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The Need for Teaching Effective ESP Courses for Medical Students in Algeria

The University of Sidi Bel abbes as a Case Study

Thesis Submitted to the Department of English in Candidacy for the Degree of "Doctorat en Sciences" in ESP

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Dedications

To my parents, my wife and my two little sons: Mohamed Heythem and Wail.

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Abstract

Learning English for academic studies and professional purposes is one of the major demands of globalisation; therefore, Teaching English for medical students in Algeria has become more than a necessity. In this context, the present research aims at investigating the needs of the medical learners in the use of English for specific purposes at the faculty of medicine in the University of Sidi Bel Abbes. It is meant to ask for implementing English in the medical field and designing effective ESP courses for medical students who expressed their urgent need to learn the language. The aim of such types of courses is to prepare the learners to handle any situation in specific context. So, it is imperative for curriculum developers and syllabus designers to design effective ESP courses which help the students in their future academic studies and real life situations. Thus, needs analysis in the relevant field can play a major role to make medical English learning more successful. To carry out this study, three main tools of research were relied on to collect the necessary data. These include a questionnaire submitted to one hundred fifty students of the medical faculty and another one submitted to five ESP teachers who are supposed to know more about medical students' lacks in English, added to an interview with the Dean of the medical faculty of Sidi Belabes University. On the whole, the findings revealed: First, the nonexistence of real ESP courses for medical students in the field and the absence of any kind of training for the so-called ESP teachers in the medical faculty. Second, the participants showed a remarkable weakness in general English competence, let alone ESP. Third; they need to develop the four skills all together ranking the interactive skills such as: listening and speaking of prior importance. Fourth, any attempt to design an ESP course for medical students should be made on the basis of analysing students' language and learning needs. Accordingly, based on the results obtained, it is of great importance to suggest some efficient measures and practices to be implemented to ESP instruction in the Algerian medical faculties so as to reach teaching quality, course effectiveness and cope with students' target needs.

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List of Acronyms

EAP English for Academic Purposes

EBE English for Business and Economics

ELT English Language Teaching

EMP English for Medical Purposes

EOP English for Occupational Purposes

ESP English for Specific Purposes

ESS English for Social Sciences

EST English for Science and Technology

GE General English

LSA Learning Situation Analysis

NA Needs Analysis

NESC Non English Speaking Countries

PSA Present Situation Analysis

TSA Target Situation Analysis

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General Introduction

It is generally agreed that English has become the international language of science and technology. This enhances a big number of researchers and scientists to learn it so as to have access to the different scientific documents and references. The medical field, which seems to be the most concerned domain with the latest scientific and technological developments, is, undoubtedly, in great need to facilitate access to information and research, which is mainly available in English. Therefore, the teaching of such a language for medical students appears to be more than a necessity for either academic studies or professional purposes.

Despite the importance of English for Specific Purposes courses for students in Algeria, especially medical learners, there have been very rare studies that generally and specifically examine the English language needs of medical students. Thus, the major concern in the present research is to emphasize the need of an English programme for medical students in the different Algerian faculties of medicine. Yet, the implementation of such a programme requires lots of efforts, and needs the contribution of the administration, the medical staff and both the teachers and the students.

In fact, medical students and professional doctors do not only require English to read and understand documents, but also write articles and participate in international conferences, where English is the most dominant medium of interaction. However, several studies show that most of the Algerian medical faculties offer no English courses to medical students, who are in urgent need to learn the language for either academic or future occupational purposes. Even if some faculties do, they are no more than general English courses, which do not really satisfy the students' specific needs in communication and social interaction within the medical field. Therefore, the researcher tries, throughout this study, to ask for offering English courses to students of medicine referring to the methods, materials, linguistic research and improving the training of teachers. Thus, the designed immediate English courses are directly related to the language needs of

medical students, and at the same time provide a practical framework for the ESP teachers who should equip their learners with the necessary tools to communicate.

Several studies show that ESP learners and medical ones, in particular, encounter difficulties in interactive skills such as listening and speaking. They generally have problems in understanding native speakers who speak too fast in seminars and conferences. They also fear the act of writing which is another handicap for medical students. They lack the techniques of writing research papers and articles in addition to the difficulty to respect grammatical structures and forms.

Designing a curriculum which will match the needs of the learners and help them meet the goals of a language course can best be achieved by starting with a comprehensive needs analysis. The latter explores what will motivate learners to acquire language in the most efficient way. This plays a, particularly, crucial role in English for Specific Purposes curriculum development.

Accordingly, the purpose of this study is to identify the specific academic English language students' needs of the Medical Faculty in Sidi Bel-Abbes University. Thus, in order to design an appropriate ESP curriculum for those students, it is important to identify their needs by considering the opinion of the administrators, enrolled students, ESP teachers and content-area instructors. The results of the present study can be crucial for designing the curriculum and developing materials not only for the medical students and instructors at Sidi Bel-Abbes University but also for other ESP course learners and instructors in EFL medical contexts worldwide.

Generally speaking, the present work aims at providing a description of the linguistic needs and perceptions of medical students and faculty members in the University of Sidi Bel-Abbes in Algeria. To achieve this purpose, four main points will be tackled in detail under the following headings:

- 1- The necessity of using English in the medical field.
- 2- Evaluations of medical students' proficiency in English.
- 3- Needs analysis of the English course for the School of Medicine.
- 4- Suggestions for setting an English syllabus for the School of Medicine.

General Introduction

Accordingly, this research sheds light on the actual situation of medical English in Algeria, trying to answer the questions below:

- 1- What is the current situation of English language teaching in the medical faculty?
- 2- Does the faculty offer any ESP courses for the learners? If no, is it really necessary to implement an effective English curriculum for the medical students?
- 3- In case students learn English, how do they evaluate their current English ability?
- 4- What are the students' linguistic needs to achieve an effective proficiency in English?
- 5- What language skills are of prior importance to medical students wishing to learn English either for future academic studies or professional career?
- 6- How to set a well-designed English course for the School of Medicine at Sidi Bel Abbes University?

To answer the questions raised above, the researcher puts forward the following hypotheses:

- 1- English language is not considered an important subject for teaching in the medical faculty let alone ESP.
- 2- Designing ESP courses for the medical learners is more than a necessity.
- 3- Medical students have at least an intermediate level of English for they were bright learners during their secondary school education.
- 4- Medical students are quite competent in General English but need more efforts to develop their ESP competencies.
- 5- More emphasis should be put on developing students' competence in the four language skills.
- 6- Needs analysis is "the corner stone" to any attempt to diagnose the students' linguistic needs in English. Thus, identifying the real students' needs is the starting point to an effective ESP course for the school of medicine.

As stated before, the subject under investigation is conducted at the faculty of Medicine of Sidi Bel-Abbes University; one of the main prominent universities in Algeria. Both quantitative and qualitative approaches were adopted to produce a more accurate analysis of the data. Hence, the method used to carry out this study is a combination of a questionnaire survey and a structured interview. The former concerns two kinds of population such as: medical students and their ESP teachers. The latter concerns the dean of the medical faculty. The first questionnaire includes a number of close-ended and open-ended questions to medical students based on Hutchinson and Waters' checklist to collect quantitative data. It is translated into French, piloted and modified according to feedback from medical students who are in urgent need for learning English. The choice of this instrument as a tool of research for the present investigation is because it is considered the most appropriate means to identify the learners' lacks in English and reveal their real needs in the language acquisition. It gives a score which is assumed to define the level of knowledge of the learner and diagnose specific strengths and weaknesses as well as measure the learner's achievements. It also enables teachers to evaluate the students' abilities to organize, integrate, interpret material and express themselves in their own words. The second questionnaire is submitted to a group of ten ESP teachers working in the same medical faculty where learners are studying. The structured interview is conducted in the dean's office and contains a number of questions that keep in view the objective of the study, content and material development, emphasis on different language skills and the needs of the learners.

As far as the structure of the present study is concerned, it is divided into four main chapters. The first one deals with the literature review through which much talk is about the field of ESP and the main principles of effective ESP course design as well as the different approaches and theories of successful ESP teaching. It also sheds light on English for Science and Technology (EST) which is, indeed, one of ESP subdivisions. The focus on EST is done on purpose for it can be categorized, in turn, into other types; English for Medical purposes (EMP) is just one of them. In this respect, the researcher devotes an important part of this study to tackle the field of medical English through referring to its characteristics and the different methods of EMP teaching.

The second chapter gives a survey of the English language teaching in Algeria and discusses the situation of ESP in the medical faculty of Sidi Bel-Abbes University. It also reveals the reality of ESP teachers' training and the actual teaching methodology in ESP classes of the Medical Faculty. Another section of the concerned chapter is reserved for depicting the major objectives of teaching medical English referring to English for academic purposes and the one for occupational purposes. It should be noted, at this level of investigation, that although the researcher takes the department of Dental Medicine as a sample of study, he does not hide the fact that the two other departments of the faculty; namely the department of Medicine and the one of Pharmacy, are not much far from the same attitude towards teaching English in general and ESP in particular in the university. The teaching of ESP is still at its infancy in the Algerian medical field and English has not yet reached that advanced status to conquer French language which is still regarded as the most widely used medium of instruction among medical learners and health professionals. The last part of the present chapter explains the research methodology design through enlightening the choice of the method, the setting, the participants and the selection of the convenient instruments of research that may serve better the objectives of the concerned work. Finally, the researcher closes the present chapter with stating the major limitations of the study.

The third chapter is generally practical and deals with data analysis in detail. The researcher shows the findings, analyzes the results and interprets the participants' perceptions towards taking efficient ESP courses. This is done through a deep qualitative and quantitative analysis of the three tools of research used in this investigation; the students' questionnaires, the ESP teachers' questionnaires and the dean's interview. The procedure aims at answering a number of questions rose previously about different sides of ESP teaching/ learning.

The fourth chapter is devoted to draw appropriate conclusions and propose effective recommendations on the basis of the theoretical discussion and the findings obtained in the previous chapters. It is an opportunity to suggest some pedagogical practices and ask for the implementation of real effective courses in the Algerian medical faculty. This is, undoubtedly, done through determining the

General Introduction

responsibility and the role of all the concerned members of the medical community; learners, teachers and even decision makers and curriculum developers.

Chapter One

Literature Review Related to ESP

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1.1- Introduction

The need for English as a professional language in medicine is nowadays beyond doubt. In fact, scientific literature and the internet are just two concrete examples that reveal the necessity for understanding and expressing ourselves in written and spoken English. There is no exaggeration to say that unless we know enough English to read the medical literature, it will be almost impossible to keep up to date with medical advances. Therefore, English is regarded as a compulsory subject at any medical school.

In this respect, many English language courses in academic settings are based on the principle that language should be related to the purpose for which students are expected to use it after their studies. An ESP course for medical students intends to help them study their subject matter and continue their medical studies in the future. That's why English plays a very vital role in the medical field for the fact that students have not only to read medical textbooks and professional journals which are mostly written in English but also participate in international conferences and write correct medical reports. However, this cannot be achieved unless medical learners are offered English specific courses which seem to be beyond reach in the Algerian university.

This purely theoretical chapter consists of four main sections which are organized under the following headings: English for Specific purposes, ESP Course Design Components, Syllabus Design and Curriculum Development, and finally Medical English. They are, indeed, interrelated and lead to achieve effective ESP courses for medical students in Algeria.

First, much talk is about the major issues related to English for specific Purposes referring to its objectives, characteristics, origin, similarities and differences with General English .Then, a special focus is put on English for Science and Technology (EST) which is regarded as a bridge between ESP and English for Medical purposes (EMP).

Second, the fact of designing effective ESP courses for any discipline is certainly based on describing language, i.e. the way in which the language system is analyzed for the purpose of learning. However, the image could not be clear enough if one

does not depict the notion of learning theories that aim at achieving successful learning. Finally and before closing the present section, the researcher discusses needs analysis which is considered as the corner stone of any course design.

Third, it is very crucial to shed light on syllabus design believing that it is a direct outcome of identifying the learners' needs. Here, much focus is put on clarifying the various kinds of syllabus.

Finally, and in order to limit the scope of the present study, the last section tackles the core of this investigation and looks specifically at English for Medical purposes which is, indeed, one of ESP's sub-divisions including the importance of teaching English in the medical field and exposing the most efficient methods of teaching EMP.

1.2- English for Specific Purposes

The first section of this chapter, as mentioned before, is devoted to discuss all the literary and practical definitions of one of the most important headings of this research namely: English for Specific Purposes.

1.2.1- ESP Definitions and Characteristics

Although ESP as a discipline has existed for more than decades, there still has been a considerable debate about its exact meaning. In this respect, Yassin (1999) points out: "It would not be possible to give an accurate and precise definition of ESP as it is by its very nature an interdisciplinary area of enquiry"

However, to grasp the real meaning of ESP, one should consider many aspects such as: the characteristics of ESP, the learners 'age and the time of learning, the purposes of the programme and the objectives of the courses, the materials and the methodology. These make it impossible to give a universal acceptable definition of ESP. Nevertheless, Hutchison and Waters (1987) regard ESP as an approach to language teaching where decisions as to content and method are centred on the learners' aim from learning.

For John Munby (1978): "ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learner".

With regard to Mackay and Mountford (1978), English for Specific Purposes is: "A restricted repertoire of words and expressions selected from the whole language because that restricted repertoire covers every requirement within a well defined context, task or vocation".

However, Mc Donough (1984) thinks that ESP is a focus of language teaching activity which certainly has its own range of emphases and priorities. He adds that ESP is a kind of language teaching activity.

Dudley-Evans and St. John (1998), have modified Strevens' (1988) definition and define ESP in terms of 'absolute' and 'variable' characteristics.

A- Absolute Characteristics

- 1. ESP is defined in terms of the learners' specific needs.
- **2**. ESP makes use of underlying methodology and activities of the discipline it serves.
- **3**. ESP is centred on the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genres appropriate to these activities.

B- Variable Characteristics

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

The above definition reveals the absolute characteristics that can be found in any field of ESP, then, within the variable ones; the changes from one branch to another can be noticed in ESP which has witnessed an amount of affecting factors which contribute tremendously in the rise and development of this new discipline

1.2.2- The Rise and Development of ESP

As mentioned before, English for Specific Purposes is a new field in the world of language teaching. This new discipline is concerned with designing courses which meet the specific needs of the learners in their academic and professional settings. It is characterized by involving teaching/learning of English for a clearly unique and identifiable goal, using specific materials related to that goal. It is more concerned with the learner as an individual. It gives great importance to practical outcomes.

"The main concerns of ESP have always been, and will remain, with needs analysis, text analysis, and preparing learners to communicate effectively in the tasks prescribed by their study or work situation". (Dudley- Evans and Jo St John, 1998).

The emergence and development of ESP was, indeed, due to three main reasons such as: Economic conditions, linguistic factors and psychological needs. So, how did these interrelated elements affect the rise of ESP as a new discipline in the field of English Language Teaching (ELT)?

1.2.2.1- Economic Reasons

Technology and commerce were two major factors behind the emergence of ESP. In fact, they did not only contribute to the progress of humanity but they also gave birth to an international language which could create a new generation of learners who knew specifically why they were learning a language." *Situations where the student has some specific reasons for wanting to learn a language*" (Harmer, 1983). Thus, English which was the language of USA, the great powerful country in the world after the First World War, could serve better for that goal.

This is on one hand; on other hand, the World Oil Crisis of the early 1970's revealed the importance of English as a language of knowledge especially among the rich countries. Therefore, "English suddenly became big business and commercial pressures began to exert an influence" (Hutchinson and Waters, 1987)On the whole, the general effect of this development made the

language teaching profession a necessity not to deliver the required goods but also to express the needs, wishes and demands.

1.2.2.2- Linguistic Factors

The second key reason cited as having a tremendous impact on the emergence of ESP was a revolution in linguistics. The latter could be easily explained through the shift from describing the features of language by traditional linguists to the focus on the way in which language is used in real communications. This new attitude towards English helped Hutchinson and Waters (1987) to conclude that spoken and written vary. i.e., English may change according to the context in which it is used. That's why the late 60's and the early 70's witnessed many attempts to describe English for science and technology.

1.2.2.3- Psychological Needs

The final reason Hutchinson and Waters (1987) cited as having influenced the emergence of ESP was rather psychological. Here, more attention was given to the ways in which learners acquire language and the differences in the ways language is acquired. In other words, learners were taught to use many learning strategies and different skills to express different needs and interests. As a result, the learners 'needs became as necessary as transmitting the linguistic knowledge. This paved the way to what was later called learner-centred approach.

1.2.3- ESP and General English

General English (GE) and English for Specific Purposes are two branches of English Language Teaching (ELT). Certainly, there are many similarities between the two mentioned ELT sub-divisions but undoubtedly there is much difference too.

To start with, General English (GE) mostly refers to the English taught at primary or secondary schools with an immediate objective for exams. According to Mackay and Mountford (1978), General English is generally taught with a general educational aim in mind. For him, if ESP is associated to needs analysis that aims to determine exactly what learners need to learn English for, one cannot assume that GE has no teaching aims.

However, Hutchinson and Waters (1987) stated that what distinguishes ESP from General English is not the existence of a need as such but rather an awareness of the need. Here lies the distinction of age that is mostly assumed that GE is taught at primary and secondary schools and ESP is mostly taught at the tertiary level because as stated by Mackay and Mountford (1978): "Inevitably what is taught to primary and secondary level children is not a communicative knowledge of how the syntactic and lexical rules of English operate."

In fact, GE is taught for different social or cultural reasons without a directed communicative objective. Anyway, is GE really different from ESP? Hutchinson and Waters (1990) say that in theory nothing, in practice a great deal. Besides the fact that it is not only ESP that has a specifiable need because all EFL enterprise has special aims and needs; the reason why one could argue that ESP is a learner-centred approach to need analysis.

Moreover,

"...the only practical way in which one can understand the notion of special language is a restricted repertoire of words and expressions selected from the whole language because that restricted repertoire covers every requirement within a well-defined context, task or vocation. (ibid:4)

Yet, in this sense, Mackay and Mountford (1978) claimed:

"However, such restricted repertoires are not languages, just as a tourist phrase book is not a grammar. Knowing a restricted 'language' would not allow the speaker to communicate effectively in novel situation".

The restricted repertoires are often analogous to ESP in the sense that the different branches to ESP cover different linguistic properties, lexical items and sentence structures but the syntax is similar to GE. Hence, GE and ESP are the same language with different linguistic structures.

What we have is the same language employed for similar and different uses employing similar and different usages. (Ibid: 5)

All in all, it is usually agreed on that ESP learners have already acquired some linguistic competence in the target language. It is often assumed that ESP students

will not be beginners but will have already studied GE for some years. (Robinson,1991).

Furthermore, Widdowson quoted Basturkmen (2006) made a remarkable comparison between general ELT and ESP. For him, General ELT distinguishes between teaching *aims* and *objectives*. The former referred to the eventual target behaviors of the students whereas the latter referred to the pedagogical means hoped to enable the students to achieve the eventual target behaviors.

The aim of General ELT is to provide learners with general language capacity, i.e. it enables students to solve communication difficulties that they face after finishing the language course through a wide range of strategies and means. On the contrary, the aim from ESP courses is to provide learners with a restricted set of language competencies that may help in specific target situation. As a consequence, ESP courses are not offered for the sake of facing all communicative situations.

To end with, GE is considered as the starting point of any ESP discipline. That's why any ESP learner is required to be equipped with much general language competence to be successfully involved at any ESP course

1.2.4- Types of ESP

Researchers such as Dudley-Evans and St. Johns (1998), and Strevens (1988) divided ESP into two main branches: English for Occupational Purposes (EOP) and English for Academic Purposes (EAP). Although Hutchinson and Waters (1987) kept the same division in their ELT tree, they stated that the distinction made between EAP and EOP is not definite for the simple fact that learners can study and work simultaneously. They also suggested another division of ESP according to the learners' specialized area. So, they founded EST (English for Science and Technology, EBE (English for Business and Economics) and ESS (English for the Social Sciences).

With regard to English for Medical Purposes, it is categorized both as EAP and EOP for the fact that Medical students need to read textbooks and articles and write essays. This can be considered as EAP. On the other hand, doctors need English to prepare papers, participate at conferences, and, speak it in speaking English country

or interact with patients. This type of English can be classified as EOP. In total, the diagram below shows the categories and subcategories of ESP.

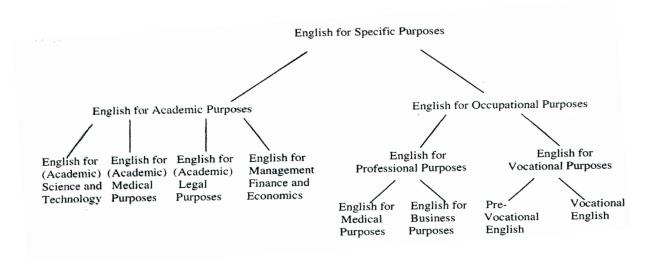


Figure 1.1: The Categories and Subcategories of ESP (Dudley Evans, T. and ST. John, M (1998)

To conclude with, the previous section dealt with the field of ESP which can be categorized into three main branches such as: English for Business, English for Social Sciences and English for Science and Technology (Hutchinson and Waters, 1987)

1.2.5- English for Science and Technology

English for Science and Technology is a branch of ESP. It is one of the English teaching approaches for students who learn science and technology. The major concern of EST is to teach students English in relation to what they need in the scientific and technological field. According to Dudley- Evans and St. John (1998):

"English for specific purposes, and consequently (EST) which is a branch of the former, is centered on the language appropriate to the activities of the discipline it serves in terms of grammar, lexis, register, study skills, discourse and genre".

In fact, many scholars think that the emergence of ESP is mostly due to a great demand of scientists, the reason why English has become the language of science and technology. In this context, Kennedy and Bolitho (1984) stated:

"Much of the demand for ESP has come from scientists and technologists who need to learn English for a number of purposes connected with their specialism."

Generally speaking, there is no a clear-cut line between ESP and EST, but rather a meeting point being the satisfaction of the learners' specific needs. Moreover, the new trend of English for science and technology serves up EST learners with the aspects (grammar, lexis, discourse) that mainly characterize the language of science.

1.2.6- Describing EST Discourse

English for Science and technology is one of ESP subdivisions. It has a specific discourse which is largely related to its field. Marsh (2002) defined discourses as:

"Frameworks for thought and action that groups of individuals draw upon in order to speak and interact with one another in meaningful ways.... They are historically, culturally, and socially generated patterns of thinking, speaking, acting, and interacting that are sanctioned by a particular group of people".

Accordingly, one can recognize The EST community by their shared interests, their contribution in science and technology and their practice of scientific and technological discourse. However, describing EST discourse was the concern of many linguists who said a lot about the subject. In this research, much emphasis is put on two main linguists who had different views about scientific discourse. They are: Widdowson (1979) and Trimble (1985) who are prominent figures in describing EST and have contributed, indeed, in giving a comprehensive image about the nature of EST discourse.

With regard to Widdowson (1978), he was against those who thought that EST discourse was a specific discourse. For him, such an analysis did not really satisfy the learners' needs. That's why he proposed another view which was rather universal in which he referred to the deep structure and the surface structure. Widdowson (1978) stated that the deep structure had a relation with the nature of the scientific text, where a secondary universal mode of communication was shared

by all scientists. He said: "the scientific discourse is a universal mode of communicating, or universal rhetoric which is realized by scientific texts in different languages by the process of textualization" This means that there are different types of communication like: diagrams, charts and formulae. These types are called the non-verbal modes. They are considered as unique to the scientific discourse. In short, Widdowson regards the scientific discourse as a composite of two related elements: the deep structure that holds the feature of textualization which is realized by means of language or the surface structure.

Later on, Widdowson (1981) had refined his theory and proposed the concept of schemata which he defined as: "...cognitive constructs which allow for the organization of information in long-term memory and which provides a basis for prediction"

For Widdowson (1981), the scientific languages' knowledge contains two levels: The systematic level and the schematic level. The former deals with the language as a system, including phonology and syntactic-semantics whereas The latter includes universal frames and rhetorical routines which are linked to the language of science.

Unlike Widdowson (1981) who relied, in his theory, on deep and surface structure, Trimble (1985) thought that the scientific discourse was based on the concept of rhetoric which he defined as: "The process a writer uses to produce a desired piece of text. This process is basically one of choosing and organizing information for a specific set of purposes". According to him, EST rhetoric was concerned with the way a set of information of a given type of a text which was organized for specific objective. Thus EST rhetoric took into account the larger discourse units in which information were organized. These discourse units were well-explained by Trimble (1985) in what he called EST Rhetorical Chart. The following is an illustration of those discourse units.

A. The objectives of the total discourse

Examples:

- 1. Detailing an experiment
- 2. Making a recommendation
- 3. Presenting new hypotheses or theory
 - 4. Presenting other types of EST information
- B. The general rhetorical functions that develop the objectives of level (A)

Examples:

- 1. Stating purpose
- 2. Reporting past research
- 3. Stating the problem
- 4. Presenting information on apparatus used in in an experiment
 - a) Description
 - b) Operation
 - 5. Presenting information on experimental procedures.
- C. The specific rhetorical functions that develop the general rhetorical function Level B

Examples:

1. Description: physical, function, and

- process.
- 2. Definition
- 3. Classification
- 4. Instruction
- 5. Visual-verbal relation
- D. The Rhetorical techniques that provide relationships within and between the rhetorical units of level c.

