaboratively with others.

Observation helps to see things differently or more consciously as Burns (2009:57) argued: "it is to do with 'making familiar things strange', or in other words, seeing things that are before our eyes in ways we haven't consciously noticed before". Through asking reflective questions, observation becomes more reliable and beneficial.

*It is about asking self-reflective questions like: What is really happening here? What role(s) am I taking up in my class? What role(s) are my students taking? What happens if I change the set-up of the classroom in some way? What happens if I communicate differently with my students? What happens if I use my materials in a new way? What will my students do if I give them more choices about class activities? Burns (2009, p.57)*

### 3.3.7 Collaboration with Teacher Specialists

One solution to the problem of who should teach an ESP course, often quoted in the literature, is to adopt a team teaching approach, whereby a regular English teacher (possibly with experience of ESP teaching) works in tandem with a field specialist, deciding course goals, selecting suitable materials, and perhaps even teaching classes together. (Dudley-Evans, 1998) advised teachers not to feel field specialists as superior to them, or to let them be guided or dictated by them in terms of ESP course designing.

Teachers need to know firstly the aim of the whole syllabus. Despite the fact that 1<sup>st</sup> year learners at the Computer Science department study various subjects, the aim is to gather all these subjects under one sole result, that is a successful learner. So subjects like English is not an exception, and it needs to be considered important as the other subjects. Collaboration between teacher specialists and language teachers is absent in this department, that might be dangerous.

*... [subject-specific work] may involve specific collaboration so that there is some integration between specialist studies or activities and the language. This might involve relating the reading component of an EAP course to the actual content of a subject course by exploiting texts in English that present additional relevant material, in other words the subject teacher provides the 'carrier content' for the English course. (Dudley-Evans & St. John, 1998, p. 15-16)*

### 3.4 Limitations

Despite that this research can play an important role and a source in the improvement of ESP teaching situation at the department of Computer Science, the population selected can reflect solely the status of ESP teaching in the Computer Science department at Mostaganem university for the academic year: 2016/2017, and it cannot be generalized to cover all departments of Algeria. Time constraint was an obstacle for the researcher not to interview all language teachers at the department, besides that teachers complaining about the time devoted

for the interview. The teachers' collaboration with the inquiry can be described as of little help as compared to students' cooperation that was really helpful.

Students and teachers' circumstances could intervene in the answers that could not reflect the real teaching/learning situation. We could not address all the participating groups that intervene in the process of ESP course design, as the administration and the subject specialists who are of a great importance.

Observation and interview tend to offer more objective data as compare to the questionnaire in which the circumstances and even the mood can have an impact on the answers and on being honest and serious as well.

### **3.5 Conclusion**

In conclusion, this the findings and the analysis reveal that the striking issue of this research that is the teachers' challenges in ESP course designing and its delivery can be solved by following a well ESP training; being a researcher after all. To gain a linguistic proficiency, the tutor can follow a teacher as a student approach to feel the learners' situation and their needs. The learners have the opportunity throughout their learning carrier to go abroad for further studies, and this can motivate them besides teachers' role to target their needs and show caring about their particular necessities.

## General Conclusion

The research has intended to investigate the challenges facing the English language teachers when providing an ESP course for the students at Mostaganem university; the Computer Science department, through several definitions of the term ESP for scholars and practitioners, namely: Hutchinson and Waters (1987), Robinson (1991), Strevens (1988) and Dudley-Evans and St John (1998). And through viewing models of ESP course design, we intended to apply those aspects on the current English subject at the respective department to see what matches and what does not.

Through the data gathered and analysed, we have concluded that the situation of the teaching/learning does not serve the delivery of a successful ESP course designing. English language tutors at the department of Computer Science department, who were invited to answer an interview, they were not conscious about the objectives of teaching English for Computer Science students and have no idea about the term ESP, and they teach without interest because; as they claim, their students are not interested in the subject. On the other hand, the learners were aware of their needs of English language and its importance for them, since some of them have the chance to be sent abroad for further studies, that can be considered the sole source of motivation, because they claim the lessons are not stimulating enough. This situation can be improved through various ways. There should be a complementarity between the English language subject and the other subjects towards achieving a better result; that is raising a good citizen after all, collaboration between teacher specialists and language teachers then can reveal a great deal of important points to be tackled together. Conducting a needs analysis can direct the students as well as the teachers to focus on the needs the course is to be built on. Besides, it provides the teachers with a clearer view of the students various learning styles and preferences that matches with the eclectic way. Teachers need to be well trained in ESP teaching so that they can be eclectics and aware enough about their learners' needs, wants and lacks.

The administration needs to allocate more time for English subject that is needed to be focused on. It needs also to assign more qualified teachers for the task that is not less important than of the other subjects. The designing of an ESP course for Computer Science students requires a linguistic proficiency on the part of the teacher. A teacher being a researcher helps to be more up to date and flexible with the current necessities, as well as

being interested as a student in a certain field can enclose the area to do research on, so that learners can feel at ease and secure with a teacher who is knowledgeable about their field of interest.