Examples:

- I. Orders
 - 1. Time orders
 - 2. Space orders
 - 3. Causality

II. Patterns

- 1. Causality and result
- 2. Order of importance
- 3. Comparison and contrast
- 4. Analogy
- 5. Exemplification
- 6. Illustration

Figure 1.2: EST Rhetorical Process Chart (Trimble, 1985)

As shown in the chart above, Trimble (1985) thought that EST discourse could be divided into four rhetorical levels. First level A presents the objectives of EST discourse which is concerned with transmitting information from writers to readers. Second level B highlights the different functions that develop the objectives of the level A. Third, if level B concerns the general functions of the rhetorical discourse, this level C considers specific rhetorical functions that are used in EST like: definition, description, instruction, classification, and visual- verbal relationships. Finally, level D classifies the different rhetorical techniques that establish relations between and within the different units of Level C. They are divided into two categories: orders and patterns. In turn, each category contains a number of rhetorical techniques as mentioned in the chart above. On the whole, according to Trimble (1985) EST discourse could be presented through a wide number of rhetorical levels to achieve particular functions for specific purposes. Therefore, both views (of Trimble and Widdowson) emphasized the specificity of the scientific discourse in possessing a universal framework that stressed the rhetorical functional approach of EST discourse.

In fact, not only Widdowson and Trimble who seemed to be interested in the notion of discourse but there were others like: Mavor & Trayner, Soler, and Rowley-Jolivet, who had been influenced by Swales' Genre analysis. The latter deals with purpose and organization of texts. Swales (1990) Stated: "genre is formed by a body of communicative events, and that a communicative event is one in which language and or paralanguage plays both a significant and an indispensable role." One can easily deduce that the scientific and the technical genres are not excluded from this view since they include the nature and organization of words in scientific discourse.

1.2.7- Characteristics of Scientific Style

Before speaking about the characteristics of the scientific style, one should present a general image about the scientific text which is composed as (Walsh, 1982) thought of three components such as: the linguistic, the conceptual and the rhetorical component. The concern of the first component is syntax and vocabulary.

For Walsh (1982), the scientific text is characterized by the use of regularly specific terms to each special subject area, sub-technical vocabulary specific to none, and general English vocabulary. However, there is no specific scientific syntax because it is it is similar to that of GE. With regard to the second conceptual component, it is about the knowledge that the reader has about a text relying on the writer ideas. The third rhetorical component is concerned with the way language is presented according to a number of objectives and functions.

Generally speaking, there are both similarities and differences between scientific writing and other types of writing. Concerning similarities, as mentioned above, it is a matter of paying attention to proper grammar, spelling, and punctuation, as well as taking care of coherence and structure. With regard to differences, it is a question of style. Scientific writing generally avoids the use of the first person singular or plural (I and we). There is much use of the third person and the passive voice. For instance, It is preferable to say: "the sickness is diagnosed" instead of saying: "I diagnose the sickness". However, a paper written entirely in the passive voice would be difficult to read and remember, and it may put a reader to sleep. This is on one hand, on other hand; much passive may cause ambiguity by submerging responsibility for an action when a more open approach would be clearer to readers. In addition, inanimate objects (like proteins, genes etc) should be described in third person, not with possessive terms (e.g., instead of saying "its att site", say "the chromosomal att site"). Another characteristic is that sentences should not start with numbers. For example, one should write "A100-Ml of acid was added instead of writing "50 mL of acid was added,"

The use of the appropriate tenses in writing about science matters is another important characteristic of scientific writing. In this respect, Burrough-Boenisch (2003) made a research about the present tense conventions in scientific texts. He discovered that the nonnative English speakers of her study used the present tense differently from the normal conventions of their scientific community. The result was that the present simple was used to express facts and truths whereas the past simple was used to speak about past processes and events. He concluded that it was

difficult for those who were accustomed to regular science English conventions to understand their writing. However, Burrough-Boenisch (2003) stated that it was not clear when writing or reading scientific English, whether nonnative English speakers:

"rely on their L1 conceptualization of temporality signal conveyed by tense" or "behave like native speakers who use tense grammatically but 'unconventionally' and yet pass the scrutiny of journal editors and referees".

In any case, the easiest way for writers to minimize miscommunication about the generality or specificity of the information being presented, is to keep to the tense conventions in scientific English. This is certainly the safest option for non-native speaker writers who may be unskilled in deploying other devices to signal the specificity or generality of information. (Burrough-Boenisch, 2003)

In scientific writing, it is preferable not to use phrases that do not contribute to understanding or add something new to meanings. For instance, there are some expressions that can be shortened or deleted without affecting the meaning of sentences as in the followings: "in order to" can be shortened to "to", the phrase "the fact that" should be deleted, etc. In brief, it is very crucial to avoid using words and expressions that do not serve to make things clear. A writer should also specify and chooses the right words to express the right meanings i.e. if the same word is modified by several expressions, they should be arranged in a way to clarify which explicit word they modify.

Another important characteristic of science is the use of singular and plural in writing. In this respect, mass nouns such as distances, times, masses, volumes and volts are used in the singular form because such things are measured in real numbers. For example, we say: "One hundred grams of flour." "Twenty five hours is not sufficient to do the job." However, integers are used in the plural. For instance, we say: "Fifty sheep were vaccinated." "Six species are dangerous"

2.3-ESP Course Design Components

This section is devoted to tackle the different components that an ESP course design may rely on. Simultaneously, it is an opportunity to bridge the gap between English for specific Purpose which has been dealt with so far in the previous section and medical English which is supposed to be discussed in detail in the next section. Hence, one should investigate the factors that affect ESP course design under three main headings: Language Description, Theories of Learning and Needs Analysis. Although the three factors are treated separately, their interdependence in a course design process is of great importance. Hutchinson and Waters (1987) represented their relationship the following way:

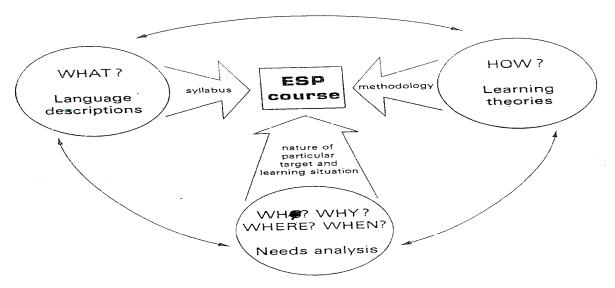


Figure 1.3: Factors Affecting ESP Course Design (Hutchinson and Waters, 1987)

The figure above illustrates the three main components of an ESP course design; language description, theories of learning and needs analysis. Each component has to answer a number of questions related to the language, the methodology *and the* learners who are supposed to take the ESP course.

1.3.1-- Language Description

Any ESP course design is based on language description which is the way in which the language system is described for the purpose of learning. According to

Hutchinson and Waters (1987), terms such as 'structural',' functional', 'notional' properly belong to this area. They refer to ways of analyzing language. Thus, there are several ways of describing language features. In this respect, one can identify six main stages of language description development where various ideas about language have influenced ESP in some way.

1.3.1.1- Classical or Traditional Grammar

The different descriptions of English and other languages were based on the grammars of the classical languages such as: Greek and Latin. Much focus was on the analysis of the role played by each word in the sentence where the form of the word would change according to whether it was a subject, an object, an indirect object and so on.

With regard to the effect of classical grammar on ESP, it was not strong enough for the simple fact that ESP Emerged after the classical form of language description. However, many linguists still believe that traditional grammar has never stop to provide teachers with indirect source of guidance. In this respect, Allen and Widdowson (1975) stated: "Teachers who wish to maintain a balanced view of linguistics should not overlook the fact that traditional grammar has many useful virtues"

1.3.1.2- Structural Linguistics

Most of the ideas of structural form of language description emerged with the advent of structuralism associated with linguists like Bloom Field .According to Hutchinson and waters (1987) the grammar of language is described in terms of syntagmatic structures which carry the fundamental prepositions represented through statements, interrogative, negative, imperative forms and notions represented through gender, time, number, etc. Sentences with different meanings can be generated through varying words within these structural frameworks. In addition, substitution plays a major role in explaining grammatical patterns.

As a result of structural linguistics, the structural syllabus proved to be a very powerful means of selecting and sequencing language items. In this type of syllabus, items are graded from simpler to more complex ones. As an example of an ESP structural syllabus is that one used by Ewer and Lattore (1969).

1.3.1.3- Transformational Generative Grammar (TGG)

The ideas of this new form of analyzing language appeared after the publication of "syntactic structures" by Noam Chomsky in 1957. The latter argued that the structural description of language was too superficial because it only described the surface structure of language and thus could not explain the relationships of meaning which were not realized in the surface structure.

For the structural description, the two sentences: "John is easy to please" and "John is eager to please" indicate the same relationship between the words However, for Chomsky, the relationship is not the same. In the first sentence, John is the receiver of the pleasing whereas in the second one, he is doing the pleasing. Therefore, language should not be analyzed and described in isolation from the human mind which produces it. On the contrary, to understand how language works, it should be viewed as a phenomenon in itself where meaning plays a major role to indicate the relationship between the different parts of speech. That's why he suggests two levels of meaning: a deep level and a surface level. The former is concerned with the organization of thoughts. In the latter these thoughts are expressed in the syntax of language. (Hutchinson and waters, 1987).

Although ESP benefited a lot from the distinction between performance (surface structure) and competence (deep structure), it paid little attention to competence and put much emphasis on describing the performance needed for communication in the target situation.

As a criticism to the previous views, language has been described from the point of view of form. However, language does not exist for its own sake. According to Hutchinson and Waters (1987), it exists because people do things with it; they give information, promise, threaten, make excuses, report..., etc. In other words language can also be looked from the point of view of function; that's what people do with it. This gave birth to the emergence of "communicative competence" led by certain socio-linguists such as Del Hymes who argued that competence consisted not only of grammatical rules to formulate correct sentences but also a knowledge of when to speak, when not,... what to talk about, with whom, when, where, how.

On the whole, the concept of "communicative competence" led to the rise of the next three stages of development in language description.

1.3.1.4- Language Variation and Register Analysis

Language varies according to the context of use. That's why, one can; for example, distinguish formal from informal, written from spoken language. Indeed, the concept of language variation gave rise to ESP which was based on "register analysis".

For ESP, if language varies according to context it is possible then to identify the kind of language associated with a specific context such as an area of knowledge (Legal English, medical English, Business English,...etc.) or an area of use (business meetings, ads, doctor patient communication). In other words, ESP research focuses on determining the formal characteristics of various registers in order to establish a basis for the selection of syllabus items.

1.3.1.5- Functional / Notional Grammar

It is very crucial, before exposing the ideas of this view, to clarify the difference between the two terms "functional" and "notional". Hutchinson and Waters (1987) stated that the first one was concerned with the social behaviour for instance: advising, warning, threatening, describing...etc, they refer to the communicative acts whereas the second one reflected the way in which the human mind could think, so one can find notions such as: time, frequency, duration, gender, number, location, quality, quantity.

Hutchinson and Waters (1987) stated:

"The functional view of language began to have influence on language teaching in the 1970's as a result of the Council of Europe's efforts to establish some kind of equivalence in the syllabuses for learning various languages. That was difficult to achieve under the basis of formal grammar where the formal structures of language show considerable variation. So, it was not easy to divide up the learning tasks into units of equivalent value across the various languages. However on notional or functional grounds, some approximate equivalence can be achieved"

ESP has been tremendously influenced by the functional/notional concept of language description, the reason why there was a move from structural syllabuses to functional based syllabuses in the 1970's. Nevertheless, the functional syllabus has also many negative aspects on language learning because it suffers from a lack of any kind systematic conceptual frame work .Consequently, the learners find it difficult to organize their knowledge of language. This paved the way to the emergence of constructive approach to describing language whose major concern was to see both the structural syllabus and the functional syllabus as complementary.

1.3.1.6-Discourse Analysis

There is no better way to understand the principles of this view of language description than the examples introduced by Hutchinson and Waters (1987) about discourse analysis. So, let's consider the situations below:

- 1- Can I go out to play? It's raining. (a child is asking his parents)
- 2- Have you cut the grass yet? It's raining. (a husband is addressing his wife)
- 3- I think I'll go out for a walk, it's raining. (one is talking to his friend)

As an analysis of the three above situations, it is clear that the statement "it's raining" is the same in the above examples. The notions are also the same (present time, 1st person singular...). However, the same statement is fulfilling three different communicative purposes. In the first, the child is asking permission to go out, and the parents' reply acts as a refusal of the request. In the second' the expression "it's raining" functions as a reason or an excuse. In the third situation, the same expression "it's raining" acts as an advice or a mild warning.

According to Hutchinson and Waters (1987), the meaning of the same sentence changes with the different contexts. This change is brought about by two factors:

1- The socio-linguistic context where the meaning changes according to the relationship between the participants in the dialogue and according to their reason of speaking (who is speaking? To whom? Why?)

2- The relative positions of the utterances within the discourse (the discoursal meaning).

1.3.2-Theories of Learning

The aim from language teaching is to achieve successful learning. This lies not only in analyzing or describing language but also in understanding the structures and the processes of the mind because language reflects human thoughts processes and language learning is conditioned by the way in which the mind observes, organizes and stores information. (Hutchinson and Waters 1987).In comparison to what has been studied about language description, there is too little to say about how people learn. Nevertheless, there are some theories of learning that should be tackled in this investigation.

In reality, theories of learning did not see the light until the field of psychology had been established as a respectable subject of scientific enquiry. Since then one can identify the following main stages of development.

1.3.2.1-Behaviourism (Learning as Habit Formation)

The first coherent theory of learning was the behaviourist theory which was based on the work of Pavlov in the Soviet Union and Skinner the United States. This theory says that learning is a mechanical process of habit formation and proceeds by means of the frequent reinforcement of a stimulus-response sequence. It had a great impact on learning psychology and language teaching, and led to the widely-use of audio-lingual method in teaching. The latter relied on two principles: First, the behaviourist stimulus-response concept and second, the assumption that foreign language learning should reflect and imitate the same processes of mother tongue learning. Some of its principles are:

- 1- Frequent repetition is essential to effect learning
- 2- All errors must be immediately corrected.
- 3- No translation is allowed.
- 4- New language should always be dealt with in the sequence: listen, speak, read, and write.

5- The basic exercise technique of a behaviourist methodology is" pattern practice" i.e. teaching through drills.

1.3.2.2-Cognitive theory (Learners as Thinking Beings)

For Hutchinson and Waters (1987), While the behaviourist theory considered the learner as a passive receiver of information, the cognitive view considered him as an active processor of information. In other words, learning requires learners to think and make sense of what we see, feel and hear.

"Learning is a process in which the learner actively tries to make sense of data, and learning can be said to have taken place when the learner has managed to impose some sort of meaningful interpretation or pattern on the data"

(Hutchinson and Waters, 1987)

The basic teaching technique associated with a cognitive theory of language learning is The Problem-solving task.

On the whole, the cognitive view of learning had significant impact on ESP through the development of courses in teaching reading strategies. It had also answered many of the theoretical and practical problems raised by behaviourism. However, the cognitive alone is not sufficient. To complete the picture, we need an effective view too.

1.3.2.3- The Affective Factor (Learners as Emotional beings)

According to this theory, learners think but they also have feelings. They are not machines to be programmed because they are just human beings with likes, dislikes, fears, weaknesses, prejeduces...etc. Thus, learning is an emotional experience and the feelings that the learning process evokes will have a crucial bearing on the success or failure of the learning. (Stevick, 1976).

In fact, the importance of the emotional factor is easily seen if we consider the relationship between the cognitive and affective aspects of the learner. However, before learners can actively think about something, they must want to think about it. Therefore, the emotional reaction to the learning experience is the essential foundation for the initiation of the cognitive process (Hutchinson and Waters,

1987). The learning cycle below illustrates the tight relationship between the two aspects positively.

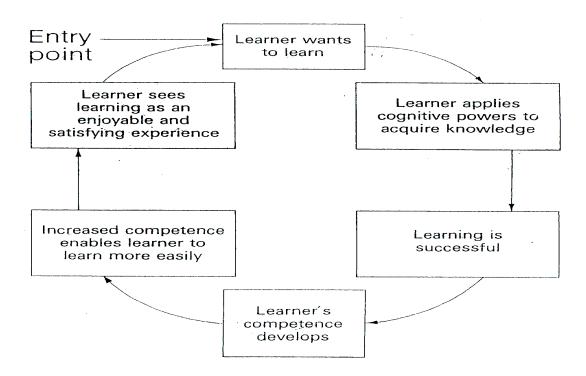


Figure 1.4: A positive Learning Cycle (Hutchinson and Waters, 1987)

The learning cycle presented by Hutchinson and Waters (1987) represents the immense role of motivation for any attempt to achieve successful learning.

1-3.3- Needs Analysis

According to Dudley-Evans and St. John (1998) Needs analysis (NA) is neither unique to language teaching nor within language training but it is regarded as being "... the *corner stone of ESP and leads to a very focused course*" i.e. any ESP course is based on an analysis of the learners 'needs.

1.3.3.1-Definitions

Many researchers have defined "needs" variously. Among them, Brindley (1984) who stated: "the term needs refer to wants, desires, demands, expectations, lacks, constraints and requirements". With regard to Richterich (1972), ".... A need does not exist independent of a person. It is people who build their images of their needs on the basis of data relating to themselves and their environment."

The term "needs" is also defined in terms of classification where one can distinguish between language needs and learning needs. The first kind is concerned with the content of the course whereas the second one refers to the methodology; that's to say a particular process or mode of teaching.

Needs can be also divided into objective and subjective needs as mentioned by Richterich (1972). Objective needs are based on facts that are seen by others whereas subjective needs are based on the learners" attitude or cognition.

However, Tony-Dudley Evans and Maggie Jo St John (1998) divided needs into product-oriented and process-oriented needs. The first category is based on target situation needs where the much emphasis is put on the final outcome or the end-product of learning. Meanwhile, the second category is based on the learners 'learning situation, that's to say; more focus is on the process of learning.

In the same context, Widdowson (1981) pointed out that product –oriented needs concerned what the learner needed to do with language while process- oriented needs referred to what the learner tended to do in order to acquire the language.

Not far from this idea, Hutchinson and Waters (1987) tackled the notion of target needs and learning needs. For them, target needs referred to what the learner needed to do in the target situation. However, learning needs referred to the processes and methodology that the learners were comfortable with. They divided target needs into necessities, lacks and wants.

Necessities refer to the type of need determined by the demands of the target situation, that is, what the learner has to know in order to function effectively in the target situation. In this respect, Hutchinson and Waters (1987) give the example of the businessman who might need to understand business letters so as to communicate effectively at sales conferences or might need to get the necessary information from sales catalogues and so on. He might also need to know the linguistic features which are usually used in the situations identified.

With regard to the second item "lacks" Hutchinson and Waters state that identifying necessities alone is not enough because the concern in ESP is the needs of particular learners. So, it is required to know what the learner knows already so

as to decide which of the necessities he lacks. In brief, lacks refer to the gap between the existing proficiency level of the learner and his target proficiency level.

As far as the third term is concerned, "wants" refer to what learners personally want the course to provide them with, i.e. learners may have a clear image of the "necessities" of the target situation, and they will undoubtedly have a view about their lacks, but it is quite possible that the learners' views will conflict with the perceptions of their course designers, sponsors or teachers. Hutchinson and Waters (1987) illustrated that view through presenting a concrete example about José Lina who is a Brazilian salesman. The latter needs to be able to talk on the telephone to customers and other colleagues. He also needs to read catalogues and business letters. However, his spoken English is not accurate despite his fluency. The employer feels the necessity to develop José's accuracy in spoken English as it may reflect badly on the company's reputation to have one of its representatives speaking incorrect English. So, he decides to devote some English courses to satisfy José's needs. For José, he regards the English classes as a criticism of his performance as a salesman because he thinks that his spoken English is good and that he can communicate very well. Consequently, he has little motivation to attend classes. As a conclusion of this illustration, one may notice that there is no relationship between the learner's' necessities and his wants on one hand. On other hand, talking about the learners' wants is greatly linked with the notion of "motivation in learning".

As far as the present investigation is concerned, one should note that the analysis of the learners' needs is done through going by the needs of the majority of learners as it is not possible to analyze the needs of each individual learner.

1.3.3.2-The role of Needs Analysis in ESP Course Design

English for Specific Purposes is considered as a learner-centered approach to teaching English. Thus, designing an ESP course is mainly based on identifying the learners' needs taking into account their specific areas of study or work such as medicine, science, technology, etc. Thus, any effective ESP course should undoubtedly give much importance to Needs analysis which is the convenient source of gathering the required information to specify the goals and the teaching

objectives of the intended course. Besides, Needs Analysis is regarded as the foundation for the choice of the appropriate materials, assignments, classroom activities and tests. According to Jordan (1997) needs analysis had to be the starting point for devising syllabus, course materials and classroom activities.

For Mc Donough (1984) the language needs of the learners are, indeed, the bases for course development since the information on the language learners 'needs will help to draw up an idea about the course objectives and then the course content. In the same context, Clark (1980) stated:

"The first step in any language teaching project must surely be to design a syllabus that will reflect the language needs and wishes of the learner concerned and that will accord with a responsible theory of language learning"

However, language problems can also be traced through socio-logical context where Shutz and Derwing (1981) pointed out:

"a detailed analysis of the of the situations of the language use is a pre-requisite even to the selection of the particular linguistic forms or structures that ought to be taught"

On the whole, needs analysis helps the course designer place a learner on an appropriate course, and gives focus to the course. It is true that when we design any course, we begin with certain assumptions about what the students need but, it is only through needs analysis that we come to know about the real needs of the learners.

1.3.3.3 - Approaches to Needs Analysis

Generally speaking, there are two main kinds of analysis of the learners' needs. They are called "Register Analyses" and "Discourse Analysis». The former focuses on vocabulary and grammar. It refers to a specific use of language for a specific discipline. By register, we do not mean a special variety of English, but a distinctive use of English. Analysis refers to the linguistic analysis of a particular register. The assumption here is that different disciplines have different registers. The latter refers to the rhetorical organization of language that signifies meaning. In other words, it is to do with how a text is organized to produce meaning. It is not only to do with

meaning of sentences, but with the ordering of sentences as well. The focus here is on language functions and notions, and the assumption is that distinctive disciplines are organized in different ways.

At present, to design an ESP course, one should rely on one of the following approaches to needs analysis which are explained below:

1.3.3.3.1- Present Situation Analysis (PSA)

This kind of analysis is mainly concerned with the strengths and the weaknesses of the learners. Its objective is to assess the learners' lacks through looking at their current use of language.

1.3.3.3.2-Learning Situation Analysis (LSA)

This type of analysis is concerned with identifying the learners' wants as it helps the course designer to know about the learners' previous learning experience as well as their reasons for learning, and their expectations from the course. It is more concerned with the learners' learning styles, their level of motivation and their methodological experience.

1.3.3.3. Target Situation Analysis (TSA)

Target Situation Analysis helps the course designer to identify the language needs of the learner through making an idea about the learners' objective and the product-oriented needs. This will make it easy to find out more activities and tasks for the appropriate English use.

To conclude, it is very crucial to take into account the three above approaches when designing any needs analysis which is undoubtedly the cornerstone of an ESP course. Indeed, the relationship between these approaches is well-expressed through a nice picture considering the analysis as a journey whose starting point is the PSA, whose route is LSA, and whose destination is TSA.

1.3.3.4-Sources for Needs Analysis

Needs analysis can be achieved through a wide range of sources which are, for some researchers, agencies that might be approached for realizing effective needs analysis. They are, indeed, different elements that are interrelated and work together to ensure successful courses. They can be summarized as follow:

- 1) Learners
- 2) Sponsors/employers
- 3) Teachers
- 4) Former Students (to see what problems they faced during their student life)
- 5) Colleagues
- 6) Other ESP researchers in the area / field

Since ESP revolves around learners as the main element for any course design, learners can be considered as a potential source for needs analysis. For Munby (1978): "ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communicative needs of the learners".

Another source for needs analysis which is not less important than learners is Sponsors or employers who are aware of the contexts in which the learners need to use the language.

With regard to teachers, they can give an idea about the needs of the learners as they are the closest body to their learners from whom they receive either positive or negative feedback about the courses they design.

As far as former students are concerned, the fact of checking the different language problems they might face during life study could be a convincing reason for being approached for needs analysis.

Finally, colleagues who have conducted similar courses in the same field and other ESP teachers can share their experience and contribute to form a clear idea about the students' real needs analysis.

1.4- Syllabus Design, Curriculum Development, and Course Planning

The present section is going to shed light on course design and planning. It is primordial, then, to tackle the vast domain of curriculum development as well as syllabus design. On this vein, Yalden (1987) wrote:

"One cannot speak about course design without shedding light on syllabus design, for a syllabus is referred to as the "summary of the content to which learners will be exposed".

1.4.1- Types of Syllabi

A syllabus describes the major elements that serve in planning a language course and provides the framework for its content and instructional application. Throughout the history of ELT, a variety of syllabi have been elaborated as an attempt to improve English language learning. Their variance, mainly, lies in the particular assumptions and beliefs made by syllabus designers about the approach to language learning and teaching. Nonetheless, choosing a particular syllabus framework for a course, proves to be a major decision in language teaching for the planners are influenced by several factors, namely, the knowledge and beliefs about the subject area research and theory, common practice and national or international teaching trends. On the whole, Syllabi are divided into two different types: Product-oriented and process- oriented.

1.4.1.1-Product Oriented Syllabus

The product oriented syllabus is commonly known as the synthetic syllabus. It employs instruction to emphasize pupils learning. It typically lists a selection of graded items to be 'learnt'. Hence, a synthetic approach is contrasted with an analytic approach that attempts to exert no control of the learning environment. This type of syllabi may include:

A-Grammatical Syllabus

It is organised around grammatical items. Traditionally grammatical syllabuses have been used as the basis for planning general courses, particularly for beginning level learners. In developing a grammatical syllabus, designers attempt to arrange items into a sequence that facilitates learning and identify a productive range of grammatical items that allow learners to develop basic communicative skills. Criticism about the syllabus was that grammar represents only a part of language proficiency. It focuses on form rather than meaning and does not address

communicative skills. In sum, the learner is encouraged to accumulate a passive knowledge of the language. Hence, such learners lack confidence in their productive skills

B-Lexical Syllabus

Vocabulary syllabuses were among the first types of syllabuses to be developed in language teaching. They identify a target vocabulary to be taught to the learners normally arranged according to levels such as the first 500, 1000, 1 500, 2 000 words (Richards, 2001). The syllabus is formed by chunks of lexical phrases, collocations, idioms, fixed and semi-fixed phrases. Harmer (2001) sustained that it would be complex to apply this type of syllabus because there are so many facets to lexis. Because vocabulary is present in any type of language content, a lexical syllabus can only be considered as one component of a more comprehensive syllabus.

C-Functional-Notional Syllabus,

The functional-notional syllabus is organised around communicative functions such as requesting, complaining, suggesting, agreeing. Harmer (2001) explained "The syllabus designer then chooses exponents for ways of expressing each function". In other words, the content of the language teaching is based on the number of the functions that are performed on using the language. Functional syllabuses were first proposed in the 1970s as part of the communicative language teaching movement. They have formed the basis for many language courses and textbooks from that time. White (1988) critics were that "language functions do not usually occur in isolation". Richards (2001) described functional syllabuses as generally regarded as only a partial constituent of a communicative syllabus. Alternative proposals for communicative syllabus design include task-based and text based syllabuses.

D- Situational Syllabus

It is another type of syllabuses where language items are organized in terms of different learning situations. Richards (2001) defines the situational syllabus as:

"One that is organized around the language needed for different situations such as the airport, at a hotel. A situation is a setting in which particular communicative acts typically occur".

This framework is prearranged around a list of situations which reflect the way language and behaviour are used every day outside the classroom. Situational syllabuses have the advantage of presenting language in context and teaching language of immediate practical useThis concept seems to suit English for Specific purposes, for, ESP approaches to curriculum development attribute a central role to the situation or setting in which communication takes place and the following elements of the situation (Munby1978, Feez 1998). One advantage of the situational approach is that motivation will be heightened since it is "learner- rather than subject-centered" (Wilkins.1976). However, this framework is inadequate for learning general English.

1.4.1.2-Process-Oriented Syllabus (Analytic Syllabus)

More recently, applied linguists have been interested in the pedagogical processes of how learners can achieve their outcomes and enhance communicative language skills. Thus, much more focus was oriented on specifications of the learning process by the use of tasks and activities. Nunan(1988).claimed that the focus is on the learning process rather than the learning product and there is little or no attempt to relate these processes to outcomes. Likewise, this type of syllabi may include:

A-Competency Based Syllabus

It is based on a specification of the competencies learners are expected to master in relation to specific situations and activities. Richards (2001) defined as an approach to teaching that focuses on transactions that occur in particular situations and their related skills and behaviours. This approach seeks to improve accountability in teaching through linking instruction to measurable outcomes and performance standards. Competency Based Education focuses on outcomes of learning. It addresses what the learners are expected to do rather than on what they are expected to learn about. It emerged in the United States in the 1970s and

referred to an educational movement that advocates defining educational goals in terms of precise measurable descriptions of knowledge, skills, and behaviors students should possess at the end of a course of study (Richards & Rodgers. 2001). The use of competencies in program planning was criticized on the bases of misinterpretation of competencies besides its hidden values underlying competency specifications

B-Topical or Content Based Syllabus

The topical syllabus is structured around themes, topics, or other units of content rather than grammar, functions or situations (Richards 2001) stated that it is "providing students with a sequence of topics which are relevant and engaging", yet, he criticized it asserting that "such organization is unlikely to be sufficient for syllabus organization."

C-Skill Based Syllabus

The content of the language teaching is a collection of specific skills to use the language. Skills are things that people must be able to do to be competent in a language. Richards (2001) defined it as: "One that is organized around the different underlying abilities that are involved in using a language for purposes such as reading, writing, listening, or speaking".

While situational syllabuses group functions together into specific settings of language use, skill-based syllabuses group linguistic competencies (pronunciation, vocabulary, grammar, and discourse) together into skills, such as listening to spoken language, writing well-formed paragraphs, giving effective oral presentations, and so on. Skills based syllabuses have the advantage of focusing on performance in relation to specific tasks and therefore provide a practical framework for designing courses and teaching materials. However, skills syllabuses have been criticized because they focus on separate aspects of performance rather than on developing more global communicative skills.

D-Task Based Syllabus

Richards (2001) defined the task based syllabus as one organised around tasks that students will complete in the target language. According to Skehan (1996) tasks *are*:

"activities which have meaning as their primary focus. Success in tasks is evaluated in terms of achievement of an outcome, and tasks generally bear some resemblance to real-life language use" (cited in Richards, 2001).

The task based syllabus is built on tasks that have been specially designed to facilitate second or foreign language learning. The tasks or activities are the basic units of syllabus design. Two kinds of tasks have been proposed as a basis for syllabus design: Pedagogical tasks that are designed to trigger second language learning processes and strategies and real world tasks that involve learners in problem solving assignments that improve their concrete practice of real world English. Task-based syllabuses may well satisfy the desire to provide meaning-based learning but until there is a way of deciding which tasks should go where, such a syllabus: "...fails to command sufficiently widespread support amongst teachers and methodologists for it to become universally accepted" (Harmer 2001).

1.5- Medical English Courses

The following section is devoted to tackle a specific field of EST which can be divided, as Hatchinson and Waters (1987) have already mentioned, into two types such as: English for Technicians and English for Medical Studies. The latter is the concern of the present discussion.

1.5.1-The Use of English in the Medical Field

English for Medical Purposes (EMP) is a type of ESP which refers to the teaching of English for health care personnel like doctors, and nurses (Maher, 1986). Like all the other ESP courses, EMP aims at teaching medical learners English with an identifiable goal, such as efficient performance at work and effective medical training or developing English competence for carrying academic

medical research. Maher (1986) noted that the aim from designing EMP courses is to meet the medical learners' specific needs, so the courses should deal with the themes and topics related to the medical field on one the hand, and expose learners to the required skills in the medical field such as writing medical papers or preparing talks for medical meetings, on the other hand.

The use of English for medical purposes is increasing not only in countries where English is the mother tongue but also in non-native speaking English countries. In order to confirm this reality, Maher (1986) conducted a study to analyze the computerized database, MEDLINE Index Medicus. The investigation put under study nearly one million articles dealing with biomedical journals around the world. The purpose was to analyze language data between the period 1966 and 1983 and estimate the amount of the spread of English as an international language of medicine and as lingua-franca. The findings indicated that the use of English in the medical field has increased tremendously in the world. According to the researcher, this could be explained through the increase of the number of articles written in English. He also found out that the increase of the use of medical English in writing and publishing articles touched even those non-native speaking English countries. The statistics indicated that about 72% of the written articles appeared in the Index Medicus were published in English language in 1982. A good example was that of Japan where about 33% of the articles were published in English. In the same context, Maher (1986) found out that about 373 meetings listed in the Journal of the American Medical Association (JAMA) were held in English in a period of nearly twelve months. Another investigation about the use of English took place in Japan where a survey about four medical sites indicated that around 96, 7% of the doctors read medical books and articles in English considering such literature very important. This convinced Maher (1986) to conclude that English language has played an international communication vehicle of medical learners.

The increase of the use of English in the medical domain was also examined by Benfield and Howard (2000) throughout MEDLINE. They stated that the period between 1980 and 1996 had witnessed a remarkable increase of publications written in English; from 72, 2% to 88, 6 %. This new phenomenon of the increase of

English use in the medical field spread in many countries such as: Sweden and Netherlands.

To sum up, all the descriptive studies mentioned above explain the spread of English as an international language all over the world and indicate the urgent need to devote real English medical courses for medical students and professionals. However, before designating any EMP course for medical learners, one should know about the fundamental characteristics of the medical jargon.

1.5.2- Characteristics of Medical Jargon

It is so important to understand and explain the medical jargon before any attempt to analyze the medical learners' needs. According to (Lanza, 2005) English was, first, a Germanic Language but later was influenced by Latin language. This can be noticed through the multilingual vocabulary that exists in most of the medical texts which contain a great quantity of terms similar in case of grammar, semantics and even phonetics (Laar, 1998).

In the same context, (Faulseit 1971, cited in Laar, 1998) stressed that English terminology had witnessed a tremendous development of vocabulary due to the different levels of assimilation with words borrowed from Greek and Latin origin.

As a result, (Erten (2003) pointed out that the medical English register contains a wide range of words which are used in daily language are represented by different terminology. For instance: vertigo (for dizziness) delivery (for birth), , uterus (for womb), and syncope (for fainting) and hemorrhage (for bleed). He also states that some English medical abbreviations refer to more than one meaning, for example CT is used for cerebral tumor, cellular therapy, clotting time, connective tissue and so on, the reason why only the context that can determines their representations.

Morphologically, coinage and syllabic contraction are the widely known characteristics of medical jargon, for example urinalysis' which is used instead of urinoanalysis, or 'contraception' instead of contra conception (Johnson, 1980 cited in Maher, 1986). Another feature is the tendency to turn nouns into verbs as in the case of: adrenalecticize (from adrenalectomy), laporatomize (from laporatomy), thoracotomize (from thoracotomy), hospitalize (from hospital) and so on. (Bakey 1966, cited in Maher 1986)

For (Yang2005), medical terminology has two main features such as:

- 1-Except the one- syllable words, most medical terms are composed of roots and affixes (prefixes and suffixes). Generally, roots determine the meaning of words and affixes alter the part of speech or the meaning of roots.
- 2- Medical vocabulary is an open rule-governed system containing a large number of newly created and low-frequency words.

Concerning the meaning of words, Erten (2003) states that the meaning of a wide range of words can be predictable from their particles; i.e. roots, prefixes and suffixes. For example:

Cardi: heart, Cephal: head, hepat: liver, neph: kidney (roots from Greek origin) cerv: related to the neck, cerebro: related to the brain (roots from Latin origin)

Boztas (1988) goes further in this context and classifies the commonly used prefixes as:

- 1- prefixes related to time and place:
- e. g. ante -before; forward antenatal-occurring before birth ante flexion-abnormal bending forward
- 2- prefixes related to size:
- e.g. olig (o) –small; few oligurian-small production of urine
- 3- prefixes relating to type:
- e.g. andro -male; man; masculine androgen-male sex hormone
- 4- prefixes denoting direction:
- e.g. ad- toward; increase adduct-move toward the midline
- 5- prefixes denoting colour:
- e. g. all-white albinuria-white and colorless urine
- 6 -prefixes denoting quantitiy and number:
- e.g. pan-all pancarditis- inflammation of the entire heart

He also classifies the suffixes unique to medical field as:

- 7- suffixes denoting state or condition
- e.g. -agra : severe pain myagra-severe muscle pain
- 8- suffixes relating to medical actions:
- e.g. -tripsy: surgical crushing neurotripsy-surgical crushing of a nerve

- 8 suffixes associated with a small size:
- e.g. –ule venule- small vein

He further classified a special set of suffixes that are called word terminals as:

- 9- terminals that change words to nouns:
- e.g. –ance, -ancy: state or condition resistance- act of resisting
- 10 terminals that change word roots to adjectives and verbs :
- e.g. tic: pertaining to diagnostic-pertaining to diagnosis
- 11 terminals that change singular to plural words : singular plural
- e.g. -a -ae bursa, bursae -en -ina lumen, lumina

In addition to the peculiarities in word formation, written medical English also has different stylistic features. Ingelfinger (1976, cited in Maher, 1986) pointed rather critically to:

"...an adherence to the passive voice, cumbersome diction, excessive use of initials, long sequences of nouns used as adjectives, stereotyped sentence structures and hackneyed beginnings"

1.5.3- Teaching Medical English

Teaching learners how to acquire medical jargon is based on the principle of the combination between medical register and discourse, and the pedagogical skills of a language teacher. Like all the other kinds of ESP courses, EMP courses focus on the learners' needs. That's to say, who want to learn and what the purposes of learning are. In addition, the need for designing effective specific syllabus that suits the objectives of the medical course is more than a necessity in teaching medical English.

So as to design specific courses for medical students, many models of courses and several strategies and materials have been dealt with so far. Those courses are bases either on content-based learning or problem-based learning methodologies.

Besides, there is much use of technological equipment so as to ensure real life communication among learners in the classrooms. Learners are also provided with structural methods and vocabulary teaching strategy in learning medical terminology and acquiring vocabulary.

First, learners have the chance to practice the different language skills while they are studying one subject area. In this context, Bailey (2000) presented a course dealing with the concept of health to motivate students to learn English in an ESL context. The course made use of "Time magazine" and enabled learners to read books related to health topics and autobiographies. It also made us of audio-visual means by exposing students to watching movies about medical issues. At the end, Bailey found out that learners could make great progress in learning English once they felt the authenticity and the usefulness of the course with the instruction method. This made Bailey believed that the learners' communicative competence could develop due to the interaction created through the discussion of the controversial subjects in the health field. Consequently, learners would learn better in groups when they focus on real health issues.

One of the approaches in the teaching of medical English is problem-based learning (PBL). As it is an approach mainly applied in medical education (Connelly & Seneque, 1999) and in order to better understand its application in EAP courses of medical faculties, it is necessary to understand the reasons for using it in medical teaching, and its common application procedures and aims. In terms of its origins, (Maxwell et al. 2001) stated that as the conditions of medical practice changed during the 1960s and 1970s, medical educators questioned the ability of traditional medical education to prepare students for professional life. In response, faculty at a number of medical schools introduced 'Problem-Based Learning' to promote student-centered learning in a multidisciplinary framework, an approach that was believed to promote lifelong learning in professional practice. In this approach, students work in groups discussing a problem, then students do research for the problem situation, and try to come up with reasonable solutions to that problem, suggesting their solutions and discussing whether they are appropriate to the situations they discussed. Then students evaluate this learning process and their contribution to the group (Maudsley, 1999, cited in Wood & Head, 2004 and Maxwell et. al, 2001). Huey (2001) described the aims of PBL as better acquisition and school integration of scientific and clinical knowledge, improved clinical thinking and other skills, and more effective life-long learning skill.

Harland (2003) suggested that a PBL approach is embedded in Vygotsky's zone of proximal development theory, explaining PBL from a socio-constructivist perspective. Albanese and Mitchell (1993, cited in Huey, 2001) provided a literature review for its theoretical bases, implementation issues and outcomes. Some others have discussed the differences found between PBL and non-PBL students, indicating the potential benefits of PBL for medical students in general (Antepohl & Herzig, 1999)

Others have discussed how PBL can be applied to language learning. It is seen as a useful technique for teaching English for academic purposes for medical students, as it is a context-based, cooperative and student-centered approach (Wood & Head, 2004, and Kimball, 1998). Wood & Head (2004) discussed the possible applications of it in the EAP classes of medical faculties. In their web-based course, the researchers conducted a case study using a problem-based learning (PBL) approach to teach EAP classes at the University of Brunei Darussalam (UBD) and obtained positive feedback both from the students and instructors. The major goal of the course they designed was to encourage students to study medical topics using English communicatively. In this approach students in groups generate a problem, which is a disease, and other groups discuss it and try to come up with solutions. The researchers claim that in this approach the tasks of the students derive from the general problem to be solved rather than being generated by the teacher, and are thus a simulation of what happens in the medical field. They further maintain that this approach responds directly to these students' needs. Kimball (1998) also proposed PBL tasks as a useful tool for the simulation of medical target settings and also supports teaching through the web. In his course design, teachers structure lessons in the context of medical concepts and case studies and problem based tasks, which enable the students to contextualize medical concepts, simulating real world clinical thinking. He concluded that the syllabus designed with problemsolving tasks using internet web pages not only provided students with authentic sources but also reflected the foreign language needs of the medical students, as the concepts about new findings, and the treatments are in English, and the medical resources the students need to use are all written in English. These studies indicate that through the web and problem-based, learner centered activities, learners were able to experience real world discourse which other printed materials could not have reflected so efficiently.

Along with the use of the internet, video cameras have proved invaluable for contextualized learning in EMP curricula (Belcher, 2004). Some researchers have tried to bring real life communication into the classroom medium using video tapes. For example, a study to design a course, using authentic videotaped communication data for medical students at the University of Hong Kong was conducted by Shi, Corcos and Storey (2001) using authentic videotaped communication data. The researchers used them to assess the difficulties learners face when making diagnostic hypotheses with doctors and to identify the discourse of diagnostic linguistic skills students needed, in order to achieve various cognitive objectives. They used videotaped ward teaching sessions over three months at two hospitals, along with teaching tasks, to raise students' awareness of some of the discourse and to improve students' performance through practice. In the study they tried to analyze and use performance data as teaching material in the classroom in order to meet the special needs of the medical students. Shi et al. concluded that the use of videotaped data is not only useful for the design of an EMP course but also useful as teaching materials by involving the students in the process of curriculum design, thereby enhancing the students' motivation.

There are few other studies conducted to develop courses for medical and pharmacy students using authentic communication data via technologies. For example, Allwright and Allwright's (1977) course design was based on professional case conference recordings, Candlin et al. and Farnill et al. used audio and video recordings of doctor-patient communication, and Graham and Beardsley used videotapes developed by pharmaceutical companies for pharmacists. Filice and Sturino (2002) developed a module using a video called "Coronary Artery Disease at Time of Diagnosis" as well as its workbook, which allowed the teachers to extract interactional materials such as worksheets, along with research articles for the students to analyze and summarize. In Hussin's (2002) courses, nursing students

were shown videos of experienced nurses talking and performing some occupational tasks.

In order to teach medical terminology more effectively, some projects and research studies have been conducted. In 1991-1992, for example, the Institute for the Study of Adult Literacy in Pennsylvania developed and field-tested an innovative curriculum with instructional materials to teach specific health care vocabulary for beginning licensed practical nurses. In this project, the staff were trained in the use of materials and then they implemented the curriculum and materials at two sites in Pennsylvania. In order to train students to use structural analysis to understand medical vocabulary, the materials were designed in the form of a narrative about a woman learning medical vocabulary from a friend. First, learners took a pretest and began using materials in the classroom and used them over a three month period. The post test scores indicated that the learners made great progress. In addition, when interviewed, both the instructors and the learners who used the new materials commented positively on them. Overall it was concluded that the use of structural analysis by identifying word parts like prefixes and suffixes enables students to determine the words' meanings, and the integration of reading, writing, listening and speaking skills in the context of the story enabled learners to understand medical terminology while enjoying the material (the collection of stories with highlighted vocabulary, teachers' guide, reproducible activities, pre/posttests are provided in Eric document numbered 356 361).

Another attempt at teaching medical terminology came from Essex Community College, MD., where a manual was prepared for introduction to medical terminology for the Claretian Medical Center Worker Education Program of Northeastern Illinois University's Chicago Teachers' Center in Partnership with the Union of Needle trades, Industrial, and Textile Employers. This manual, published in 1996, consists of glossaries and descriptions of medical terminology for use in a workplace literacy program for hospital workers.

In teaching medical terminology, Laar (1998) pointed out the need for systematic presentation of term-forming elements like prefixes and suffixes in medical texts in his study. He asserted that words of Latin origin could be successfully taught via integrated teaching in the English and Latin courses designed for the Medical Faculty of Tartu State University in Estonia. As for the terms of multilingual usage, which are found in several languages in phonetically, grammatically and semantically similar forms, they could be included in English courses to improve text comprehension. The aim of his study was to examine the teaching of this vocabulary to medical students for their courses of Latin. English. and medical subjects and to what extent Latin courses could enhance the learners' comprehension of English medical texts. In the study, the stems and affixes of Latin and Greek origin were systematically presented to medical students learning English at advanced levels. The Latin and Greek stems and affixes frequent in multilingual terms were listed and their definitions were given in English, as were the practice exercises. At the end of the courses the feedback from students was very positive. Laar concludes that as the English language is enriched by Latin borrowings, the English course is the most reasonable framework within which to teach Latin and Greek elements found in medical terms to students studying medicine.

The other approach to EMP teaching is the grammar-translation method which is probably still a common feature of language courses throughout the world (Maher, 1986). Also in Turkey, the grammar translation method has remained a commonly practiced method of ELT. In fact, translation is an important field in Turkey as recent scientific discoveries and treatments in medicine are usually made accessible to readers via translations, and in ELT, the translation method is used to make the medical texts more understandable to the students. However, it is worthwhile noting some possible problems encountered in the field of professional medical translation. Very early on, Newmark (1976, 1979 cited in Maher, 1986) pointed out some of these main difficulties as follows: The medical language register in European languages has a lot of synonyms, and there is the problem of standardized lexis (terminology, agreed hospital jargon, etc.) and the difficulty of technical usage, which he regards as the most difficult problem for the translator who is neither medical nor paramedical himself. A further evidence against

translation came from Maher (1986), who supposed that in EMP classrooms, learners are already supposed to have mastered medical texts in other ways, such as comprehension checks and exercises. He also argues that translation of medical texts may not be so effective in improving English competence but merely encourages dependence upon the practice of translation itself. He identified three problems in the use of translation in an EMP context: accuracy, quality of translation and being very time consuming and distracting for the students because of the equivalence problem with some languages. Recently, Sezer (2000) pointed out that translation is potential source of errors. Nevertheless, translation continues as a popular approach in Turkey.

In the field of medical translation, the most recent and notable work is that by Asalet Erten, who published the book '*Tip Terminolojisi ve Tip Metinleri Çevirisi*' (*Medical Terminology and Translation of Medical Texts*). In her book, the characteristics and formation of medical terminology, approaches to the translations of medical texts, example translations from English to Turkish, and criticism of some translated texts can be found. For those who see benefit in translation, this book can provide good guidance to them.

To conclude, the medical students' communicative academic and professional language needs should be met via various tasks, which are mostly problem-based as they allow for better contextualization of medical concepts. The literature also recommends using technologies which provide real world data. The literature also indicated that there are also some more structural and traditional approaches to the teaching of medical English. These attempts to develop specific courses using technologies and instructional methodologies like content-based, problem-based and grammar translation for teaching medical English to medical students and health care staff indicate that English for medical purposes teaching is a demanding job for the instructors. The instructors, therefore, should first analyze the students' unique needs in their contexts and then consider which of these approaches can be suitable. In this sense, needs analysis, as the first step of appropriate course design for the students, is very important.

1.5.4- Methodological Implications

The choice of the type of syllabus can determine ESP teaching methodology. This is because the syllabus is considered as a facilitator and a referent, and can deeply affect ESP teaching methodology. However, the syllabus which plays the role of a guide alone is not sufficient; it needs the presence of an important element which is the teacher. The latter knows how and why to use a given syllabus, and therefore, opts for the appropriate convenient teaching methodology.

In fact, methodology helps to induce learning and carries a number of procedures, techniques and tasks to solve some language problems. Nowadays, a teacher has a plenty of choices to opt for the convenient teaching methodology to enable learners to learn appropriately and achieve successful learning process. However, the field of ESP takes into account the various approaches of course design and combines between two major approaches such as: language-centred approach and learning-centred approach. That is, indeed, the procedure adopted in the present research to identify medical students' needs; i.e. the researcher relies on two types of students' needs analysis: target needs' analysis and learning needs' analysis.

In designing an ESP course, many practitioners have opted for a range of approaches within a course, exploiting one type of syllabus as the organizing principle and the others as complementary. This paper focuses on the writing of ESP materials, which take into account needs and context. It is drawn from theoretical insights and practical experience covering different topics for syllabus design, linguistic content and learning tasks and activities. An example of the materials produced will be demonstrated during practice in this work. Most of the results of the target needs analysis indicate that the administrators and teachers prefer ESP courses which emphasise the development of reading and writing skills; however, medic's students express the desire to most improve listening and speaking. Reading is still crucial. The schematic knowledge of the subject matter and the systemic knowledge enable them to tackle conceptual and communicative functions of the texts. Thus; there is strong relationship between the four skills. The

aim of the reading activities provide input for tasks and for exploring discourse structures (definitions-classifications-explanations). Thus, equipping them with a model for writing production and provide them with an ability to interpret texts they are reading; therefore, English is used as a medium to provide linguistic and conceptual inputs. All this may be done after needs analysis; moreover, there will be a use of several procedures to increase the learner's ability to comprehend. For example, teachers can present a set of sentences as statements and a list of items. The task is to connect the right word with its appropriate statement. After that, the student can construct a coherent passage. The exercise may take the following form:

A- Instruction: Match the items below with their appropriate statements:

1. Oviducts Houses developing foetus

2. Vagina Conduct egg; location of fertilization

3. Ovaries Contains opening to uterus

4. Cervix Produce egg and sex hormones

5. Uterus Receives penis during sexual intercourse and serves as birth canal

The passage produced after the understanding of these statements may be developed as follow:

"The female reproductive system includes the ovaries, the oviducts, the uterus, and the vagina. The ovaries which release an egg each month, lay one on each side of the upper pelvic cavity. The oviducts, also called uterine or fallopian tubes, extend from the ovaries to the uterus; however, the oviducts are not attached to the ovaries. The uterus is a thick-walled, muscular organ about the size and shape of an inverted pear. Small opening at the cervix leads to the vaginal canal. As far as it is concerned the vagina, it receives the penis during the sexual intercourse and serves as birth canal."

Human Biology (1989)

The rationale behind these types of exercises is to move from usage (the production of well-formed sentences) to use (the comprehension of data as sentences associated with their significance). Here, the methods are based on two crucial points: Form and meaning. It is usually focused on meaning in order to teach any grammatical item; therefore, there is a move from usage to use. Let's consider the exercise below for a better comprehension.

B- Instruction: Insert a suitable preposition in the following and guess the general meaning of each sentence:

- 1. The foot extends.....the point of the heel....the roots of the toes.
- 2. Carcinoma is a cancer arising....epithelial tissue.
- 3. Chemotherapy means the use.....a drug....selectively kill.....dividing cancer cells as opposed to non-dividing cells.
- 4. Genetic engineering allows the insertion....a foreign gene.....cells, and this makes them capable....producing a new and different protein.