The learners asked to devote more time for English subject being aware of its importance in their current studies and their post-graduations, that should be taken into account by both administration and English language teachers.

The issue in hands; that is the inadequacy of ESP teachers' proficiency at the Computer Science department at Mostaganem university needs further inquiries by digging deeper in order to agree on solutions to help tutors in this field.

This research's results pave the way for further investigations, as the role of the administration in the assignment of qualified teachers for the respective task of delivering A tailor-made ESP course for a particular category of learners in particular time and circumstances.

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## APPENDIX 1

### STUDENTS' QUESTIONNAIRE

1. How many years have you studied English? كم سنة وانت تتعلم الانجليزية؟

The years	
...≤7 years	
7<...≤10 years	
... > 10 years	

2. Please indicate your English language skill in: قيم مستواك الحالي فيما يخص

التالي

	High عالي	Intermediate متوسط	Low ضعيف
Reading			
Writing			
Speaking			
Listening			

3. Are you interested in studying English? هل انت مهتم بتعلم اللغة الانجليزية؟

Yes

No

4. If yes, why do want to study English? ان كانت الاجابة نعم, لماذا تريد ان تتعلمها؟

- . To take part in oral discussions in English لاستعمالها اثناء المحادثات باللغة الانجليزية
- . To understand lectures on computing in English لفهم دروس الحاسوب باللغة الانجليزية
- . To read and translate articles in your field of study in English لترجمة مقالات في مجال التخصص بالانجليزية
- . To pass exams لاجتياز الامتحان
- . Other (specify)

5. what areas do you think you need English for? ما هي المجالات التي تعتقد انك تحتاج فيها للغة الانجليزية

- . In your post-graduate studies دراسات ما بعد التخرج
- . In your future works or career في مجال عملك في المستقبل

. In everyday life في حياتك اليومية

6. Classify the skills according to your needs: 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>. رتب العناصر حسب احتياجاتك

Listening	speaking	reading	Writing

7. Do you find difficulties in? (you can cross(x) more than one item)  
هل تجد صعوبة في: يمكنك ان تختار اكثر من عنصر واحد

- b. Speaking . Listening  
 . Writing . Reading  
 . Grammar . Vocabulary  
 . Pronunciation . Communication  
 . If you have any other lacks specify

8. Describe the actual course content. صف محتوى دروس اللغة الانجليزية.

.....  
 .....

9. How do you find your current English courses? ما تقييمك لدروس اللغة الانجليزية

- . Favourable . Unfavourable

10. Do you think English course would be better if taught by: هل تعتقد ان اللغة الانجليزية تدرس افضل من طرف

- . subject specialist . English teacher . both

11. How do you prefer learning activities? كيف تفضل الانشطة التعليمية?

- . Individually . in pairs . in groups

12. Do you have any suggestions to improve English courses?

هل لديك اقتراحات حول تحسين دروس اللغة الانجليزية?

.....  
 .....

## APPENDIX II

### TEACHERS INTERVIEW

**1. Which degree do you have?**

Licence                      master                      PHD                      others

**2. What is your field of specialism?**

GE teacher                      ESP teacher                      teacher specialist

**3. How long did you teach in Mathematics and Computer Engineering Department?**

**4. Did you have any training before teaching?**

Yes                      no

**5. Please note below the time table for teaching English.**

	8h-9h30	9h30-11h	11h-12h30	12h30-14h	14h-15h30	15h30-17h
Sat						
Sun						
Mon						
Tues						
Wed						
Thurs						

**6. Do students attend English lectures compulsorily?**

. Yes                      .No

**7. Do you find difficulties in managing the class with :**

- a. Students' number
- b. Group work
- c. Motivation
- d. Consciousness & awareness
- e. Other (please, specify) ...

**8. Do you use the materials/texts :**

- a. as they are
- b. bring some changes (length, language complexity,...)

**9. Is there a programme provided by the department?**

. Yes                      . No

**10. If yes, Do you bring modifications to the established programme (adding or deleting sections)?**

**11. If it doesn't cover their needs, what does it lack?**

**12. What do you think are the learners' needs?**

**13. Do students solicit extra knowledge or practice?**

Yes    No

**14. If you deal with Grammar, what kind of tasks do your learners perform?**

**15. If you deal with Writing, what kind of tasks do your learners perform?**

- a. Dictation
- b. Word order
- c. Sentence combination
- d. Copying texts word for word
- e. Making lists of items, ideas, reasons, etc.
- f. Others: .....

**16. If you deal with Speaking, what kind of tasks do your learners perform?**

- a. Repeating
- b. Role-plays
- c. Oral presentation
- d. Answering verbal cues
- e. Interactive conversation
- f. Others:





- c. You do not really understand the needs of the students imposed by the specific field.
- d. There is not any collaboration between the language teacher and the teachers of specific field.

**34. What are your suggestions to improve the situation of English teaching to students of Mathematics and Computer Engineering?**