The student may guess the meaning of these sentences after the insertion of the right preposition. He may rely on form to understand the meaning, or he may use his previous knowledge about his subject matter to guess which preposition he may use to arrive at agreed meaning. Another stratagem of teaching form and meaning is to ask the advanced student to explain some high technical terms. The rationale behind this is to construct grammatical sentences and to enrich his English vocabulary. For more clarity, the following example may be useful:

C- Instruction: Explain the following terms:

Blood pressure – Myocardium - pulmonary circuit -Vena cava -Valve.

The student may define them as follow:

- 1. Blood pressure: Force of blood pushing against the inside wall of the artery.
- 2. Myocardium: Cardiac muscle in the wall of the heart.

- 3. Pulmonary circuit: Part of the circulatory system that takes deoxygenated blood to and oxygenated blood away from the gas-exchanging surface in the lungs.
- 4. Vena cava: Large systemic vein that returns blood to the right atrium of the heart; either the superior or the inferior vena cava.
- 5. Valve: Membranous extension of a vessel or the heart wall that opens and closes, ensuring one-way flow.

Even if the student is not able to define these medical terms as above, he may be helped by the teacher to produce at least correct sentences. The aim here is to allow the learner to use these kinds of data in communication, being aware that the majority of doctors and researchers participate in seminars and conferences. We usually adopt various kinds of methods and techniques in teaching ESP in general and medical English in particular. Generally, we rely on our intuitions in this profession to gain success. Other suggestions will be proposed in the next discussions. What can be said is that an ESP methodology for advanced learners has to employ procedural activities, that's to say the task-based syllabus as well as activities which reflect the experiences of the target community. In the present case, it is better to ask a doctor to write a set of instructions in English. Here the focus will be on both form and meaning. From a methodological point of view, these types of activities are procedural, in the sense that the learner is going to perform an act. Of course, to make such activities work requires considerable knowledge on the part of whoever sets it up. Here the role played by the teacher is very crucial. But before talking about the teacher and his influence on the teaching and learning process, the next section is devoted to shed light, first, on the learner's role in EMP.

1.5.5- Student's Autonomy in EMP

Medical students' autonomy starts when teachers succeed to put an end to their interference in students' learning and get rid of their high degree of control and spoon feeding their students. However, teachers are not the only factor to be blamed for not achieving students' independent learning, but learners themselves share a

part of responsibility for their rooted belief about their teachers' crucial role of controlling and guiding their learning process.

In fact, to change this belief and attitude towards students' self learning, teachers have to minimize their strict control and guidance to their students, and let them feel responsible for their own learning through raising their awareness of some effective learning strategies and enhancing them to take the initiative in developing their own learning process. So, achieving a real autonomy of students' learning is a question of changing roles of both teachers and learners. In this respect, medical learners seem to be the most concerned for they tend to be autonomous not only in language learning but in their knowledge acquisition too. Nevertheless, students' autonomy cannot be achieved if teachers do not change their classical teaching attitude and enhance students 'self learning. Certainly, there are some common aspects of such autonomy for medical students.

1.5.6-Aspects of Learner's Independence in EMP

Many researchers and scholars have the belief that developing learners' autonomy is strongly based on a number of aspects which should exist at ay faculty of medicine. These aspects can be listed as follow:

- Learners are responsible for their own learning.
- Teachers should develop students' awareness of their learning process and gradually release control over their learners' study.
- Teachers have the duty to build their learners' positive attitude towards their learning process.
- Teachers should allow self and peer evaluation.
- Learners should be trained how to produce and use their own authentic materials.
- Teachers should accept different degrees of learners' autonomy.
- Like teachers, learners could check their learning process through activities and tasks.
- Learners should be enhanced to do more oral presentations.

On the whole, ESP courses are a great challenge for teachers who have to convince themselves about sharing power and control with their students. It is a matter of working together to come to create an appropriate syllabus for medical students. The teacher's role is then no more than an organizer or motivator who looks for good opportunities and convenient conditions for his learners' learning. Thus, an ESP teacher is supposed to be more flexible and knowledgeable about new approaches and teaching methods. He is responsible for creating such an environment where medical learners feel more concerned of acquiring English and developing the necessary skills to fulfill their goals of interaction and communication.

1.5.7-Reasons for EMP Learners' autonomy

The followings are the reasons behind being an autonomous EMP learner:

- Students have different individual needs for their professional lives.
- The majority learn to over rely on teachers in their language learning careers.
- There is a need to prepare the students for self directed learning outside the classroom to acquire the habit of learning continuously.
- The English teachers at the Faculty of Medicine usually have less medical knowledge that learners therefore are perceived as lay people as opposed to 'expert' students.

Since students usually transfer their knowledge of medical subjects onto the English course, they can help in planning the course itself which enables the development of student autonomy. Autonomy presents a necessity in society which puts great emphasis on lifelong learning. Since teachers cannot provide the students with all the skills and knowledge they would like to have, the best way to help students is by providing them with strategies on how to learn by themselves. The first step towards autonomy is encouraging the students to take responsibility for their own learning. The concept of student autonomy and successful learning are closely connected. Teachers of ESP teach both language and content and the relationship between the teacher and the student is different from that in General

English. In ESP students are experts in the field in which the teacher has very little knowledge. This specific relationship affects the methodology of teaching which is no longer teacher—based and this is one of the hardest things teachers have to learn. Another characteristic of ESP methodology is interdisciplinary team teaching. Cooperation between language teachers and expert subject teachers is essential if the ESP course is to be of any success.

1.5.8- The Role of EMP Teacher

The role of the teacher has changed in recent years in the light of current trends in education, technological advances, and information explosion and communications revolution. The teacher is no longer viewed as the only source of information or imparter of knowledge. He/she is a facilitator of learning, an organizer and a coordinator rather than a director of the learners' activities. S/he is an advisor and a consultant on the learner's problems. S/he has to create the most favorable conditions under which learning may take place.

The shifting of authority from teacher to student is the most important thing that ESP teachers must learn and accept. Such a situation inevitably imposes a change of the role of language teachers. In this context the teacher is responsible for giving the students help with acquiring the knowledge and skills necessary to reach their goals. The teacher is an organizer and a coordinator rather than a director of learners' activities. She/he is an advisor and a consultant who understands and supports students. S/he has to create the most favorable conditions under which learning may take place. The teacher shows great patience, makes all the students participate and has the same interest in all students. The teacher listens to the students and respects them, inspires confidence and empathizes with students' problems.

Probably the most important issue is developing in teachers the understanding and techniques for delivering effective learner strategy instructions to students (19).

Learning how to learn a language is a complex skill to acquire. It involves focusing on the process of learning as well as on the content of the learning. It is concerned with being informed about the language itself, about oneself as a learner – through

self-assessment, reflection and experimentation – and therefore involves training in independence.

Teachers should teach communicative function of language and insist on fluency rather than accuracy. In the modern ESP, in our case EMP classroom, grammar is not taught traditionally with explanations of grammatical rules – students should be allowed to discover the rules by themselves. Only authentic materials are used and students take an active part in designing the syllabus.

As we have said, the modern English language course is student – centered which helps develop student autonomy and learning continues even after the end of the course.

Language teaching should be based on the process itself, not on the final product. If the teaching process is in accordance with the students' needs, the final product, communication in English, will be successful. The teacher should make the lectures interesting. Only interesting lectures attract students' attention and raise their motivation for participating and learning. Even though teachers are no longer the center of the classroom, they should maintain integrity and authority without being distant from the students. Students have more confidence in teachers who are open and honest, who do not hide their feelings and personality.

1.6- Conclusion

In conclusion, the necessity of teaching ESP has urged the Algerian decision makers to call for urgent implementation of ESP courses in all faculties so as to ensure better professionalization of prospective workers, teachers, scientists and researchers to meet both the needs and the requirements of the working life and the different markets. In fact, medical students seem to be the most interested in ESP courses through ensuring effective English teaching.

In this chapter, a number of important points have been tackled under four major sections such as: English for Specific purposes, ESP Course Design Components, Syllabus Design and Curriculum Development, and finally Medical English. First, English for Specific Purposes (ESP) was explained in terms of its distinguishing points from English for General Purposes, its development process,

its course types and much focus was put on English for science and technology and characteristics of scientific style. Next, describing language and depicting the notion of learning theories was largely highlighted. Finally, the purposes of needs analysis with its various definitions, its methodology and similar needs analysis conducted in medical contexts were presented in detail. Then, the literature about English for Medical Purposes was reviewed in terms of the field of EMP and its importance, the characteristics of medical English, research studies and ways of teaching EMP.

The next chapter will explain the methodology of the current study in terms of the setting and participants, instruments, procedure and the learning situation..

Chapter Two

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2.1- Introduction

As mentioned in the previous chapter, taking ESP courses has become the demand of a great number of learners in different fields all over the world. It is through learning specific English that suits specific context in a very restricted period of time that ESP learners conserve more efforts and gain more time in their learning process. Accordingly, medical students in the medical field seem to be more interested and ask for more opportunities to take ESP courses so as to be equipped with English, particularly in their future academic studies. This makes the matter of teaching medical English in the Algerian faculties and institutes one of the biggest challenges raised by the decision makers and curriculum developers.

This chapter, which is mainly concerned with the situation analysis and the methodology design of the present research, is typically considered as the preparatory stage for the next coming practical side of the investigation. Thus, more emphasis is put on describing the medical setting where English is used starting by exposing the real prospects of English language use in Algeria and moving to the core concern of this study through clarifying the actual situation of teaching medical English in one of the most prominent universities in Algeria; the one of Sidi Belabes. In the same context, much talk is about the type of the actual syllabus applied in teaching English for medical learners with reference to timing, the staff of ESP teachers, and closing with the benefits from teaching effective ESP courses to medical learners.

Another part in the present chapter is reserved to explain the methodology design of the present work referring to many aspects of the investigation such as: the choice of the method, the setting, the participants, the research instruments and the data collection procedure. This leads the researcher to analyze the data in detail in the next coming chapter.

2.2- Reality and Prospects of English Language Teaching in Algeria

As previously mentioned, the teaching of English language is witnessing a remarkable development throughout the world, and Algeria is among those

countries which have taken decisive and courageous decisions to give English its real status and undertake some basic reforms in teaching foreign languages in general and English in particular. This new vision started to take place mainly in the year 2004-2005 when Algeria has adopted the rules and principles of the Bologna process by adopting the LMD principles (Licence, Master and Doctorate). In addition, the effects of globalization have led to a considerable shift in the aims and objectives of teaching that had to meet the changing demands of the socioeconomic market. As an inevitable consequence, new methods and approaches of language teaching have shaped the new curricula as far as English teaching and learning are concerned.

With the aim of improving the structure of the educational system, Algeria had undertaken a wide range of reforms, among which English has been defined as the first foreign language after the year 2000 to gain the status of the langue of science and technology. This, on the one hand, paved the way to the emergence of various TEFL (Teaching English as a Foreign Language) schools throughout the country. On the other hand, the teaching of English in schools has led to the adoption of two major approaches to language teaching namely; the Communicative Approach to language and the Competency-based Approach.

The first one states that language is first communication putting the learner in the skin of the native speaker and providing him with the necessary materials to achieve successful communication and better command of language. However, this approach could not realize fruitful results due to time, space and culture constraints. The second approach to language teaching is based on the principle that learners should acquire communicative competence by centralizing on the learner as the target of the learning process. Here the focus is on the meaning conveyed by the context rather than the grammatical forms used in it.

Generally speaking, although the use of English in Algeria is restricted to classrooms, there is much Openness of the school on the outer perimeter where more opportunities of learning this language are given to a wide range of learners in

different domains. This could explain the upward trend in language teaching at the level of the educational system in the country.

2.2.1- English Language Teaching in the Educational System

Education, in Algeria, is free and officially compulsory for people aged between 6 and 16. Recent figures show an average of 97% of boys and 91% of girls attending school, the reason why the current literacy rate is estimated to be around 70%. Education consumes one-quarter of the national budget. The primary language of school instruction is Arabic. French is taught as a first foreign language whereas English is considered as a second foreign language. After the French ten year compulsory school model, then the foundation school (Ecole fondamentale et polytechnique), Algeria adopted another new system of education structured as follow: primary school, middle school, secondary school and university.

Levels	Age
Kindergarten	3-5
Primary school	6-10
Middle school	11-14
Secondary school	15-17
University	≥18

Table 2.1: The Educational Structure in Algeria.

Primary education starts at the age of 6 and lasts five years. Although some children are lucky to attend kindergartens before this age, most of them, particularly those in rural regions, cannot receive this basic form of education.

In middle school, pupils have to spend four years and finish this stage by taking a final examination called BEF to be admitted in the secondary school or oriented toward vocational training.

Generally, secondary education begins at the age of 15 and finishes when pupils take the Baccalaureate Examination which determines the pupils path; either to university or vocational training centre. At this level of education, pupils are

oriented toward a wide range of streams such as: literary, scientific, foreign languages, mathematics or other technical streams.

To be admitted at the university, students are required to get their Baccalaureate Certificate with a least general average equal to 10/20.

With regard to foreign language teaching, and due to globalization, English has imposed itself in every domain of people's daily life. Consequently, it has become, with no exaggeration, the language of many parts of the world, mainly the developing counties like Algeria where it found its way to the people in the early 60's and 70's mainly in respect to the economic tendency of the country.

However, despite its important status, at least, from the economic side, English has remained the second foreign language after French and has always been restricted to the classroom use only as a school subject. That's why, for many scholars, the Algerian learners' language proficiency may vary between average and poor. In fact, learning English for about 524 hours counting 3 hours a week for a period of 5 years (02 years in the middle school and 03 years in the secondary school), remains insufficient to master a foreign language and meet learners' communicative needs as explained by Mountford and Mackay (1978):

When English as a foreign language is taught to children at the primary school and early secondary levels of education, it is generally taught with a general aim in mind – that is, it is regarded as a 'good thing' for them to learn a foreign language as a part of a broad education. There is usually, however, no immediate and specific requirement for such children to make use of the language in any communicative situation.

As a result, when students arrive at University, they lack many aspects of the language that negatively affect their performances like the communicative competence which is required in the utilitarian purposes ,to travel abroad , to find a job or simply to study as stated by Brumfit (1979):

"The problem is that students and especially students in developing countries, who have received several years of formal English teaching frequently remain deficient in the ability to actually use the language, to understand its use, in normal communication, whether in the spoken or the written mode"

For Algeria, the need to establish many political and economical relations with different parts of the world has urged the country to encourage teaching English in the early stages of its educational system starting from the middle school with three hours a week.

In the secondary school level, English is taught to all the streams (Foreign languages, literature and philosophy, science and biology, Mathematics and other technical streams) from first year to third year but with different timing and coefficients.

In the first year level, English is nearly taught similarly for both scientific and literary streams which have almost the same syllabus to be applied .However, pupils of literary stream learn English for four hours a week whereas those of scientific stream have only three hours a week of language learning.

In the second year level, kind of teaching English for specific purposes starts to take place in the field of language teaching process due to the different syllabi designed for the different streams. If we take the case of the scientific stream, teaching English has much to deal with scientific subjects and notions that learners are acquiring in every day learning situation. Thus, a major focus is on teaching scientific vocabulary, scientific discourse and dealing with scientific topics in a purely scientific style.

In the third year level, the objective from teaching English in relation with the pupils' branch (scientific or literary stream) seems to be more emphasized since there is a noticeable difference in the programmes designed for each stream. This clear difference could explain the intention of curriculum developers to equip learners with the convenient type of English needed for their field of study. The table below illustrates the programme of English for third year secondary school level.

Unit	Scientific stream	Literary stream
One	Ethics in business	Ancient civilizations
Two	Food safety, advertising and economy	Ethics in business
Three	The solar system	Education in the world
Four	Feelings and emotions	Feelings and emotions

Table 2.2: Third Year English Syllabus for Scientific and Literary Streams

The table above shows some differences in the teaching content between students of scientific stream and the ones of literary stream. The difference is even in the hourly volume where the literary students have four (4) hours of learning English perweek whereas the scientific students have only three (3) hours. This could plainly explain the existence of ESP discipline at an early phase in the educational system.

2.2.2- English Language Teaching In the University

To catch up with the demands of globalization, Algeria has started to implement a new policy based on teaching foreign languages particularly English which has become the language of science and technology. The current view of the place of English in language learning/teaching is still at its beginning in the Algerian university which still uses French as a language of instruction in most of the faculties and institutes especially medicine, architecture and electrical engineering.

Nevertheless, 2004/2005 witnessed the emergence of a new university system in Algeria called the LMD reform issued in the Executive Decree 04 -371of November, 21st 2004 on the creation of a new bachelor degree. These reforms gave English an advanced ranking among the other foreign languages particularly French

which has lost much of its importance on the ground as professor Miliani (2000) stated:

"In a situation where the French language has lost much of its ground in the socio cultural and educational environments of the country; the introduction of English is been heralded as the magic solution to all possible ills including economic, technological and education ones"

However, despite recognizing its crucial role in all the fields of university, curriculum developers still give no particular attention to English courses and do not provide specifications for the course content and methodology. The total absence of well-desined syllabi and the non- selection of appropriate materials make, most of the time, the English teacher in many faculties and departments free to teach whatever he judges relevant to his students. This is on one hand, on other hand, most of the teachers of English whose background is literary are not specialists in the fields they teach, the reason why they find themselves teaching a subject they know nothing about or not interested in at all. In addition, "some teachers are more interested in having a post at the university, as it is socially speaking a sign of success to belong to the elite or the intelligentsia." (Miliani, 1983)

Another problem that faces implementing real English courses in the Algerian university is the lack of teaching materials such as: teaching aids, reading materials, equipped laboratories...etc. Moreover, most students who have heavily loaded programs seem unwilling to attend English courses which are regarded as a compulsory subject in their curriculum; and even if they do, it is only for the sake of exams no more. Nevertheless, this is not only the unique reason behind the lack of motivation from the part of students, it is also due to the quality of the English courses offered by teachers who generally focus on teaching terminology and grammar to their learners.

2. 2.3- EFL and ESP Teachers' Training

Before depicting the subject of training teachers in Algeria, it is with great importance to clarify the way teachers of different categories obtain their certificates and diplomas to start working in the field of teaching. In this respect, students wishing to enroll at an" école normale supérieure", which trains basic and secondary school teachers, must have passed the baccalauréat examination. As far as basic education is concerned, teachers are required to train for three years to obtain the "Diplôme de Maître d'Enseignement Primaire" or for four years to get the "Diplôme de Professeur d'Enseignement Moyen." With regard to Secondary school teachers, they have to train for five years to be rewarded the "Diplôme de Professeur d'Enseignement Secondaire." While the final year in the training is generally devoted to practical teacher-training placements combined with pedagogical and theoretical training, the first two, three or four years are generally dedicated to reinforce the teachers 'knowledge in their subject area specializations.

Concerning university teachers, they are also required to be highly qualified people with the doctorate degree or at least, as the classical system states, the Magister degree to be allowed to teach in the university as permanent teachers.

However, Obtaining high degrees or diplomas does not mean, at any rate, being a successful teacher because most of teachers look for additional preparation and competencies to achieve success in their teaching career. Therefore, many teachers ask for training courses to develop their teaching skills and experiences. Richards and Farrell (2005) state that "training courses are sets of activities designed not only for the GE teacher but also for the ESP one". Yet, one should distinguish between two types of training; pre-service training and in-service training. The former refers to the different professional tasks designed for teachers or student teachers who intend to teach for the first time and during the years of graduation; this is called teacher training and it is available in most of Algerian schools. The latter concerns experienced teachers who seek increasing their knowledge to be" better" as professional teachers (Underhill (1986); this is called teacher development. Nevertheless such kind of training is not always available, the reason why most teachers particularly ESP ones look for their own way to develop their competences through different strategies such as reading, attending seminars and conferences, participating in workshops,...etc (Hutchinson and Waters 1987). This could explain the absence of an official teacher training scheme which could provide teachers with the needed theory and practice for a successful teaching career.

It should be noted that the aim from training teachers is to prepare them to develop some pedagogical roles with the focus on teachers' present responsibilities. It is regarded, as Richards and Farrell (2005) stated "...a preparation for the first teaching position or to take on a new teaching assignment or responsibility". In the same context, Vassilakis (2011) saw that the main goal that could lie behind training teachers was to prepare them to develop some pedagogical roles such as analyzing language and language skills in order to understand the learners" needs, providing the relevant materials and planning courses that match those needs. If the cited above is the stated goal from training, how could that goal be achieved with the Algerian ESP teachers?

In fact, the convenient way to ensure efficient training for Algerian ESP teachers is to create a number of ESP centres added to the one of Oran USTO (University of Science and Technologies of Oran) mainly concerned with developing professional advisory service for key tertiary institutions in the western, central and eastern region of the country (Benyelles, 2009). The role of ESP centres has become of paramount importance to keep up with research development and scientific progress.

Generally speaking, English teachers in Algeria need training. They need to improve their teaching strategies and acquire more modern methods of teaching, especially ESP teachers who are supposed to be equipped not only with the linguistic competence but with sufficient knowledge of the field they deal with. Ongoing professional teacher training together with advanced language learning/practice in some ESP centres is the suitable solution to achieve the intended progress. This can be accomplished by the teachers themselves organizing workshops, inviting English native speakers and professionals to join them, and working together to make a change.

2.3- Methodology in ESP Classes at Sidi Bel Abbes University

The various contacts between some of the Algerian universities under the Ministry of Higher Education and Scientific Research, and some of the British universities had resulted into the creation of some ESP centers on the ground. The objective was to develop the scientific research and facilitate knowledge of different sciences through using English as a vehicle. Hence, Oran which borders Sidi Bel Abbes from the North West was one of the privileged towns in Algeria where an ESP centre was settled. This could make it possible for many ESP teachers to benefit from the training courses offered by the centre. Nevertheless, ESP is still at its beginning in the Algerian university where most teachers are teaching general English with much focus on terminology and long bilingual lists of vocabulary items related to the discipline they are supposed to teach. This is unfortunately the situation of teaching ESP in most of the Algerian faculties and the faculty of medicine is just one of them. Likewise the University of Sidi Belabbes, where the situation under investigation is taking place, consists of a separate department of English under a huge faculty called the faculty of letters, languages and arts.

At the level of this department, learners obtain BA degree in English after three years of study or MA degree after five years of training through which they are offered the position of English teachers in the Algerian middle or secondary schools. The university teaching level requires, as mentioned before, the doctorate degree or at least the magister diploma of the classical system. However, due to the terrible lack of university teachers not only at Sidi Bel Abbes University but in the whole country, lots of faculties recruit MA degree teachers to satisfy the need of English language teachers who most of the time are not trained how to teach ESP. Although, those EFL teachers are supposed to implement ESP programs in the different concerned departments, they, indeed, offer no more than GE courses for their learners. Moreover, the time allotted for teaching English which is often not more than one hour and half per week, and the rely on part time teachers in most of the departments added to an absolute absence of a stimulating socio-cultural background and a linguistic unawareness (Ourghi 2002) makes it really impossible

to talk about any clear methodology in ESP classes of the Algerian university including the university of Sidi Bel Abbes. This is due to a number of reasons that were stated by Miliani (1983):

- -The lack of a coherent approach
- The lack of fully trained teachers of ESP
- -The lack of in-service training for teachers who give ESP courses
- -The lack of appropriate materials, i. e. textbooks, magazines, journals, films, etc.
- -The lack of motivation and interest from the students and even the teachers.

2.3.1- The Faculty of Medicine

The Faculty of Medicine is one of the six (06) teaching and research entities of the Djilali Liabès University of Sidi Bel Abbes. It is created by Executive Decree No. 04 - 252 of August 29, 2004 which amends and completes the Executive Decree No. 98 - 141 August 1, 1989 establishing the Djilali Liabès University of Sidi Bel Abbes. The faculty was created in 1981 as an institute with a staff of 04 teachers and 51 students. In 1985; it was attached as an annex to the INESSM of Oran until 1989 when it became institute of medical sciences. In 1993, a new organization was introduced and there was the creation of the Faculty of Medicine.

Currently, it contains 17 University Hospital Professors, 10 A Masters, 17 Senior Lecturers B and 104 Master Assistants supervising 2349 medical students, 448 dental medicine students and 625 pharmacy students. It also has: 07 Amphitheatres with a capacity ranging from 200 to 500 seats,11 tutorials (TD),12 Laboratories, 01 internet room, 01 Library, 01 Reading room with a capacity ranging from 100 to 150 places, 03 rooms for teachers.

The faculty of Medicine consists of three medical departments namely: the Department of Medicine, the one of Dental Medicine and the Department of Pharmacy. In this faculty, English is not taught in both of the departments of Medicine and Pharmacy, and is regarded as a secondary course in the department of

Dental Medicine where teachers are free to teach whatever they judge relevant. It is up to them to opt for the convenient syllabus and the appropriate methodology applied in the teaching process. This asserts the fact that decision makers, in general, and curriculum developers, in particular, give no particular attention to teaching English let alone English for Specific purposes. To clarify the situation more and more, the researcher has chosen the department of Dental Medicine as a sample of study from the above mentioned medical faculty.

2.3.2- The Department of Dental Medicine as a Sample

The choice of Dental Medicine Department as model of study is not done at a random but because it is the unique department in the medical faculty where students have been taking some English courses for two years. So, it is of great importance to shed light on English language teaching situation in that institution with much focus on all that may surround the act of teaching and the real circumstances that may affect the English language learning.

The Department of Dental Medicine generally receives students from scientific and mathematic streams holding their Baccalaureate diploma (BAC) with a good grade or close to good. Those students go through a curriculum of six (06) years to have a degree in Dentistry Medicine through which they will be able to start their professional life and become general practitioners; they can also continue their studies for post-graduation to become specialized in a specific field of dental surgery.

As for the subjects taught in the department of Dental Medicine, they differ from one level to another, some are annual, others are semestrial, some are very essential with high coefficient, and others are secondary with low coefficient. The following table illustrates in details the modules and the hourly volume devoted to the teaching process for second year students of Dental Medicine.

Teaching Unit	Teaching Mode	Coefficient	Hourly Volume for Theory	Hourly Volume for Practice
Prosthesis	Annual	5	26 h	192 h
Operative dentistry	Annual	3	25	128
Oral Pathology	Annual	3	62	32
Anat-Histo- Embryology	Annual	3	64	24
Bacteriology	Annual	2	31	/
Phesiology	Annual	3	30	15
Dental Anatomy	Semestre 1	3	16	15
Materials	Semestre 1	1	44	/
Immunology	Semestre 2	1	42	/
Parasitology	Semestre 2	1	23	/
General Pharmacology	Semestre 1	1	20	20
Dentofacial Orthopedics	Semestre 2	3	16	/
English	Semestre 1	1	30	/

Table 2. 3: *Modules taught for* 2nd *year Dental Medicine*

The table above presents the big number of modules taught for second year dental medicine students with a reference to the mode of teaching, coefficient and the hourly volume devoted to theoretical and practical work. It is clear that English which is regarded as a secondary subject is a semestrial module with no more than thirty (30) hours per semester. It seems not enough to enable medical learners to use English efficiently and communicate effectively.

This is on one hand, on other hand, before choosing dentistry or becoming dentists, students should know that dentistry is one of the most exciting career choices. As part of their education, prevention, diagnosis and treatment activities, dentists provide the public with an essential health service. Thus, from the beginning; students should determine whether the career choice is right for them, what opportunities a dental degree can offer them. Besides, a dental medicine student should be aware of the following tasks and missions when opting for this medical branch:

- Talking to people and helping them.
- Working collectively through team works.
- Pursuing a career that may offer challenges and variety.
- Practising a liberal profession.
- Helping people maintain or improve their oral health.
- Having a good manual dexterity.
- Having a strong memory, interest and aptitude for science.
- Participating in the advancement of the knowledge.

In addition, in dentistry as in other health disciplines, knowledge and new technologies are evolving. Nowadays, dentists do more than just cut and seal their patients' teeth, perform a wide range of procedures and functions, and have a variety of treatments to retain natural teeth. Thus, the doctorate in dentistry leads either to the job market or to graduate studies in dentistry or related fields. Various residency, master's degree and PhD programs are offered to dentists who wish to specialize or move towards research. The majority of general dentists or specialists work in private practices, alone or in groups. They adapt their work schedule according to the needs of their clientele. Some practice in hospitals, others go to teaching, research or public health.

2.3.3- The Learning Context

Dental Medicine Department is the only medical body in the faculty of medicine at Sidi Bel Abbes University where students are offered English courses for about two years. They start learning English in the first year by exposing them to different subjects related to the domain with much focus on teaching medical terminology and grammatical structures. There is no such official developed curriculum to follow or even clear syllabus to rely on. ESP teachers are free to take the initiative to set their own programme and teach what they judge relevant to their students. Most of them are lost in the search and selection of appropriate materials which are most of the time not easy to get, and even if they are available they do not meet the objectives of the designed courses and satisfy the students' needs in the language. As a consequence, most of the students are not highly motivated to learn English and if they attend English courses, they do for the sake of exams no more. They argue that they need English to communicate and use it as a means to contribute to knowledge and share their thoughts with other professionals from English speaking countries. For most of them, they are not able to do so with the kind and the quality of English courses they are taking. Neither the hourly volume devoted to learning English is sufficient nor are the objectives from the teaching of English module in the dental medicine department clear.

2.3.4- Time Allocation

Among the main features of the learning context, allocating time is very crucial. It is important in the sense that the designing of any language course or syllabus is based on how many hours are allocated to achieve the stated goals and realize an effective teaching. If one takes the case of the Department of Dental Medicine, it is noticed that not more than one hour and a half per week is the devoted time to the English teaching course. It is not sufficient to ensure the required proficiency and enable learners to use English fluently in their field of study. What worsens the situation more and more is that the English module session is usually scheduled late in the afternoon when learners are usually exhausted and unable to concentrate. Besides, English is taught as a semesterial module for the second year level whose hourly volume does not exceed thirty hours per month. So, it is not surprisingly to find the rate of absence of students in the English course very high.

2.3.5- Group Size

One of the encouraging factors to the possibility of designing successful ESP courses in the department of dental medicine is the limited number of students in groups. This, in fact, concerns the whole medical faculty where the current statistics show about twenty five (25) students per group. This could serve better for classroom management and for achieving course objectives. The no crowded classes make it easy for ESP teachers to look after students 'individual learning and control their language acquisition progress. Besides, it affects positively the quality of the suggested input and the amount of learning activities and tasks. Students would feel much involved in the learning process and could develop more competence and achieve remarkable performance in their English language learning.

2.3.6- Teaching Materials

Although The Ministry of Higher Education and Scientific Research has recently equipped many universities with a great deal of teaching material such as: multimedia means and some audio visual materials, the Algerian universities still rely on traditional and simple ones like: the chalk, the board and the handouts. The absence or the nonuse of the necessary materials especially laboratories and audiovisual aids makes the fact of teaching foreign languages a difficult task and an arduous job for many language teachers. The faculty of Medicine in Sdi Belabes University is not excluded from that reality. This concerns, in particular, the department of Dental Medicine where English language teachers complain about the nonexistence of English medical text books and printed syllabus that could guide them and allow for better language learning. The consequences of such a situation push many teachers to take the initiative and select what they think appropriate and suitable to their learners far from any kind of guidance or control from the official administrative authorities of the university. Thus, the absence of the required materials has tremendously affected the quality of the act of teaching and resulted in the lack of motivation from the part of learners.

2.4- Objectives of Teaching Medical English

Medical students in Algeria and those of the university of Sidi Bel Abbess in particular, want to learn English for a wide range of objectives. They are strongly convinced that any scientific research is based on English which is the appropriate medium of international communication. This could enable Algerian doctors, medical students and researchers to communicate with foreigners and share their medical knowledge with others or benefit in return from their scientific experiences. So participation in international conferences and seminars through presenting oral communications is one of the main reasons that enhance a great number of Algerian medical learners to learn English. On other side, medical learners express their need to write medical reports and publish their articles on medical issues in English. Consequently, the fact of learning the norms of scientific writing and acquiring the basic medical terminology is undoubtedly among the major linguistic demands of medical learners.

However, medical English in the Algerian university seems to be far from the real stated objectives. Up till now EMP as a discipline has not been yet implemented in most of the medical faculties, and even if it is taught in some faculties, it is no more than general English courses which are offered without vain. That is, indeed, the case of one of the most prominent universities of Algeria; the University of Sidi Bellabes where the medical students under the three departments: medicine, pharmacy and Dental medicine are not really taught ESP. In fact, the implementation of ESP courses in the medical faculties could undoubtedly equip students with a tool for facing the world and this, of course, needs the contribution of many effective elements such as: the teacher, the medical staff, the decision makers and the medical learners themselves.

Generally speaking, teaching ESP in the medical faculties is not a question of designing a general syllabus favored with special vocabulary or a specific terminology related to a given discipline but it is a matter of providing learners and doctors with the necessary competence to communicate efficiently and master the different structures of language to achieve competency. It is an attempt to enable

students to develop their oral and writing skills through a wide range of activities and tasks which lead to a successful learning process. This motivates a large number of medical learners to learn specific English related to their field of study either for academic objectives or professional reasons; that is, indeed, the concern of English for academic purposes and the one for occupational purposes.

2.4.1-Medical English for Academic Purposes

It is also called English for Educational purposes and aims at enabling learners to specialize in specific fields of study and socialize students who speak English as a second or a foreign language into a specific academic discourse community by helping them build an academic skill set that will benefit them in their coursework and professional career. Thus, the crucial objective of the English for Academic Purposes program in the Algerian medical faculty is to prepare students to meet academic expectations for written communication at a university level. On the whole, one can summarize the learning objectives for EAP Classes in the following notes:

- 1- Focus on developing the students' competence in academic writing and its various genres with an awareness that includes language use.
- 2- Provide learners with the appropriate tools and materials to enhance their critical reading of authentic academic texts and develop their skills of synthesizing, summarizing and criticizing materials relying on their expectations.
- 3- Enable learners to understand the different practices related to an academic research and master the right scientific methodology to gather, evaluate and analyze data through managing information from sources and demonstrating control over assigning citation format.
- 4- Enrich learners' linguistic stock of academic vocabulary which is both general and specific, and enable them to develop appropriate grammatical structures that could serve for a variety of academic writing tasks.
- 5- Encourage peer feedback as well as error analysis, proofreading and editing of different types of writing.

2. 4.2-Medical English for Occupational Purposes

English for Occupational Purposes (EOP) refers to the type of English taught to learners who seek to fulfill occupational purposes which may include banking,, law, medicine administration and so forth It is particularly used for general workplace training and development. Kennedy et al (1984:04) write: "EOP is taught in a situation in which learners need to use English as part of their work profession." The concern of EOP is the use of case studies and surveys from a wide range of occupational contexts to test whether the same language is used to articulate the in structural development. According to a diagram that was adapted from Johns (1991) ESP can be divided into types: EAP and EOP. The latter includes two main fields such as EPP; English for professional purposes and EVP; English for Vocational purposes. Nevertheless, both EPP and EVP are for providing learners with appropriate English to cope with the demands of every day working needs.

In the Algerian setting, EOP is not widely demanded in comparison with EAP. This is due to the fact that most postgraduate students and health professionals get more job opportunities in non English speaking countries such as: France in particular. Thus, they feel much interested in developing their academic English instead of improving the type of English needed for their professional career.

2.4.3- Medical Learners

The majority of the participants are females (around 70%) They are pursuing an undergraduate medical course in the Faculty of Medicine, Sidi Bel Abbes University, Algeria. Their age is between 18 and 22. They come from different academic backgrounds. Most of them have had more than five years of English instruction. All of them did their schooling in regional /Arabic medium schools. A very few of them have taken English courses in private schools. All of them think that English is important in their medical study for the following reasons:

- 1. To be able to speak with foreign English speakers and understand them well.
- 2. To speak with other health professionals from English Speaking Countries.
- 3. To read articles, scientific journals and medical books written in English.

- 4. To use English as an international language.
 - 6. Some prefer learning English for future professional career..

Though there are some things in common among the learners, they do also differ in many aspects related to their difficulties in the language, their wants, and lacks, and the styles and strategies of learning they use. An overview of all these similarities and dissimilarities will be explained in detail in the next chapter. (see chapter three)

2.5- Research Methodology Design

Whatever the objectives set for a research, it cannot be authentic and evaluable if it does not respect a well-organized methodology which relies on certain precise pedagogical and linguistic principles. To put this reality into practice, the present work is based on three main elements which are: the choice of the method, population and sampling and data gathering tools .All of these elements serve to better understand the situation of teaching English in the medical faculty of Sidi Belabes University.

2. 5.1- The choice of the Method

The choice of the appropriate method for any kind of research depends largely on many factors such as: the nature of the problem, the type of the needed data, the objective of the research work and the population. (Turney and Robb, 1971).

Taking into consideration all these factors, the present work aims at describing a situation and carrying out an experiment i.e., it is based on a combination of descriptive and experimental approach which fits the purpose of this research. It is descriptive in the sense that it aims at providing descriptions and explanations of the target situation. It describes the situation and population under study, and displays the research instruments used to investigate the case. It is experimental in the sense that it relies on testing the gathered data and confirming or disconfirming the findings of the study. Thus, the choice of this method certainly helps to clarify the actual situation of medical English in Algeria and reveal the main reasons behind asking for implementing urgent ESP courses for medical students of all the specialties.

2.5.2-Settings and Participants

At the Faculty of Medicine in the University of Sidi Belabes, students are not offered English courses except Dental Medicine students who learn general English with much focus on teaching medical terminology for the first two years of their learning process. The non-implementation of ESP courses in this faculty makes it more difficult for medical learners to easily access to medical knowledge which is most of the time presented in English.

To achieve this research, three categories of participants were relied on. First, 150 students of the medical faculty represented the corner stone of the present work whose main objective is to enable learners to learn EMP effectively. Students were not chosen at random but they belong to three different departments of the medical faculty namely: the department of Dental Medicine, the one of Medicine and the Department of Pharmacy. All the participants were of the fifth year levels. The purpose from opting for this sample, i.e. 5thyear students is to ensure better comprehension of the actual specific needs of the medical learners for the reason that they are more aware about what they need than other students of any other levels. Second, a group of five ESP teachers working in the medical faculty were also taken into account in this investigation. All the participants were part-time teachers having different qualifications such as: magister degree, master certificate and classical license diploma. The third kind of participants contributing in this work is the dean of the medical faculty. The latter represents the administrative authority and the decision making body of the institution. He facilitated the task of the researcher and provided with illumined help for better results achievements. He was interviewed about the situation of teaching English for medics and the prospects of implementing medical English courses in the faculty. The table below illustrates the demographic profile of all the contributing participants in the study.

Number of participants	Department	Degree of study
	Medicine/Dental	5 th year level
150	medicine /pharmacy	
		Classical
05	ESP teachers	Licence/Master/
		Magister Degree
01	Dean of the Faculty of Medicine	Professor

Table 2.4: Participants' Demographic Information

2.5.2.1- Target Surdents' Profile

The present research is based on a group of fifth year medical students belonging to the departments of: medicine, dental medicine and pharmacy in the university of Sidi belabes. They are about 150 learners with a medium age of 22 years, 70 % of them are girls who reside in the University campus. They were chosen at a random to answer a questionnaire about different aspects related to ESP learning during the second semester of the academic year 2015/2016. However, not all the students have answered the questionnaires due to many reasons that we would like to clarify in the" limitations section"

It should be noted that French is their first foreign language and the language of instruction at university, while English is their second foreign language. They learnt English language during two years in the middle school and three years at the secondary level, which makes a sum of five years. At university level; however, they had never received any kind of English instruction except dental medical students who have learnt English during their first two years.

2.5.2.2- Target Teachers' Profile

The second questionnaire was devoted to five (05) participants working as ESP teachers in the Faculty of Medicine. The number of informants was very limited for

the simple fact that English language has not been yet taught throughout the faculty where only dentistry students had the chance to take some kind of English courses.

The table above showed that there were five teachers; two males and three females teaching in the medical faculty; the department of Dental Medicine of Sidi belabes University. All of them were part time teachers, three (01) with classical License degree, three (03) with Master certificate and only one with Magister degree. The qualifications of four of them are not sufficient to enable them to teach ESP in the university. The one with Licence degree has an experience of fifteen years while the three with the Master degree are the product of the LMD system with an experience of not more than two years of experience as a maximum. The fifth teacher is the only respondent whose qualifications are really of such of a value to allow him to teach in the university

2.5.2.3- The Dean's Profile

He is a professor specialized in epidemiology. He has been in the medical faculty for more than thirty years, and dean of the same Faculty since January 2014. After his graduation from the medical faculty of the University of Oran, he joined the University of Sidi Bel Abbes and worked as a lecturer, then as a chief of a medical unit at the University Hospital of Sidi Bel Abbes since January 1988. Later, he was nominated as a head of the medical activities in the same hospital. French is his first medium of interaction and he is not proficient in English language. Nevertheless, he is strongly convinced that English should be implemented in the medical sector and medical students should learn the language at an early stage of their study.

2.5.3- Tools of Research

To conduct the present study, triangulation was respected in the sense of using three main tools of research such as: two questionnaires and an interview. The first questionnaire was submitted to students of the medical faculty; whereas the second one concerned a number of ESP teachers teaching in the medical field. The choice of questionnaires as an instrument was in purpose for the simple fact that they are

regarded as a cost and time efficient way of collecting data from large groups of participants (Dornei 2003). For Brown (2001 cited in Dornei) they are:

"...any written instruments that present respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers."

With regard to the other instrument used in this research, it was an interview with both structured and open-ended questions, it was held with the Dean of the Medical faculty. The purpose from using an interview was to reveal the opinion of the higher authority towards the necessity of implementing effective English courses in the medical field as well as getting information about the existing situation of non-teaching English to medics and the possible suggested curricula for better English language teaching. The interview is regarded as a useful instrument of data collection; it provides a more in-depth exploration of issues as stated by Duff (2008):

"Interviews are one of the richest sources of a data in a case study and usually the most important type of data to be collected .Interviews provide the researcher with information from a variety of perspectives"

The advantage that an interview may offer to researchers is the possibility of getting information from respondents face to face without resorting to intermediates. Though, it requires adequate time and does not allow for a large sampling, Richard (2001) asserted: "Interviews allow for a more in depth exploration of issues than is possible with a questionnaire, though they take longer to administer and are only feasible for smaller groups"

It should be noted that both students' questionnaires and the Dean's interview were prepared in English then translated into French, the medium of interaction in the medical field, so as to facilitate communication with the participants and enable them to express their opinions easily on one hand and avoid all kinds of misunderstanding by the respondents on other hand.

2.5.3.1-Questionnaire Piloting

It is very crucial to design the questions carefully so as to meet the research questions and test them prior to conducting research. (Fowler, 1993), (Wilinkinson and Birmingham, 2003). Hence, the purpose of piloting questionnaires was to achieve more reliable results. Therefore, a pilot study was conducted on April 2015 after addressing the Dean of the faculty of Medicine at Sidi Belabes University through an orientation letter from the part of the supervisor of the research. The letter carries a request to negotiate access to the medical students for the distribution of questionnaires among medical students of the three departments: Medicine, Pharmacy and Dental Medicine department. The request was also carried to seek permission to gather the required information from ESP teachers teaching in the same medical faculty through submitting another questionnaire to a group of ESP teachers.

The first questionnaire was administered to 150 participants of fifth year medical students belonging to three main departments; Medicine, Pharmacy and Dental Medicine (about 50 students from each department). The questionnaire was translated in french and distributed among participants who took more than two days to answer the questions and give back the questionnaires.

2.5.3.2- Interview Conducting

The fact of relying only on questionnaires to test the raised hypotheses about the situation of teaching ESP to medical learners was not really sufficient and might not give much credibility to the obtained results. That's why; submitting an interview to the high administrative authority of the medical faculty which was represented by the person of the dean himself was more than a necessity. The structured interview was conducted with the purpose of obtaining information about the actual situation of teaching English in the department of Dental Medicine and revealing the major reasons behind not offering real English medical courses to students of the two other departments in the faculty; Medicine and Pharmacy.

2. 6 - Limitations

At this level of research and before analyzing the concerned data, one should expose the main obstacles and barriers that hindered the present research and made it somehow difficult for the researcher to obtain the required findings. Therefore, the resort to alternative strategies and methodologies was a compulsion to achieve the objectives of this investigation. In fact, one can identify two kinds of limitations, notably participants and methodology.

A-Participants

Those who participated in this study were medical students of the three departments, some of their ESP teachers and the Dean of their Medical Faculty of Sidi Bel Abbes University. First, although the whole questionnaire was translated into French language to facilitate comprehension, some of the medical learners were not really much co-operative and especially not serious enough in their answers where they did not give back their questionnaires or responded irresponsibly to the raised points. In other cases, they half answered the questions or left some without answers. This had some impacts on both processes that of data collection and later on their analysis.

Second, with regard the ESP teachers who were only five participants, it was an attempt from the researcher to enlarge the population the maximum but without vain. This was due to the fact that medical learners have not been offered English courses throughout their learning career except medical dental students who have learnt English for not more than two years. Thus, the lack of ESP teachers was remarkable in the medical faculty where their number was very limited; the reason why, it was very necessary to contact some other ex-ESP teachers from the same faculty. Nevertheless, the conclusions were restricted to a specific group of teachers in a specific context. Therefore, it might not be accepted by other teachers in other universities. As a result, another study would be required to reach this purpose. Hence, to open the door for further researches to conduct similar studies, the

investigator assumes that, it can be possible for others to use a broader sample population which may include other faculties from other universities

Third, as for the Dean of the faculty who represented the decision makers and was supposed to answer the interview, seemed, in turn, much reserved in his answers and did not intend to explain many sensitive points plainly and freely. He was much concise in most of his answers which deserved more analysis and exemplification. Therefore, many of his responses left much mastery and interpretation.

B-Methodology

It was another barrier in the present research. This concerned the interview in particular. It is worth remembering that the structured interview was not face to face despite the insistence of the investigator to conduct it directly with the interviewee who apologized due to his professional duties and commitments. Such a fact might have an influence too on the findings of the present study through which the informant found himself alone to answer and interpret the questions subjectively and most of the time misestimated some of the basic questions of the interview. However, in such a situation face to face interview could be more appropriate.

It should be also noted that the concern research work was exploratory in the sense that it attempted at highlighting English language teaching situation in the medical faculty. However, combining both qualitative and quantitative research methods within a single research work, using a variety of tools from different data sources may not be considered as enough for such a work. With the questionnaire there is the risk that students' and teachers' answers do not reveal their own views, as well as the current teaching circumstances revolving around them. This fact may have some effects on the results gained from such source using such an instruments.

At the end, although limitations are part of any research work and have a direct influence on the findings of any study, the investigator wishes that the present study will shed light on the actual situation of teaching English in one of the most important faculties of Sidi Belabes University and investigate the main causes behind the absence of effective ESP courses in the concern faculty.

2.7- Conclusion

The second chapter of the present work was mainly devoted to tackle the scope of the present study and reveal the learning situation of medical learners at the faculty of Medicine in the University of Sidi Bel Abbes with special focus on the department of Dental medicine.

As a matter of fact, it was very crucial to talk about the actual status of English in Algeria starting by discussing the fact of teaching English in the educational system and moving to the English learning/teaching process in the university with much focus on ESP and the real practices of such a discipline in the different faculties. Keeping the same context, the researcher attempted to shed light on the main factors that might determine the act of language teaching and motivate students to learn English. So, much discussion was about some necessary points such as: the learning context, the time allocated for English, the group size and the teaching materials.

Another part of the present chapter was devoted to expose the objectives of teaching medical English to medical students referring to EOP and EAP as two main branches of learners' options for medical career.

Finally, the researcher presented the research design of the study through describing the methodology and the different research instruments used to gather data and; therefore, finding out satisfactory answers to the research questions and testing the hypotheses put forward. This would indeed pave the way to the analysis and the interpretation of the collected data in the next coming chapter.

Chapter Three

Data Analysis and Interpretation

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3.1-Introduction

As mentioned in the previous chapters, learning English for prospective profession or study area has nearly become the demand of great number of students. Medical learners are a real sample of those interested English language learners. Therefore, an ESP course for medical students would help them study their subject matter and facilitate their long term learning in the future.

However, despite the importance of ESP courses for students in Algeria, especially medical students, there have been very rare studies that generally and specifically examined the English language needs of medical students. Thus, the aim from conducting this study is to investigate the students' English language needs of the medical faculty at Sidi Belabes University taking into consideration the perceptions of different groups such as: medical students themselves, their ESP teachers and the head of the medical Faculty. The starting assumption of this study is that English is important for the students' professional career and their future academic studies. Therefore, the identification of their real needs would undoubtedly provide useful data for designing effective English medical courses.

To achieve the above-mentioned learning goal, the following step is to clarify the type of approach adopted in this investigation. Then, information about teaching English at the medical faculty is given through gathering information from different samples of informants. Next, the participants of the present study are well-introduced through giving a clear image of the profile of each population. Later, the data gathering tools are well- explained taking into account triangulation as a principle to achieve authentic results. Finally, the data collection procedures and the obtained results are carefully analyzed and interpreted. All in all, the present chapter is based on three main sections: The students' questionnaire, the teachers' questionnaire and the dean's interview.

3.2-Data Analysis and Interpretation

Research process relies on an important stage generally called data analysis, which is the process of evaluating data using analytical reasoning to examine each component of the data provided. Data from various sources were gathered, reviewed, and then analyzed to achieve the required results. Overall, Data analysis focuses on deriving a conclusion based solely on what has been already known by the researcher.

As far as the present investigation is concerned, data were analysed using three different types of questions such as Likert Scale, ranking and multiple-choice questions. At the same time, a wide range of statistical techniques was followed to ensure careful analysis and obtain reliable findings. Among these techniques, percentages of multiple-choice questions were carefully calculated through descriptive statistics. With regard to the interview, data were analyzed qualitatively based on a natural language description. On the whole, a combination of both quantitative and qualitative approaches was mainly followed in this research..While the former defines, the latter describes.

3.2.1- The Quantitative Approach

Quantitative approach is considered to have, as its main purpose, the quantification of data. It is the process of analyzing and interpreting numerical data which is measured on a numerical scale by using tables, graphs, charts, diagrams... This allows generalizations of results from the chosen sample to an entire population of interest and the measurement of the incidence of various views and opinions. This approach, indeed, was very appropriate for analyzing students and teachers' questionnaires and provides quantifiable and easy to understand results. Yet, quantitative analysis alone of the concerned data could not explore findings further if it is not reinforced with an in-depth understanding of underlying reasons and motivations; that is in fact the concern of the qualitative analysis throughout this research.

3.2.2-The Qualitative Approach

Qualitative approach is another approach applied in this research, and is defined as:

"Development of concepts which help us to understand social phenomena in natural (rather than experimental) settings, giving due emphasis to the meanings, experiences and views of the participants" (Pope and Mays, 1995)

This type of analysis is based on describing items of categorization; that is to say categorical measurement by means of verbal accounts far from counting or measuring things in terms of quantity, amount, intensity or frequency. The rely on this approach to collect data was mainly devoted to the interview where the different findings were analyzed and interpreted in terms of a natural language description. Simultaneously, qualitative analysis accomplished the quantitative data analysis adopted in the two previous mentioned questionnaires.

3. 3- Data Collection Instruments

The present research has been carried out by the implementation of a needs analysis which is regarded as a prerequisite in any course design (Richterich and Chancerel, 1987). The needs analysis has included two questionnaires; one for medical students and another for their ESP teachers; and an interview with the dean of the Medical Faculty of Sidi Belabes University. Thus, the procedure has taken into account the principle of triangulation, which is highly recommended for any authentic scientific research. Therefore, the method followed in this investigation is the descriptive one as it enables the researcher to describe the actual situation of teaching ESP for medical students. This description is available through shedding light on the students' questionnaire.

3.3.1- Students' Questionnaire

A first questionnaire was submitted to a number of students and was based on three main sections that sought information about many aspects of language learning. The first one shed light on the students' background information referring to their names, age, gender, the name of their department, their level, the medium of interaction in their faculty and the need to know whether they were taught English during their medical learning process. The second section in the questionnaire was devoted to clarify the importance of using English in the medical domain. So, the use of Likert scale questions was very helpful to identify the perceptions and attitudes of students towards the effect of learning English either for the success in

their academic studies or professional career. The Likert scale questions consisted of three options such as: disagree, agree and not sure. The third section took the biggest part of the questionnaire and investigated the medical students' linguistic needs with much focus on their lacks, necessities and wants. Thus, it is obvious that the objective here is to identify and analyze the medical learners' needs following Hutchinson and Waters model of needs analysis. In this respect, students were asked to evaluate their current overall level of English, their English proficiency in language skills, their possible problems with language use and the way they preferred the designed English course to be. It should be noted that much emphasis, in this section, was put on the reasons of learning each of the four English language skills; listening, speaking, reading and writing. Again, in this part of questionnaire, there was much use of Lickert scale and multiple choice questions.

To conclude, the whole questionnaire was piloted in French at the medical faculty of Sidi Belabes University with 150 students from three departments namely: Medicine, pharmacy and Dental Medicine; taking 50 students from each department as a sample of study.

3. 3.2- Analysis of the Students' Perceptions

In this part of work, the researcher aims at analyzing the data gathered from the students' questionnaire which was generally based on three main sections such as: background information, the importance of using English in the medical field and finally the students' linguistic needs. The latter, in turn, is depicted through tackling: students' lacks, necessities and wants.

3.3.3- Background Information

The first part of the students' questionnaire was dedicated to obtain general information about the 150 participants who represented the three departments of the Medical faculty of Sidi Belabes University: the department of Medicine, the department of Pharmacy and the one of Dental Medicine. There were about 50 informants from each department. The choice of that sample was not done randomly but it was based on a specific purpose. First, all the three departments belong to the medical field. Second, nearly no real ESP courses are offered to students in none of these departments except dental medical students who are taught General English

courses for about two years. So, it was very crucial to identify the real needs of the medical learners of the whole faculty.

To start with, the majority of the respondents were girls as they represented 90 participants out of 146 students with a percentage of 61%. What should be noted is that 04 informants did not give back their answers. All of them were 5th year level medical learners and used French language as a medium of interaction in the faculty. When asking them about whether they have learnt English throughout their medical career, students of medicine and pharmacy replied not receiving any English courses let alone learning ESP. The exception was that dental medical students were offered English courses for two years in the university. Besides, the answers showed that English language exposure was different from one department to another (while pharmacy students and those of medicine have been learning English for seven years, medical dental students had the chance to learn English for nine years) Nevertheless, time exposure to English is, indeed, without vain since two or three hours of learning English per week in the middle or secondary school cannot provide learners with the necessary communicative competence of English language acquisition. That was stated plainly by a large number of respondents in different sections of the present questionnaire, but before discussing all those points in details, what was the students' reaction towards implementing English courses in the medical field?

3.3.4- Importance of Using English in the Medical Field

To answer the above question and for the sake of investigating the students' attitudes towards teaching English in the medical field, the respondents were asked to answer four precise questions which were as follow:

Circle the number you think it is appropriate.

- **1-** English is important in your study.
 - a) disagree
- b) agree
- c) not sure
- **2-** English is important to succeed in academic studies.
 - a) disagree
- b) agree
- c) not sure
- **3-** English is important for your future professional career.
 - a) disagree
- b) agree
- c) not sure

Not sure

06%

- **4-** Learning English is a challenge that you enjoy.
 - a) disagree
- b) agree
- c) not sure

The students 'answers demonstrated that English was more than important for nearly all the respondents who did not hesitate to express their real need to be offered effective ESP courses in the field. Their answers in detail were as follow:

	ſ						
		Engl	lish is important in y	our study			
Options		Sts of Medicine	Sts of Pharmacy	Sts of Dental Medicine	Total		
	F	02	00	01	03		
Disagree	P	4%	00%	02%	02%		
	F	45	50	42	137		
Agree	P	90%	100%	84%	91,33%		
	F	03	00	07	10		
Not sure	P	06%	00%	14%	06,66%		
		English is import	ant to succeed in you	ır academic studies			
	F	06	04	11	21		
Disagree	P	12%	08%	22%	14%		
Agree	F	41	41	36	119		
	P	82%	82%	72%	79,33%		
	F	03	05	06	14		
Not sure	P	06%	10%	12%	09,33%		
		English is impo	ortant for your future	e professional career			
	F	01	00	02	03		
Disagree	P	02%	00%	04%	02%		
	F	47	48	43	138		
Agree	P	94%	96%	86%	92%		
	F	02	02	05	09		
Not sure	P	04%	04%	10%	06%		
	F	00	02	06	08		
Disagree	P	00%	04%	12%	05,33%		
	F	47	44	40	131		
Agree	P	94%	88%	80%	87,33%		
	F	03	04	04	11		

08%

08%

07,33%

Table 3.1: *The Use of English in the Medical Field*

The table above reveals the students' attitudes towards the use of English in the medical field where 137 out of 150 recognized its importance in their study, and more than 82 %. of the concerned respondents agreed that English could be very helpful to ensure success in their future academic studies. Nearly 92% of them thought that English had to be implemented in the medical curriculum to enable future doctors and pharmacists to succeed in their professional career. Therefore, it is not surprising to find that 87, 33 % of the participants declared that they enjoyed learning English.

3.3.5- Students' Linguistic Needs

The second section in the present questionnaire was devoted to reveal the actual students' target needs in English language relying on Hatchinson and Waters' view about needs analysis. Their approach considers three aspects of analysis such as: lacks necessities and wants. The purpose from adopting this approach was to answer three major questions which summarized the process of conducting a needs analysis. The first question concerns the learners' lacks and is formulated this way: what are the students' problems and deficiencies in the language? The second deals with the learners' necessities and is generally asked to know what learners do with language or rather: what kind of language do they really need in their field of study? The third one refers to the students' objective from learning English, and is generally formed in this manner: why do learners want to learn English?

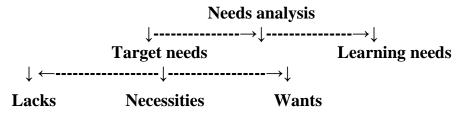


Figure 3.1: Hatchinson and Waters' Needs analysis

To answer the three previous questions, it was very crucial to get the data from the medical learners who did not hesitate to express their lacks, reveal their necessities and determine their wants. The findings showed much seriousness and co-operation of the learners to achieve fruitful results that could pave the way to design effective ESP courses for medical students in the near future. That was in fact, the wish of one of medical students who belongs to the department of Pharmacy when he said:" *I wish we would be offered English courses in the future*."

3.3.6 – Lacks

The first question about the learners' lacks tackled their proficiency in English i.e. how do they evaluate their current overall level of English? To reply, students had to cross one of the four suggested possibilities: very poor, poor, good and very good. The table below summarizes the respondents' answers vis-à-vis their proficiency in English.

		s of icine		ts of rmacy		f Dental dicine	Total			
	F	P	F	P	F	P	F	P		
Very poor	04 08%		06 12%		03	06%	13	08,66%		
Poor	24	48%	20	40%	23	46%	67	44,66%		
Good	21	42%	24	48%	22	44%	67	44,66%		
Very good	01 02%		00	00%	02	04%	03	02%		

Note: F = Frequency P = percentage

Table 3.2: *Medical students' proficiency in English*

Although the results in table 2.3 showed that medical learners were not very proficient in English (44, 66% for both poor level and good levels) the reality demonstrates that medical learners are generally the most competent learners among those who get their BAC degree in Algeria. They are nearly brilliant in all the subjects they take during their tertiary level.

The next question in the questionnaire was about ranking the English language skills in terms of priority according to the respondents. From the first glance, the findings showed that the perceptions of medical students in terms of their prioritization of English language skills were not much different between the three departments. In general, it was found that the learners' weakness was in the interactive English learning. First, in speaking skill, there were 88 out of 150

expressed their poor level and inability to engage in speaking process. Certainly, this handicap is due to the lack or the total absence of using English in their studies. Second, after speaking, listening took the second place of the learners' weakness and failure where 75 students out of 150 recognized their poor level in listening and around 16% of the respondents did not hide their very poor level in the concerned skill. What is encouraging is the fact that medical learners answered have not been so bad in writing (46, 66 % for good level and 14% for very good level) and reading (46 % for good level and 17, 33 % for very good level). Nevertheless, this cannot be taken for granted because learners are not submitted to a writing test to assess their real level in writing. Overall, both the table and the figure below illustrate the learners' opinion about language skills according to their importance.

	V	ery p	oor			Poor			Good			Good Very good			ood	
				Tota				Tota				Tot				Tota
	M	Ph	D.	1	M	Ph	D.	1	M	Ph	D.	a	M	Ph	D.	1
			M				M				M				M	
Listenin	08	07	09	24	30	25	20	75	10	12	10	32	06	05	04	15
g																
speakin	07	06	07	20	32	32	24	88	09	10	08	27	04	04	02	10
g																
Reading	02	04	00	O6	12	12	19	43	30	22	17	69	06	12	08	26
Writing	09	06	00	15	15	10	13	38	21	26	23	70	05	08	08	21

Table 3.3: Results of Medical Students' Classification of Language Skills

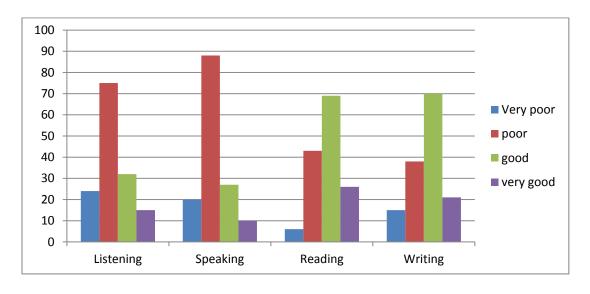


Figure 3.2: Classification of English language Skills in Terms of Priority

The last question that sought the learners' lacks in the questionnaire was devoted to answer a number of the learners' areas of weakness. This concerns different language matters such as vocabulary, language structure, Writing and speaking practice, ideas generation, pronunciation, and translation from English to French language. The objective from shedding light on these points was to identify the learners' deficiencies in language and recommend the convenient solutions and appropriate strategies to overcome language problems. All in all, the table below clarifies the whole results of the question. The general question was: **Do you have a problem in:**

Question	Sts Medi	_		s of rmacy	Sts Den Medi	tal	Total		
	Yes	No	Yes	No	Yes	No	Yes	No	
(a) Holding a conversation in English?	35	15	42	08	34	16	111	39	
(b) Framing simple questions?	13	37	08	42	21	29	42	108	
(c) Providing responses to simple questions?	18	32	24	26	16	34	58	92	
(d) Choosing the right word while speaking?	28	22	30	20	33	17	91	59	
(e) Expressing ideas and thoughts clearly?	30	20	32	18	34	16	96	54	
(f) Pronouncing medical terminology correctly?	34	16	28	22	34	16	96	54	
(g) Writing correct meaningful sentences?	24	26	22	28	25	25	71	79	
h) Encountering difficulties while translating from English to French.	32	18	34	16	32	18	98	56	

Table 3.4: Students' Perceptions about Different Language Areas

The table above presents learners' perceptions about their possible weakness in many language aspects. However, the findings were not much different among the learners of the three departments where they confirmed their handicap in speaking and listening skills. There were 111 out of 150 informants (nearly 74 %) who stated they had difficulty in holding conversation in English and around 96 participants (64 %) who found it difficult to pronounce medical terminology on the right way. In addition, those who expressed their inability to translate medical documents from English to French were approximately 98 students i.e. 65, 33%.

3.3.7- Necessities

Another important section that took a large space in the questionnaire was devoted to identify medical students' necessities in English focusing on revealing their perceptions about the need of the four language skills such as: writing, reading, speaking and listening. First, learners were asked to state how much they need to learn the four skills i.e. the frequency of the need of each skill. Second, they had to answer one basic question for each of the four skills: Why do they learn that skill? In other words; why is learning the skill concerned necessary for medical studies?

3.3.7.1- Writing Skill

With regard to writing, the table below illustrates the learners' perceptions about their need of the skill.

		Sts of Medicine	Sts of Pharmacy	Sts of Dental Medicine	Total
A1	F	22	34	28	84
Always	P	44 %	68 %	56 %	56 %
Compating	F	19	14	17	40
Sometimes	P	38 %	28 %	34 %	26,66 %
	F	08	00	02	10
Never	P	16 %	00%	04 %	06,66 %

Note: F = Frequency P = percentage

Table 3.5: Students Perceptions about Writing Skill

According to the statistics mentioned in **table 3.5**, only 06,66 % stated they **never** needed writing skill in their learning process whereas 26,66 % said they **sometimes** needed to write in English. However, more than half (nearly 56 %) revealed their need to **always** write in English. If this was the case of writing skill in the eyes of learners, what about the types of writings that medical students most needed to do in English; in other words, why is learning the writing skill necessary for medical studies? The table below answers the previous question in detail.

			Di	sagree			A	gree			Not	sure	
		M	PH	D.M	Total	M	PH	D.M	Total	M	PH	D.M	Total
Writing	F	07	00	08	15	30	44	27	101	05	04	08	17
research papers	P	14%	00%	16%	10%	60%	88%	54%	67,33	10%	08%	16%	11,33
Writing medical		17	04	12	33	20	30	25	75	14	16	06	36
reports		34%	08%	24%	22%	40%	60%	50%	50%	28%	32%	12%	24%
Taking notes in lectures/confere	F	12	10	05	27	33	30	33	99	02	04	06	12
nces	P	24%	20%	10%	18%	66%	60%	66%	66%	04%	08%	12%	08%
Writing replies/emails to	F	02	02	07	11	36	46	32	130	06	02	07	15
English speaking key pals	P	04%	04%	14%	07,33	72%	92%	64%	86,66 %	12%	04%	14%	10%
Writing essays	F	05	06	05	16	32	36	24	92	08	02	09	19
	P	10%	12%	10%	10,66	64%	72%	48%	61,33	16%	04%	18%	12,66

Note: M = Medicine PH = Pharmacy D.M = Dental medicin F = Frequency P = percentage

Table 3.6: Students' Perceptions about the Types of Writings Needed for Learning

First, one should note that there were no significant differences in the results between students of the three departments. Second, the majority of the respondents showed great interest to English writing skill where nearly 86, 66 % of the

participants stated that they needed English to chat and write replies to English speaking key pals and 67, 33 % were for using English to write research papers. Around 66 % thought that taking notes in lectures and conferences had to be better in English and approximately 61, 33 % agreed that writing essays in English was among their favourite hobbies. This attitude towards writing skill reflects the learners' interest towards implementing English curriculum throughout their learning process and the desire to go farther in the use of English language.

3.3.7.2- Reading Skill

The second skill that was tested in the present questionnaire was reading through which medical learners expressed freely their opinion about the necessity of learning this skill. On the whole, the table and the graph below demonstrate the learners' attitudes towards reading and present a clear picture about the reality of emphasizing teaching reading skill in the medical field.

		Sts of	Sts of	Sts of Dental	Total
		Medicine	Pharmacy	Medicine	
Always	F	37	42	34	113
	P	74%	84 %	68 %	75 ,33%
Sometimes	F	13	04	10	27
	P	26%	08 %	20 %	18 %
Never	F	02	00	01	02
	P	04 %	00%	02%	01,33 %

Note: F = Frequency P = percentage

Table 3.7: Students' Perceptions about Reading Skill

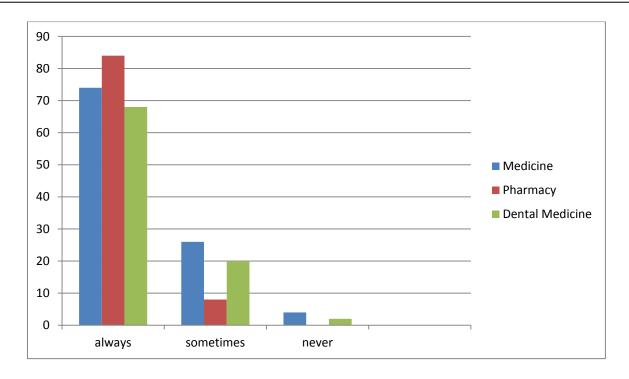


Figure 3.3: *Students' Perceptions about Reading Skill*

Both the table and the bar graph illustrate plainly the vision of the medical learners of the three departments about reading skill. It seems to be always necessary for learning (around 75,33% learners were for the necessity of reading and only 01,33 % were against). These high percentages for reading reflect the learners' awareness of this skill for any successful learning process. That is why the reason why 86,66 % of them agreed that this skill was necessary for reading medical journals and articles, and not less than 81,33 % of the respondents stated that they preferred reading scientific newspapers and magazines in English. Besides, around 80, 66 % of the participants regarded reading English textbooks and lecture handouts in English language more than a necessity. Moreover, unlike usual, a great portion of medical students showed great interest to reading stories and novels in English in spite of having no relevance to their medical studies. As a matter of fact, the results above make it very clear that medical learners were eager of reading in English and did not hesitate to express their lack and demand of providing urgent ESP courses in the domain. To sum up, the table below presents in details the learners' interest in different types of reading.

			Di	sagree			A	gree		Not sure				
		M	PH	D.M	Total	M	PH	D.M	Total	M	РН	D.M	Total	
Reading medical journals and	F	00	02	04	06	46	46	38	130	01	00	01	02	
articles	P	00%	04%	08%	04%	92%	92%	76%	86,66%	02%	00%	02%	01,33%	
Reading English textbooks and	F	02	04	06	12	41	42	38	121	04	00	06	10	
lecture handouts	P	04%	08%	12%	08%	82%	84%	76%	80,66%	08%	00%	12%	06,66%	
Reading Scientific	F	02	00	08	10	46	44	32	122	04	02	08	14	
newspapers and magazines	P	04%	00%	16%	06,66%	92%	88%	64%	81,33%	08%	04%	16%	09,33%	
Reading medical prescriptions	F	06	02	10	18	31	36	27	94	10	06	03	19	
PP	P	12%	04%	20%	12%	62%	72%	54%	62,66%	20%	12%	06%	12,66%	
Reading stories and novels	F	13	02	12	27	36	36	23	95	09	02	08	19	
	P	26%	04%	24%	18%	72%	72%	46%	63,33%	18%	04%		12,66%	
Reading graphs, charts and	F	07	00	12	19	33	36	17	86	03	08	12	23	
tables	P	14%	00%	24%	12,66%	66%	72%	34%	57,33%	06%	16%	24%	15,33%	

Note: M = Medicine PH = Pharmacy D.M = Dental medicin F = Frequency P = percentage

 Table 3.8: Students' Perceptions about Why They Need Reading Skill

3.3.7.3-Speaking Skill

According to one of the previous questions in the present questionnaire, medical learners showed their weakness in speaking skill and inability to engage in spontaneous communication. Their failure is, undoubtedly, due to the lack of English use and the fewer or the rare opportunities of the language practice which, over time, makes learners not only unable to speak English but fear the act of speaking too. Nevertheless, the findings of the concerned investigation showed how interested the medical learners of Sidi Belabes University were in learning speaking skill. The table below presents the students' perceptions about speaking. The

question around which the table was built was: How often do you think you need English speaking skill?

		Sts of	Sts of	Sts of Dental	Total
		Medicine	pharmacy	Medicine	
Always	F	31	34	33	98
	P	62 %	68 %	66 %	65,33 %
Sometimes	F	17	12	11	38
	P	34 %	24 %	22 %	25,33 %
Never	F	02	01	02	04
	P	04 %	02 %	04 %	02,66 %

Note: F = Frequency P = percentage

Table 3.9: Students' Perceptions about Speaking Skill

According to the descriptive statistics above, 65,33 % of the total number of medical students stated that they <u>always</u> needed to speak English while only 02, 66 % said they <u>never</u> did. The findings showed no significant differences between participants of the three departments. To make the image more expressive, the pie chart below shows the obtained results in details.

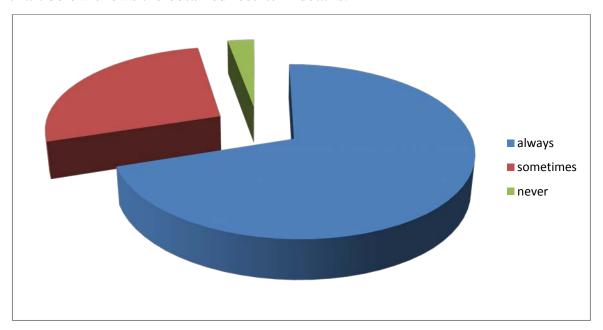


Figure 3. 4 : Medical Students' Perceptions about the Frequency of the Need for speaking skill

For the next question which was: why is learning the speaking skill necessary for medical studies? The respondents' answers are displayed on the following table.

			Di	sagree			A	gree			Not	sure	
		M	PH	D.M	Total	M	PH	D.M	Total	M	РН	D.M	Total
	F	03	08	07	18	42	32	31	105	01	04	05	10
	Р	06%	16%	14%	12%	84%	64%	62%	70%	02%	08%	10%	06,6 6%
Taking part in daily	F	05	08	06	19	36	32	30	98	07	08	06	21
conversations	P	10%	16%	12%	12,66%	72%	64%	60%	65,33 %	14%	16%	12%	14%
Presenting oral	F	07	04	06	17	32	40	31	103	06	00	04	10
reports	P	14%	08%	12%	11,33%	64%	80%	62%	68,66	12%	00%	08%	06,6 6%
Talking to	F	00	02	02	04	34	42	37	113	01	00	04	05
foreign doctors / researchers	P	00%	04%	04%	02,66%	68%	84%	24,6	75%	02%	00%	08%	03,3
Participating in negotiations	F	05	06	04	15	36	40	33	109	06	00	07	13
	P	10%	12%	08%	10%	72%	80%	66%	72,66 %	12%	00%	14%	08,6 6%
Attending Web- English-Talks	F	00	00	05	05	40	46	27	113	03	00	07	10
_	P	00%	00%	10%	03,33	80%	92%	54%	75,33 %	06%	00%	14%	06,6 6%

Note: M = Medicine PH = Pharmacy D.M = Dental medicine F = Frequency P = percentage

 Table 3. 10 : Students' Perceptions about Why They Need Speaking Skill

As mentioned in the previous table, about 70% of all the medical students stated they needed English for making presentations at seminars and conferences, particularly students of the department of medicine who reached 84%. Besides,

most of participants responded positively to the fact of using English to talk to foreign doctors and foreigners (around 75%) and participate in negotiations (nearly 72, 66%) There were about 109 students out of 150 who placed much importance on attending web-English- talks and 105 students who agreed on taking part in daily conversations. The same thing was for presenting oral reports on which 68, 66% of the respondents agreed on the necessity of speaking English fluently. So, generally speaking, learners responded positively to all the items related to the use of English for speaking at a large scale.

3.3.7.4-Listening Skill

Listening is the last skill tested in this investigation through which learners showed much fear and inability to comprehend native speakers' talk. Generally speaking, the findings revealed no great differences between students' perceptions about listening skill of the three departments, and the details on the tables below summarize the results in a good manner.

		Sts of Medicine	Sts of Pharmacy	Sts of Dental Medicine	Total
Always	F	38	42	35	115
	P	76%	84%	70%	76,66 %
Sometimes	F	08	00	10	18
	P	16%	00%	20 %	12%
Never	F	01	00	00	01
	P	02%	00%	00%	00,66%

Note: F = Frequency P = percentage

Table 3.11: Students' Perceptions about Listening Skill

From the first glance, it is very clear that the biggest majority of medical students representing the three departments were for the necessity of learning listening skill so as to develop their communicative competence for the simple fact that one cannot ameliorate his speaking abilities if he is not a good listener. So, 76, 66 % of the participants were for <u>always</u> in need of listening skill whereas only 00,

66% of them were for <u>never</u> need listening in their learning process. The particularity was with pharmacy students who no one stated <u>never</u> need listening and all of them were for <u>always</u> need except a few of those who did not respond to the question. The findings of the present question are well-interpreted in the graphic display below:

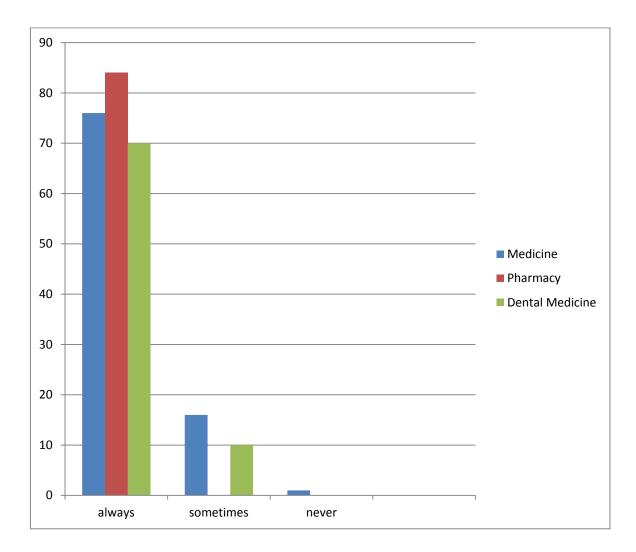


Figure 3. 5: Medical Students' Perceptions about the Frequency of the Need for listening skill

For the question: Why is learning the listening skill necessary for medical studies? The students' answers are presented in the table below as follow:

			Di	sagree			A	gree		Not sure				
		M	PH	D.M	Total	M	PH	D.M	Total	M	PH	D.M	Total	
Understanding	F	03	02	02	07	43	38	38	119	02	00	01	03	
discussions on														
medical issues	P	06%	04%	04%	04,66%	%86	76%	76%	79,33%	04%	00%	02%	02%	
Understanding	F	08	04	01	13	39	42	40	121	01	02	02	05	
daily														
conversations	P	16%	08%	02%	08,66%	78%	84%	80%	80,66%	02%	04%	04%	03,33%	
Understanding	F	03	02	03	08	41	38	37	116	03	06	02	09	
spoken														
presentations in														
seminars /	P	06%		06%	05,33%	82%	76%	74%	77,33%	06%	12%	04%	06%	
conferences.		0070	04%	0070					77,5570	0070				
			04%											
Understanding	F	03	02	03	08	37	40	38	115	06	04	02	12	
English radio														
and TV					05,33%		80%							
programs.	P	06%	04%	06%		74%		76%	76,66%	12%	08%	04%	08%	
Understanding	F	01	04	04	09	41	34	37	112	04	02	07	13	
visitors / guests	1	01	0-	0-1		71	34	31	112	04	02	07	10	
from native														
speaking English	P	%02	000	000	06:	920	600	740	74.66**	000	045	1.40	08,66%	
countries.	Р	7002	08%	08%	06%	82%	68%	74%	74,66%	08%	04%	14%		
Understanding	F	05	04	04	13	32	42	31	105	07	00	07	14	
English phone														
calls.	P	10%	08%	08%	08,66%	64%	84%	62%	70%	14%	00%	14%	09,33%	

Note: M = Medicine PH = Pharmacy D.M = Dental medicin F = Frequency P = percentage

Table 3. 12: Students' Perceptions about Why They Need Listening Skill

The table above which presents the findings graphically in figure 3.5 demonstrates the absolute agreement of nearly all the medical learners of the three departments on the necessity of developing their hearing mechanism through

listening to different types of English items mentioned previously. The statistics showed 79, 33% of the participants were for the need to understand discussions on medical issues in English and nearly 77, 33 % of them agreed on their urgent need to understand spoken presentations in seminars and conferences. Besides, around 74, 66% of the students stated that they needed English to understand visitors or guests coming from native speaking English countries. In addition, 76, 66% of the informants were for using English to understand radio and TV programs and around 62% were for emphasizing listening skill to understand English phone calls. However, the largest number of the medical students (nearly 80, 66%) revealed their wish to understand English daily conversations. This positive attitude towards the need of listening skill indicates the medical learners' desire to develop their level of interaction believing on the fact that a good speaker is a good listener.

The last question that was about the learners 'necessities in the questionnaire tended to seek the participants' opinion about the suggested medical course whether it had to emphasize medical conversation (listening and speaking) medical reading or medical writing. The students' answers of the three departments about the previous question were not much different and were as follow in the table below:

		Sts of Medicine			Sts of Pharmacy		Sts of Dental Medicine			Total			
		1	2	3	1	2	3	1	2	3	1	2	3
Medical	F	26	15	03	36	10	00	30	10	05	92	35	08
conversatio	P	52	30	06	72	20	00	60	20	10	61,33	23,33	05,33
n		%	%	%	%	%	%	%	%	%	%	%	%
Medical	F	13	18	12	08	18	20	15	25	06	36	61	38
reading	P	26	36	24	16	36	40	30	50	12	24,00	40,66	25,33
		%	%	%	%	%	%	%	%	%	%	%	%
34 11 1	F	04	11	29	02	18	26	01	09	36	07	38	91
Medical writing	P	08	22	58	04	36	52	02	18	72	04,66	25,33	60,66
		%	%	%	%	%	%	%	%	%	%	%	%

Note: $1 \rightarrow$ More important $2 \rightarrow$ Important $3 \rightarrow$ Les important $F \rightarrow$ Frequency $P \rightarrow$ Percentage

Table 3.13: Students' Perceptions about the Emphasized Skill in the Suggested Course Design

The table above illustrates the medical learners' opinion about the most important learning skill that should be emphasized when designing an effective ESP course for learners. As mentioned, the findings showed that students of all the departments were for reinforcing more and more the interacting skills through enhancing medical conversation. Nearly 92 students out of 150 participants were for emphasizing listening and speaking and only 15 of them were for giving more importance to medical writing and not more than 36 learners were for stressing medical reading. These results reflect again the medical students' much interest in developing oral capacities and interaction in English.

3.3.8- Wants

The second section in the students' questionnaire was reserved to tackle the learners' wants, i.e. what the learners want to do with English. In this respect, participants had to answer four precise questions to summarize what they want the course to provide them with.

The first question was typically: Why do you want to study English? Here, learners had a number of options that were classified with the results of their answers in the table below as follow:

	Sts of Medicine		Sts of	f macy		f Dental icine	Total	
	F	P	F	P	F	P	F	P
For personal interest	12	24%	13	26%	11	22%	36	24%
For future work	11	22%	10	20%	12	24%	33	22%
For academic studies	22	44%	23	46%	25	16,66%	60	40%
For no special reasons	01	02%	01	02%	00	00%	02	01,33%
For other reasons	02	04%	00	00%	01	02%	03	02%
(specify)								

Note: $F \rightarrow Frequency P \rightarrow Percentage$

Table 3.14: *Students Wants about the Use of English*

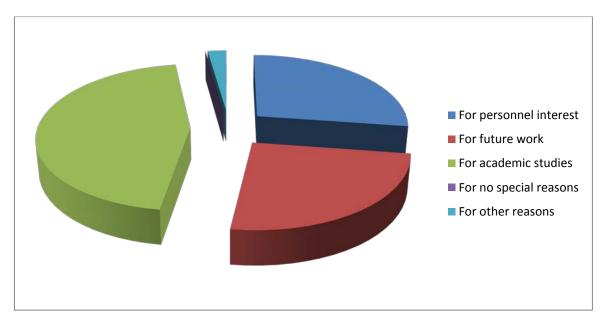


Figure 3.6: Students Wants about the Use of English

According to the statistics of the table mentioned in the pie chart above, 40% of medical learners preferred learning English for academic studies. This could explain their tendency to continue their high studies and contribute in the scientific research believing that without English this could be very hard if not impossible. In addition, the findings showed that 22% of the participants were for the use of English in their future professional career despite the fact that English is not the medium of interaction among Algerians. This could reveal the fact that medical learners are thinking of working abroad where English has an advanced status. Besides, there were about 24% of the students who said they wanted to take English courses for personal interest.

The second question about the learners wants sought the manner medical learners wanted to take English courses; whether in pairs, in small groups or individually. The data revealed the results below:

Learning	Sts of Medicine		Sts of Pharmacy		Sts of Dental		Total	
English in					M	edicine		
Pairs	06	12%	04	08%	12	24%	22	14,66%
Small groups	35	70%	36	72%	26	52%	97	64,66%
Individually	09	18%	06	12%	11	22%	26	17,33%

Table 3.15: *Students Opinion about Taking ESP Courses*

Table 3.15 shows that 64, 660f the total medical learners including students of the three departments were for taking English ESP courses in small groups. The desire to learn English in groups indicates the medical learners' preference of the collaborative work believing that practising English with each other could raise their communicative competence more and more.

However, collaborative work alone cannot achieve satisfactory results if appropriate materials are not well-selected i.e., effective learning necessities convenient materials in the teaching process. That was indeed, the concern of the next question of students 'questionnaire where participants were asked to opt for the most helpful materials that could facilitate the learning processes; whether audio materials, video materials or handouts and other printed materials. In this respect, the findings showed that 37, 33% of the respondents were for learning English through the use of handouts and other printed materials and about 36% of them preferred audio materials whereas only 23, 33% thought that video materials could be useful. The figure below illustrates the students 'perceptions more expressively.

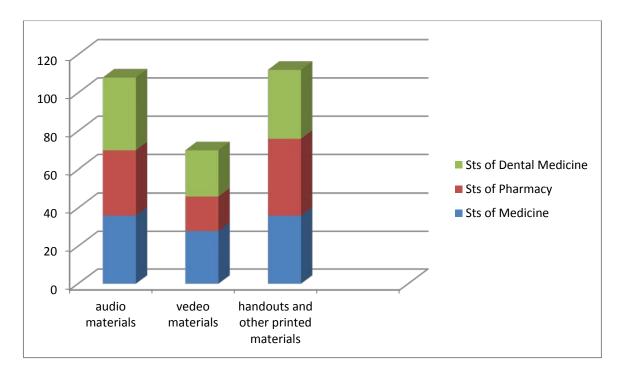


Figure 3.7: Students' Preference about Helpful Materials in Learning English

The last question about the students' wants deals with the duration of the ESP course for medicals. The data revealed that 40, 66 % of the participants wanted

to receive English instruction for two sessions per week while only 12% of them claimed that more than thrice a week could be sufficient to be able to master English language fluently. On the whole, the table below summarizes the findings in details.

	Sts of		Sts of		St	s of Dental	Total	
	Medicine		Pharmacy		Medicine			
Twice a week	13	26%	20	40%	28	56%	61	40,66%
Thrice a week	12	24%	18	36%	11	22%	41	27,33%
More than	03	06%	08	16%	07	14%	18	12%
thrice a week								

Table 3.16: Students' Opinion about ESP course Duration per Week

3.3.9- Summary of the Main Results and Interpretation

The collected data from medical students 'questionnaire showed that around 70% of the participants were females. Their age was between 22 and 26. They almost had the same academic background as all of them were graduated from the Algerian school (from primary to secondary school). 40% of them had more than five years learning English and only 20% who were offered English courses at the beginning of their medical career at the faculty of Dental Medicine for about two years. All of them thought that English was so important in their medical study for two main reasons: First, the continuity of their academic studies. Second, their future professional life.

Though there were many things in common among the participants, they did also differ in some aspects related to their difficulties in learning English. Thus, the students' questionnaire was built on three major aspects called linguistic needs. They were derived from Hatchinson and Waters' approach about needs analysis and were as follow: lacks, necessities and wants.

With regard to the first aspect, the results showed that medical learners were not much proficient in English let alone ESP; only 44, 66% of the respondents

had good level in the language, this is on one hand. On other hand, the learners' weakness generally lied in interactive English learning where 88/150 of the informants chose speaking as the most problematic skill followed by listening (75/150) undoubtedly; this is due to the lack or absence of using English in studies or daily life. Consequently, there were 74% of the medical students had difficulty in holding conversations in English, 64% had found it difficult to pronounce medical terminology correctly and about 65, 33% were unable to translate documents from English to French.

Concerning the second aspect; necessities, the focus was on the English language skills where participants had to answer two major questions: The first one was: How much do they need to learn the four skills? The second one was: why is it necessary to learn each one of the concerned skills? In this respect, more than half of the medical participants thought they always needed writing skill to write research papers, take notes in lectures and conferences, chat and write replies to English speaking key pals and even write essays in English.

As far as reading is concerned, 75% of the medical students agreed that this skill was always necessary for learning English. They thought that reading medical journals and articles in English was very necessary as well as reading scientific newspapers and magazines. The findings also revealed that 80,66% of the participants were for reading English textbooks and lecture handouts written in English. What was unusual was that 63, 33% of the informants preferred reading some stories and novels in English which were far from their area of study.

Listening was the last skill tested in this part of work where medical students agreed that developing a hearing mechanism for learning English language was as important as making progress in speaking skill.76, 66% of them always needed listening skill, particularly pharmacy students who no one of them stated never needed listening. Around 79, 33% of the participants needed to devote more listening sessions to understand discussions on medical issues and about 77, 33% expressed their urgent need to comprehend spoken presentations in

seminars and English conferences. Besides, not less than 74, 66% of them agreed on the necessity to learn listening to understand medical visitors, doctors and scientists coming from English speaking countries, and around 76, 66% stated they needed to understand English TV/ radio programs and phone calls. All in all, medical learners were for emphasizing the interactive skills which are listening and speaking through emphasizing medical conversations.

The third last aspect of the linguistic needs was about the students 'wants from learning English. They had to answer one typical question which was: Why do you want to learn English? The participants' answers were that 40% of them wanted to take English courses for academic reasons, 22% for future work and 24% for personal interests. Around 64, 66% of them preferred to learn English in small groups through audio materials, handouts and other printed documents for two sessions per week.

This is, in brief, the medical learners' view towards their situation of English and the possibility of implementing ESP courses in their medical carrier, now what about their teachers' opinion of designing effective ESP courses to meet the students 'needs in the faculty of medicine, the University of Sidi Belabes? That was, in fact, the concern of the next questionnaire which was submitted to a number of ESP teachers working in the medical field.

3.3.10- Teachers' Questionnaire

The same tool of research was devoted, this time, to some ESP teachers who were supposed to know more about the students' needs in English language learning and be aware of the way to design effective ESP courses. Unlike the previous questionnaire which was based on sections, the present one was open and consisted of twenty precise questions about different areas of students 'needs and purpose from learning English.

The researcher opened the questionnaire by seeking information about the teachers' profiles regarding their qualifications, experience in the teaching field and their possible training in ESP. He, then, wondered whether medical learners really needed to take ESP courses related to their field of study. So, he asked them to state

some reasons behind that necessity .It was, indeed, one of the main questions raised in the present research. The questions from 07 to 20 concerned the nature of the ESP course designed for medical learners. In the same context, teachers had to answer some questions about the length of the course, the collaboration between subject lecturers and ESP teachers, the language aspects (grammar, spelling, terminology...) and the language skills that should be emphasized in the ESP course. They were also required to give opinion about the provided materials, the resort to translation in teaching medical English, the use of audio-visual aids, students' assessment and the class size. He, finally, closed the questionnaire by asking respondents to provide more suggestions for the course amelioration.

3.3.11-Analysis of the Teachers' Perceptions

Question 1, Question 2 and Question 3: Gender, Qualifications and Experience:

The first part in the present questionnaire was devoted to present a general overview of the teachers' profiles referring to their gender, qualifications and experience in the teaching field.

Gender State				Quali	fications	Experience				
Male	Female	Full time	Part time	Licence	Master	Magister	Doctorate	Less than 02 yrs	Between 02 and 05 yrs	More than 05 yrs
02	03	00	05	01	03	01	00	01	03	01

Table 3.17: Teachers 'Gender, Qualifications and Experience in the Field

The table above showed that there were five teachers; two males and three females teaching in the medical faculty; the department of Dental Medicine of Sidi belabes University. All of them were part time teachers, three (01) with classical

License degree, three (03) with Master certificate and only one with Magister degree. The qualifications of four of them are not sufficient to enable them to teach ESP in the university. The one with Licence degree has an experience of fifteen years while the three with the Master degree are the product of the LMD system with an experience of not more than two years of experience as a maximum. The fifth teacher is the only respondent whose qualifications are really of such of a value to allow him to teach in the university.

Question 4: Teacher's Training:

This question was designed to show whether teachers have made any kind of training before or during their act of teaching As shown below, no one of the participants admitted receiving any training in the field of ESP, neither pre-service nor in-service training. This is quite alarming as one wonders how is it possible to teach a discipline like that one of medical English without benefitting from any kind of training.

Yes	00
No	05

Table 3.18: Teachers' Previous ESP Training

Question 5 and Question 6: Necessity and Reasons of Learning English

This question sought to know the teachers' opinion whether it was necessary for medical learners to learn English. All of them answered" yes" and justified their answers by giving a wide range of arguments. One stated that all major research and publications were in English language, the reason why medical learners had to be acquainted with the required skills to improve and update their knowledge with all that was new in their field. Another participant went farther and said that medical learners had to be equipped with English language so as to be able to take part in

international scientific meetings and conferences in which English has become the unique medium of interaction. In the same context, the remaining teachers affirmed that being able to accede to medical literature and publish any eventual research work in English language has become a demand of any researcher or scientist seeking knowledge and research.

Q7: Students' Interest in Learning English

The teachers 'answers in the previous question have confirmed the necessity of designing ESP courses for medical students due to a plenty of reasons; some have been already mentioned by the respondents. Nevertheless, this is not sufficient, what about the students' opinion of learning English in the eyes of their teachers. Are they interested to take medical English courses throughout their learning process? The teachers' answers of this question showed that most of the learners were for studying English and ready for the implementation of English curriculum which could take years throughout their medical career.

Question 8: Duration of ESP Courses:

The question was designed to know the duration teaching ESP for medical students, whether it would be one year, two years, three years, or other suggestions proposed by the participants. The results indicated that one of the participants was for two years English in the medical field whereas another one opted for three years. However, three teachers were for more than three years learning medical English; one suggested four years, another asked for five years and the last one wanted the maximum as he suggested seven years English for medical learners. This could explain the necessity of reinforcing ESP courses in the medical field where English has not established itself yet.

Question 9: Objectives of Learning English

This question was meant to state which objectives among the four mentioned suited best the medical students according to ESP teachers. The results revealed that no one of the participants was against the last mentioned objective which regarded writing medical reports or publications in English as a priority. Besides, three

teachers chose taking part in oral English discussions as an important objective and two of them thought that understanding medical lectures in English had to be emphasized at any ESP course. There was only one teacher who stated that reading medical textbooks in English could be very necessary to develop students' competence in writing.

Question 10: Collaboration with Subject-Lecturers:

This question looked for the possibility of existence of a kind of collaboration between ESP teachers and subject lecturers who are supposed to know more about medical knowledge. The findings showed that all the five participants admitted the necessity of this collaboration as it is inconceivable to undertake a course of English in medicine without seeking advice from the teachers of the 'modules' themselves. At the same time, ESP teachers should have an idea of what is taught in the other subjects so as to help themselves determine and design what should be taught in English.

Question 11: Aspects of Students' Weakness

The following table presents the English teachers 'opinion about the medical students' possible weaknesses in different aspects of English learning:

	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 5
Vocabulary			X		
Grammar	X	X	X		
Spelling					
Speaking	X		X		
Reading		X	X		
Writing	X	X			
Listening	X	X	X		

Table 3.19: Medical Students' Weaknesses in Different Aspects of English

As can be noticed, all teachers agreed that grammar was the major language aspect that could create difficulties for medical students followed by the listening skill, which in turn, could cause a great obstacle in the learners' comprehension and communication. In addition, three teachers thought that writing about medical issues could be another deficiency that encountered learners, arguing that the act of writing might cause problems for not only students of medicine, but also learners of whatever discipline. The only aspect that was not supposed to pose problems for learners according to all teachers was spelling.

Question 12: Emphasized skills in an ESP Course

The aim from asking this question was to seek the teachers 'opinion about the skill that had to receive much importance when teaching medical English, whether it could be listening, speaking, reading or writing. Here, teachers had to classify the mentioned skills from the most important to the least important. The results showed that teachers were not of the same opinion as two of them regarded reading as the most important skill followed by writing then listening and finally speaking. On the contrary, two other teachers rated speaking in the first position followed by listening, and then reading in the third position and finally writing took the fourth place. The last participant in this questionnaire was not much different from the two previous ones as he classified the four skills in the following order: listening, speaking, reading and writing. What should be noted at this level of analysis is that although teachers did not share the same opinion about classifying skills, they did know very well that reading could serve writing and had to be rated together while they had the belief that successful listening paved the way to perfect speaking and they had to be always together.

Question 13 and Question 14: Teaching Materials

In question 12, teachers were asked if it was easy for them to find the necessary teaching materials. All of them answered 'no'. Their answers revealed the difficulties and problems they encountered when preparing their courses, which lacked the availability of resources. In fact, this bitter reality haunts a great number

of teachers who most of the time rely on their own materials to present their lessons. The next question was: "Do the provided materials, if they exist, cover the needs of the entire course?" Here also the respondents shared the same point of view as four of them said 'no' while only one of them was against. This means that the selection and the availability of appropriate materials could undoubtedly determine any success or failure of the teaching act.

Question 15 and Question 16 : The Use of Translation in Teaching

Questions 14 sought information about the use of translation in teaching ESP, i.e., to know whether teachers resort to translation to French or Arabic when presenting their courses. The results showed a total agreement between the five teachers who did not hesitate to confirm the fact of resorting to translation when necessary especially when dealing with abstract items or difficult medical terms. However, the frequency of the use of translation was different from one respondent to another. Two teachers thought they often relied on translation in order to save time and facilitate ambiguous concepts whereas two other ones used it when necessary. However, the fifth teacher rarely resorted to translation and even if he did, he preferred French than Arabic justifying his choice that French was much closer to English than Arabic. Certainly, this attitude reflects the teachers' still belief on the benefits of grammar translation method through which the translation of long bilingual lists from, particularly, a mother tongue to a foreign language was the major principle of that method.

Question 15 was meant to know the opinion of the teachers about the cases where translation could be effective i.e. was it useful in translating important medical concepts, or giving clues if necessary or full translation into Arabic or French?

The results showed that nearly all teachers were of the same opinion for the simple fact that all of them stated that translation could be more useful when translating important concepts in a given course, except one of them who added that translation could be of a real value when giving cues if necessary.

Q17: Teaching Aids

It is commonly known that teaching relies on appropriate materials to achieve success and realize effective learning. That was, indeed, the starting point to ask teachers whether they used audio-visual aids in their teaching process. Their answers were different as two of them said "yes" and three said "no". This disagreement between teachers would reflect the no availability of teaching aids for a big number of teachers who most of the time use the board as the unique teaching aid.

Q18: Class/ Group size for an ESP course

All teachers were of the same opinion concerning the number of students in an ESP class. They asserted that twenty learners per group could give fruitful results for an ESP course. However, this is not the case in many faculties of the Algerian universities where overcrowded classes are beyond all the expected wishes.

Q19: Assessment of Students

Assessment is the most crucial stage in a teaching act through which teachers can have an idea about what they have taught and know whether learners have made any progress in learning the foreign language. Thus, without it, teaching is without value. Therefore, assessing learners through tests and exams is generally the last step done by most teachers to evaluate the effectiveness of their input and the feedback of their students. In this respect, the participants in this work were asked to express their opinion about the manner they assess their students; that is to say whether they use oral tests, written tests or both. The findings revealed that three out of five teachers stated they used both oral and written tests while there were two teachers who regarded using written evaluation as the most convenient way to assess learners. However, there was no respondent who admitted using oral test alone as a type of assessment.

Q20: Teachers' Suggestions

The five teachers suggested some recommendations to ensure effective ESP courses, here are what they thought appropriate for Algerian medical learners:

- 1) It's high time we implemented an English curriculum in all the Algerian medical faculties.
- 2) We should make English sessions more interactive, enlarge students' horizons about medical research and enhance them to publish their works in English.
- 3) Providing learners with English courses and assessing them through formative evaluation is an obligation.
- 4) We should integrate more ICT's. Learners should be exposed to native speakers. Medical learners should have a module of English for at least three years.
- 5) Bringing doctors and medical specialist from English speaking countries like Britain USA and Canada to Algerian Medical faculties and ask them to do some lectures for Algerian students.

3.3.12- Discussion and Interpretation

The teachers' questionnaire was another means of research through which a group of five ESP teachers expressed their opinions about the situation of medical English in one of the most prominent universities of Algeria; the University of Sidi belabbes. Those teachers exposed their experience of teaching ESP as well as their view towards implementing effective ESP courses for medical students. The results showed that most of the participants (four out of five) were not qualified enough to teach English in the university let alone teaching ESP. This was owing to the fact that classical Licence or Master Degree is not sufficient to be assigned the task of teaching university students. Hence, the reality indicates that in most of the Algerian faculties where students are supposed to take ESP courses, many teachers

have not the necessary qualifications and the required experience to be accepted as teachers in the ESP field.

This is on one hand, on other hand the findings showed that most of those ESP teachers if not all of them did not receive any kind of training in the field; neither pre-service nor in-service training. Nevertheless, the participants in the present questionnaire did not ignore the necessity of designing ESP courses for medical students who might use English in a wide range of situations such as: taking part in international scientific meetings, being able to accede to medical literature, publishing research works, reading medical textbooks, writing medical reports...etc.

With regard to the duration of teaching ESP in the medical faculty, teachers were not of the same opinion as they suggested two years, three years, four years and seven years as the maximum. They also insisted on the importance of the collaboration between ESP teachers and the medical subject lecturers to achieve successful courses and realize fruitful results.

To clarify the students' weakness in the different aspects of language, the respondents agreed on the fact that grammar, listening comprehension and writing about medical issues were the major aspects that refrained learners from making progress in the language. That's why some of them regarded emphasizing listening and speaking followed by reading and writing as the right logical order when building any ESP course, whereas others placed reading and writing as the most important skills to be stressed first followed by listening and speaking. This divergence of opinion among teachers indicates the absence of a clear image about the students 'needs which should be determined through conducting a deep needs analysis.

Concerning the teaching materials, again the participants affirmed the no availability of teaching resources which resulted on the difficulty of preparing lessons, and even the provided materials could not cover the entire courses.

Translation was another aspect under investigation through which the teachers expressed their total agreement on the use of translation when necessary,

particularly when dealing with some ambiguous medical concepts or abstract items. They were not much different in the frequency of the use of translation as well as the cases where translation would be allowed. Besides, the use of oral and written tests to evaluate students 'knowledge was the major pedagogical procedure of a great number of teachers.

At the end of this section, the respondents argued that the limited teaching aids used in the teaching/learning process added to the overcrowded classes could never achieve the intended wishes in the future, the reason why they suggested integrating ICTs in teaching and exposing learners more and more to real life situations. They also insisted on implementing an English curriculum through devoting a module of ESP in the faculty of Medicine for, at least, not less than two years.

3.3.13- The Dean's Interview

The interview is another instrument used in this work to obtain information about the situation of medical English and the attitudes of a key administration official towards the teaching of English for medical students and the idea of implementing real ESP courses in the Faculty of Medicine at Sidi Belabes University.

Unlike the questionnaire, the interview was built on some structured and openended questions that served for better diagnosis of the subject matter and led to recommend appropriate strategies to implement English medical courses in the faculty. Thus, the interview was conducted with the Dean of the Faculty of Medicine at Sidi Belabes University. The latter holds a Doctorate degree in Medicine and an experience of more than twenty five years in the medical field and before being nominated a head of the faculty; he held various positions in the medical field.

The most prominent goal of the interview was to reveal the concrete reasons behind the nearly absence of teaching English to medical students; this is on one hand, on other hand, the researcher aims at identifying the decision makers'

opinion about the possibility of implementing effective ESP courses for the first time in the Algerian medical faculty.

Before starting the interview, the respondent was kindly requested to answer the questions and was given insight about the nature of the needs analysis and the purpose from conducting the research as well as the objectives of the interview and the way data were to be used.(Nunan,1992). Hence the questions asked included the following broad lines:

- 1- The profile of the respondent and his experience in the medical field.
- 2- Clarification of the reasons behind not teaching English for medical learners.
- 3- Seeking opinion about the implementation of ESP courses in the medical field
- 4- Suggestions for the course content.
- 5- Seeking opinion about the collaboration between ESP teachers and medical content teachers.
- 6- Seeking opinion about resorting to translation in teaching medical English.
- 7- Suggestions for an effective ESP course.

3.3.14- Analysis and interpretation of the Interview

The first two questions to the dean of the faculty in the interview were about his qualifications and experience in the medical field. The unique participant of the present interview replied that he had the grade of professor working for three years holding that position. The next question sought to know whether medical students took English courses throughout their learning process. His answer was precise and concise "no, except dental medicine department". Obviously, the next coming question was to state the reasons behind not designing English courses in the medical faculty which is considered as one of the most important faculties in the Algerian universities. This was, indeed, one of the crucial questions raised in this research. However, and again, the dean seemed much reserved and answered: "No teachers". By doing so, either he meant the lack of English teachers in the faculty of medicine, and this was a problem for all the

other faculties, or he referred to the lack of real ESP teachers with special experience in the medical domain, and this was another problem facing ESP course designers and practitioners.

With regard to the reasons behind the importance of teaching ESP in the medical sector, the dean of the faculty stated that English could be very crucial for any scientific development or research, the reason why he was for implementing real effective ESP courses in the medical faculty for all levels.

The seventh question in the interview sought information about the availability of equipments and teaching materials in the faculty for teaching EMP. Unfortunately, the dean's answer was not much encouraging and revealed great lack if not absence of such necessary tools for any successful teaching process. This could explain the total neglect of the linguistic side in the medical knowledge acquisition. Nevertheless, the dean did not hesitate to confirm the need for a kind of collaboration between ESP teachers and medical subjects to shape the content of medical courses and adapt the teaching syllabus. Furthermore, he insisted on the fact that ESP teachers had to know medical literature to ensure efficient language teaching and facilitate students' learning.

Before closing the present interview, the dean was required to express his opinion on the use of translation to teach medical students and justify his choice through stating the main reasons and factors. Like, many ESP teachers in the previous questionnaire, the head of the medical faculty admitted the usefulness of translation in the teaching process particularly for the medical learners

Finally, the interviewee was asked to recommend what he thought appropriate for implementing English courses in the medical curriculum. Again, he was very concise in his answer and stated that the faculty's decision makers had the wish to parallel teaching medical knowledge to an acquisition of English language throughout the students' learning career. This recommendation reflects plainly the desire of the medical responsible to devote ESP courses in the field.

3.4-Conclusion

In this chapter, much emphasis was on analyzing and interpreting the results drawn from the participants' perceptions on the situation of teaching English in the medical field and the possibility of designing effective ESP courses in the near future. This was possible through submitting two questionnaires; one for medical students and one for their ESP teachers working or had experience in the field. The administrative staff was taken into consideration when devoting an interview with the dean of the medical faculty of Sidi Belabes University.

The findings showed that all the participants taking part in this research agreed on the absence of real ESP courses in the medical faculty and asked for implementing real effective English in the field through taking brave decisions and providing serious measures to change the reality and the prospects of English language teaching in the Algerian medical sector.

First, medical students of the three departments namely; the department of medicine, the department of pharmacy and the one of dental medicine expressed their urgent need to be taught English, particularly for future academic studies. The results of the questionnaire showed that medical learners were not much proficient in English let alone ESP. Their weakness generally lied in interactive English learning (speaking and listening) where they had difficulty to hold conversations in English and pronounce medical terminology correctly. Besides, they failed to translate documents from English to French language. The findings also revealed that medical participants thought they always needed writing skill to write research papers, take notes in lectures and conferences, chat and write replies to English speaking key pals and even write essays in English. They also thought that reading medical journals and articles in English was very necessary as well as reading scientific newspapers and magazines. The data also showed that the respondents were for reading English textbooks and lecture handouts written in English. In addition, a big number of the respondents needed to devote more listening sessions to understand discussions on medical issues and comprehend spoken presentations in seminars and English conferences. Furthermore, most of them agreed on the necessity to learn listening to understand medical visitors, doctors and scientists coming from English speaking countries.

Second, the group of ESP teachers participating in this study represented a common truth in most of the Algerian faculties where students are supposed to take ESP courses; many teachers have not the necessary qualifications and the required experience to teach English in the university let alone ESP. This is on one hand, on other hand, the findings showed that most of those ESP teachers if not all of them did not receive any kind of training about teaching ESP. Nevertheless, the participants in the present questionnaire did not ignore the necessity of designing ESP courses for medical students who might use English in a wide range of situations and for convincing reasons. They also served the present research by clarifying the students' weaknesses in the different aspects of language and expressing opinion about the duration of ESP courses as well as selecting convenient syllabus and appropriate teaching materials.

Third, the dean of the medical faculty who represented the power of decision justified the non-teaching of English for the students by the lack of ESP teachers. Nevertheless, he was not against providing medical learners with English courses. In contrast, he was for asking ESP teachers to work in collaboration with subject lecturers to set appropriate content and convenient learning syllabus wishing to parallel teaching medical knowledge to acquiring English language in the future.

Chapter Four

Proposals of an ESP Design Model in the Medical Field Suggestions and Recommendations

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4.1- Introduction

The last chapter of the present work is mainly devoted to propose some pedagogical implications, suggest efficient strategies and refer to some correct practices of designing successful ESP courses for medical learners. This will be tackled from different sides and with much focus on the major factors that contribute to better achieve an ideal design model of an ESP course in the medical field.

The role of an ESP teacher for EMP learning is, without doubt, of an immense importance in this study, the reason why a whole section of the present research is dedicated to talk about the teacher's role in realising better learning conditions for his learners who are mostly affected either positively or negatively by their teachers' teaching methodology.

However, talking about implementing effective medical English in the Algerian faculties seems to be worthless and without vain if course designers and curriculum developers don't put much focus on the learners who are considered as the corner stone of any ESP course design. That is why another important part of this chapter is reserved to discussing the learners' process of learning and exposing the most efficient strategies of medical English acquisition.

Teaching effective ESP courses for medical students is not only a matter of providing competent ESP teachers or taking care of medical learners, but it is rather a question of how to develop students' competencies in the different mechanics of language such as: grammar, medical terminology, correct spelling of English medical items, capitalisation and punctuation, pronunciation and the ability to translate terms and medical phrases from English to French or vice versa. It is also a question of how to teach the four language skills effectively and enable learners to use English efficiently in the different medical contexts of every day communicative situations. This would be tackled in detail in another section of the present research.

The last part of the current chapter is reserved for presenting an English design model of an ESP course for medical students where much discussion will be about the major components of the course as well as the content and the objectives from setting the activities. Although the course presents a sample unit of the syllabus design, it could be a good example and a guiding source for many ESP teachers seeking a practical frame work of ESP teaching.

4.2- General Pedagogical Implications and Remedial Measures

The present needs analysis of the medical students was of a great value for not only the medical faculty of Sidi Bel Abbes but for many similar contexts in Algeria and other EFL settings. This is because identifying students' needs is the key for any ESP course and the corner stone of an effective ESP teaching.

According to the obtained findings of this investigation, there is an urgent need for implementing an effective ESP curriculum for medical learners with much support from administration and medical staff. First of all, so as to fully meet the professional and academic language needs of the medical students, the hourly volume devoted to English language classes should be increased. Thus, instead of taking one hour and a half of English course once a week, students should be more exposed to English language sessions; at least two hours thrice a week

With regard to English language teachers or instructors, they should make more efforts to develop their teaching system bearing in mind that teaching English for medical learners demands much awareness of medical knowledge. They are required then, to take some training sessions of teaching ESP and take part in seminars and English workshops so as to develop their teaching act and ameliorate their techniques and teaching strategies. In this context, Hutchinson and Waters (1987) point out that an ESP teacher should have positive attitudes and willingness, as well as some basic knowledge of the discipline he/she teaches, to achieve meaningful communication between teachers and learners.

If one considers the context of the medical faculty of Sidi Bel Abbes University, there are very few academicians and teachers who have benefitted from some kind of training in English speaking countries for their academic studies and become able to use English appropriately. Those figures with the help of some ESP experts have the required experience and language knowledge to guide the training sessions of the English language instructors and ESP teachers.

In order to implement an effective English curriculum design for medical students in the University of Sidi Bel Abbes, first academicians, curriculum developers, administrators and ESP teachers should stay together and negotiate the academic English needs of the students, trying to put a platform for a real start and a road map for English language teaching. With the help of the content teachers (medical instructors), they should work together to frame the content of the English lessons. The role of the content teachers, in this case, is very crucial for they motivate the medical learners to connect between what is done in English classes and their medical academic studies. This should be done, of course, after determining the appropriate ESP approach that should be adopted and the convenient syllabus that should be applied.

Another remark obtained throughout the findings of the present study is the lack of motivation and willingness of ESP teachers when doing their job. This is, first due to the limited financial support they receive, as most of them are not permanent teachers in the faculty and are not well-paid. Second, those ESP teachers have never been invited to express their opinion about what to teach and how to teach, i.e. taking part in curriculum development or even syllabus design. Overall, this situation leads to unwillingness and motivation among a great number of ESP teachers who are not really interested to teach in the medical faculty. Therefore, it is of an immense importance to take this situation into account and find urgent solutions to the problem.

The questionnaire data also revealed the limited use of technologies and appropriate materials in the teaching process. It is of a great importance to select, adapt and sometimes produce convenient materials that should be relevant to the medical field. For Hutchinson and Waters (1987):

- "...there are three possible ways of turning your course design into actual teaching materials:
- a) Select from existing materials: materials evaluation.
- b) Write your own materials: materials development.
- c) Modify existing materials: materials adaptation."

In fact, ESP teachers have a wide range of options to select their authentic materials. They can resort to journal articles, scientific magazines or some medical sites on the internet. They can also rely on certain research articles considering the level of proficiency, interests and students needs. The most important thing is to negotiate with content instructors and the students themselves whenever they decide to make such materials into practice. Indeed, the selection of materials should be based on the criteria whether they stimulate learning and motivate learners, meet the learning objectives and the students' needs are available and easy to get. In this respect, Brown (1995) asks for preparing a checklist of convenient materials. For him, those which do not match the objectives of the course or the students' needs should be eliminated.

This is on one hand; on other hand the administration is responsible for providing the instructors with various technological equipments such as: computers, OHP, video, cassette players and so on to be used in EMP classes. It should also facilitate access to the internet which is an indispensable source of communication and research for both students and instructors who should work together to search for articles and relevant medical sites.

In terms of learning skills, medical students revealed a remarkable weakness in interactive skills such as listening and speaking, the reason why they should be given more priority and ought to be widely integrated in the classroom activities and reinforced in the new curriculum to be developed. Different techniques and strategies about teaching the aforementioned skills are well-explained in the precedent sections. The other skills, reading and writing should not be neglected for they are needed to fulfil a number of communicative functions which are explained in detail by the medical students in the questionnaire. Students should be accustomed to academic texts by eliciting their existing knowledge in pre-reading

activities and enable them to use some techniques such as skimming texts for global comprehension and scanning for detailed information.

Tasks of presenting some medical topics can be given to them in English classes and the students can ask questions about their peers' presentations. The presenters can respond to them, and they can discuss the issues in an interactive way. As for communication with foreign patients, clinical discourse should be taught. Thus, the most common vocabulary, lexical phrases and expressions used by doctors to communicate with patients, that is, medical discourse, should be taught to the students. In classes they can use role play activities in order to practice communicating with foreign patients in real life situations, such as examinations or taking the history of a patient, which require asking questions about common symptoms of the disease, their complaints, and giving instructions and explaining a diagnosis.

In terms of listening, real lectures or presentations can be videotaped or academicians who have studied or worked in the UK or the USA can read some lectures and their voices can be tape-recorded by the English instructors; then the videos and audiotapes can be used as materials in English classes. In terms of technical and specific vocabulary, systematic presentation of term-forming elements like prefixes and suffixes in medical texts is necessary (Laar, 1998), as the first step to learning medical language is to learn medical words (Yang, 2005).

With regard to translation, it can still be useful to understand very complex sentences, so the researcher suggests situational translation, instead of translating all the words and sentences in the passage. For the situations in which they feel in great difficulty, for example, understanding very long sentences with complex grammar structures, translation can be useful for them. The grammar translation method has been widely used in ELT teaching worldwide. However, it should be noted that translation of medical texts has its own problems. The instructors who teach at the Medical Faculty should be familiar with the translation techniques and translations of the medical texts, but should certainly not rely on it fully. The students should be

given more problem-oriented tasks which will reflect their cognitive ability and their own academic skills.

The necessary grammar or vocabulary items are acquired during the implementation of the tasks. Also, learners acquire good knowledge during their research and can easily integrate it into their existing knowledge. According to the literature, the communicative method is an effective method which not only improves medical students' clinical skills but also their self learning skills, making them more autonomous learners of health care issues

The findings of the investigation also showed the prominent role played by both EMP teachers and medical learners for achieving successful ESP courses. This would be tackled in detail in the precedent sections.

4.3- Strategies for Becoming Effective EMP Teacher

Teaching students effective medical English is not an easy task because the matter needs much competence and knowledge from the part of teachers who should not only develop their learners' language skills but also the necessary knowledge related to the field they are supposed to teach. It is a question of gaining some individual qualities and a kind of experience in the teaching field. So, how is it possible for an English medical teacher to take that responsibility and what are the necessary steps that he should follow before he even set foot in the classroom? To answer the question above, the researcher proposes the following qualities and features as a crucial part of an ESP teacher's character.

4.3.1- Assessing Strengths and Weaknesses

Successful teaching is not only a matter of being knowledgeable about what to teach, but it is rather a question of how to show concern for students to learn and how to stimulate their interest through explaining subjects clearly, involving them in the different communicative acts and showing enthusiasm. A successful teacher is the one who devotes time to assess his strengths and weaknesses, and benefits from his previous teaching experiences so as to improve his teaching skills and his course design plans. Likewise, he would be able to give his learners more chances to ask questions and reflect upon solutions instead of overwhelming them with a

rash of complex ideas and explanations. It is very crucial for a teacher to build his own confidence to facilitate interaction with his students and enhance their learning process through a number of strategies such as: starting teaching through opening discussion with a topic he knows well, encouraging give-and-take technique, and working with small groups that may suit his personality because: "...good teaching is part art, part technique, and part personality..." (Howard Hughes Medical Institute and Burroughs Wellcome Fund, 2006)

4.3.2- Taking Advantage of Professional Help

Good teachers are those who take advantage of any professional assistance that may be offered from a colleague, a university or any training organism. It is through carer development programmes that new beginner teachers could expand their teaching experiences and other professional skills. In spite of the fact that those formal programmes seem to be rare, their numbers are quickly increasing particularly within private institutions and centres whose concern is to give opportunities for teachers or trainees to videotape their performance and suggest ways to improve it. However, this is not the unique source of developing the teachers' competencies but there is another way to get advantage; it is that one based on online resources of curriculum development where much use of teaching techniques and other issues could serve better for becoming effective EMP teacher.

4.3.3- Observing and Being Observed

Learning about how to teach is as important as learning about how to improve a scientific research based on critiques and comments that one may receive from editors and examiners. It is another opportunity for an EMP teacher to develop his teaching skills and practices through observing other colleagues, peers and particularly the feedback provided by students. This can be done in different ways and manners. For example, one may organize reciprocal arrangements with another teacher whose role is to provide assessment about the teaching act and give advice and orientation about the course objectives, classroom management, materials use, rapport with students and students' feedback. All the remarks and comments should be taken into consideration for the sake of self-correction and improving one' teaching abilities because senior and experienced colleagues may help a lot and

offer a great deal of advice to deal with particular topics and solve specific situations. It would be of a great value, then to attend their classes and observe what they do with their learners and how they transfer knowledge and language in a professional way to their students. Experienced teachers and those who have developed a reputation for creative teaching could have the necessary teaching expertise, knowledge and enthusiasm to comment on the teaching strategies, techniques and propose suggestions.

However, observing or being observed by colleagues or experienced teachers about teaching improvement may not be sufficient; the reason why seeking feedback from learners themselves could be of an immense value. Student's evaluation and critiques of teaching effectiveness can offer valuable results for improving the teaching behaviour, making the necessary course corrections and ameliorating student learning and performance. Certainly, this can be done through a wide range of procedures to receive effective feedback. For instance, Students are asked to write their remarks and comments and put them on their teacher's desk. Anonymous feedback is then encouraged to avoid any kind of dishonesty or shame from the part of students who do not hesitate to praise or criticize and sometimes insult if they feel angry with some teaching attitudes. This will, undoubtedly, help teachers level up because great teachers are never afraid of having or inviting hard conversations.

Believing that achieving effective ESP courses for medical learners is only the duty of ESP teachers is not true. A part of the responsibility is, undoubtedly, related to learners themselves who are responsible for their own learning. Most of the new teaching methods put the learner in the centre of the learning process, and any attempt to describe a successful procedure of an ESP teaching without taking students' role into account leads towards failure. Accordingly, the researcher devotes a whole section in the present chapter talking about how medical learners can contribute to their self learning. This could be done through a wide range of steps and procedures. Cooperative learning and active learning are just good examples of those learners who take the initiative to improve their own learning and ameliorate their learning style.

4.4- The role of Medical Students

In this section, the whole discussion is about the role played by medical students to achieve successful learning. There different types of learning that could enable students develop their proficiency in English. Among which, the followings are of immense importance.

4.4.1- Collaborative Learning

One of the teachers' effective teaching methods is to encourage collaborative learning among their learners. Collaborative learning is:" an educational approach to teaching and learning that involves groups of students working together to solve a problem, complete a task, or create a product" It is fruitful in the sense that learners work together as a team to prepare a meaningful project, discuss a given lecture, explore a significant question or analyze and discuss some language problems using English as a medium of interaction. This type of learning is much recommended for medical learners who showed great interest in group works throughout the submitted questionnaire in the previous chapters. They revealed their desire to work together in small groups on structured activities through which they can share knowledge and show their strengths as well as their weaker skills.

Collaborative learning enables medical students to develop their language skills particularly when it is guided by clear objectives, students can improve their comprehension of subjects through a wide range of tasks and activities. However, collaborative learning cannot achieve good results without taking into consideration three major conditions such as: First, students should feel safe and challenged to engage into face to face discussions and communications. Here, the role of the teacher is of an immense importance. Second, the tasks and the activities' instructions should be clear enough to enable students know what to do. Third, the group size should be as small as possible to give chance to all the group members to take part in talks and debates. In addition, there are other factors that should not be neglected when assigning collaborative learning. They are as follow:

- 1- Teachers turn into guides, monitors, facilitators and sometimes co-learners when students engage into communications
- 2- Learners should feel responsible for their learning.

- 3- Any contribution from the part of students should be encouraged and appreciated by teachers.
- 4- Students should be encouraged to handle their own issues before coming to the teacher for assistance.

In addition to the advantages mentioned before, learning collaboratively helps students being compatible. In other words, if one is not as strong in a subject, or does not fully understand the concept of an idea, a partner can help understand, for example, when listening, interacting, asking questions, responding and exchanging ideas, students learn a lot from each other. They can relate to one another than to a teacher at times collaborative learning enables students to see the different angles of the problem. Two minds or more solving problems or bring up new ideas are definitely better than one. In addition, Collaborative learning forces students to communicate and use the target language with a purpose, i.e. students learn to work together to achieve a common goal and try to solve the problem collaboratively. On the whole, one might say that learning to work cooperatively is vital in everyday life. In almost any job situation, people will have to cope with each other for a better life.

To conclude, one could say that collaborative learning is very helpful because it gives a taste of what students will have to do in the 'real world'. It helps improve social skills and provides a more 'real life' work situation. Students can learn to express their ideas and concerns and accept others' ideas and concerns. So, it is not only developing students' language and social skills but preparing them for what the future holds.

4.3.1- Active Learning

The following part of this section will describe the concept of active learning, how to design a science course, and how to involve medical students in the process. But before one can even start writing his course outline or think about how many active-learning exercises he wants to include in his lessons, he should ask himself: What will the course accomplish? Below is a possible answer.

The goals of this course are:

- To teach the following three components(x, y, and z) in a deep and meaningful way.
- To sustain the interest of students who are planning to major in science.
- To provide an understanding of the method and principles of the scientific process for those not continuing with the subject.
- To provide a strong preparation for the next course in the series.

Once the teacher clearly defines the goals for the course, the next question he needs to ask is: "How will I know I have accomplished these goals?"

Active learning uses a variety of problem-solving techniques to help students become active participants in the learning process, giving them the chance to clarify, question, apply, and consolidate new knowledge. The concept was originated by John Dewey, a philosopher of education who contended that learning must be built upon the experience of the learner, who actively integrates new knowledge into an existing conceptual framework. Today, broad support exists for the core elements of active learning, and a growing body of research has made it clear that supplementing or replacing lectures with active-learning techniques and engaging students in discovery and scientific process improve their abilities to understand concepts, think critically, and retain knowledge.

In the classroom, the principal tools of active learning are

- Cooperative learning: Students work in groups and the teacher is the facilitator. Cooperative learning builds a sense of community in the classroom that enables students to work together in noncompetitive ways.
- *Inquiry-based learning:* Students ask and answer questions and engage in the process of science.
- Assessment: The instructor continually assesses what students are learning and uses the feedback to make revisions as the course progresses.

However, active learning without mastering the most important mechanics of language such as grammar, vocabulary, spelling, and so on cannot bring satisfactory results, the reason why, the researcher would like to discuss that point in detail.

4.5 - Teaching mechanics of Language

Teaching effective ESP for medical learners requires developing the different mechanical components of English language. These are considered as the nuts and bolts of any authentic piece of writing or even spoken language. So, it should be more than necessary to discuss some of these components where much focus will be put on teaching scientific vocabulary as well as teaching spelling, punctuation and capitalization, pronunciation and grammar.

4.5.1- Teaching Medical Terminology

Teaching vocabulary is one of the ways of acquiring a foreign language. So, it is very crucial to enable students to grasp and memorize as many vocabulary items as possible to engage in tackling any medical subject or describing any scientific phenomenon. However, the fact of teaching vocabulary is not a matter of setting long bilingual lists of scientific vocabulary items as the traditional teaching methods used to do, it is rather a question of how to involve learners in realistic communicative situations where they feel able to use convenient scientific vocabulary needed for specific designed situations for writing or speaking about medical issues as in the case of medical students. Thus, scholars and most language researchers agree that the possession of a sufficient stock of scientific vocabulary facilitates the writing tasks for learners and make them feel more self confident to discuss any scientific subject and engage in successful conversations.

In practice and in order to solve the learners' lacks in scientific vocabulary, there are many effective ways of teaching vocabulary by using a number of techniques and a wide range of materials such as: pictures, graphic displays, scientific experiments, etc.... It is up to teachers to choose the suitable material that corresponds with the teaching input. If it is, for example, to describe the human digestive device it is preferable to use pictures and authentic materials to discuss the different organs of the device. If the matter deals with the increasing consumption of genetically modified foods among people, the learner should be asked to analyze and interpret results of data in a pie chart or a bar graph. The writing from various visual displays can help learners positively to interpret the data scientifically by

using appropriate terminology and logical information. So, it is the learning situation which determines the register of the scientific terminology that should be taught to learners.

Bearing in mind that ESP-vocabulary teaching is quietly different from general language-vocabulary teaching, medical students can be asked to guess the meaning of some particular words by using their prior knowledge for their subject matter and practise them in full sentences or statements. What characterises ESP or EMP in particular is the lexis which is subject specific and the terms which are meaningful without resort to special knowledge. Besides, most of the medical words are nouns that carry technical significations in medical texts. The majority of these words are exact, specific and systematic. However, there are other words, which may have technical meaning in medical context, belong to general English. As examples of these words, one can find: demonstrate, observe, analyse.

On the ground, ESP teachers can select a number of tasks and present a set of activities to reinforce their students' vocabulary stocks and enrich their cultural baggage. Gap filling could be of a remarkable value if the teacher, for instance, asks his learners to fill in the gaps with appropriate medical terms so as the selected text makes a sense. The teacher may offer assistance for his students by suggesting the list of terms. The aim of this kind of tasks is to enable medical students to use their prior knowledge to deduce the meaning of words relying on their context of use. The following is a sample of the intended activity meant for teaching vocabulary.

Task: Fill in the gaps with the appropriate item so that the passage makes a sense. There are some irrelevant terms that should not be used.

Fever – nausea – cholera - consulted – vomiting – physician- bleeding

A 23 year old woman was admitted to the hospital because of persistent with diarrhea. The patient was well until 5 weeks earlier, when, headache, myalgia and watery diarrhea began, and her temperature rose as high as 41 °C. She..... a physician who made a diagnosis of a viral syndrome and prescribed symptomatic treatment. Fever and diarrhea persisted. occurred. She had a sore throat and enlarged, tender cervical lymph nodes. She returned to her......, who found that the temperature was 40.3 °C. She was admitted to the hospital.

Peter Gross (2002)

Another type of activities that could achieve successful teaching of medical vocabulary is the use of what is called," connecting (matching) exercises". Here, learners are required to guess the meaning of words through making connections with suggested synonyms, definitions or antonyms. In fact, students are not required to use dictionaries but they rather decipher the meaning of words according to their context in the reading passage because terms are best understood when they are presented in a context and not in isolation. This will facilitate students' comprehension and enable them to enrich their vocabulary stock of terms. The following activity could explain the technique clearly.

Task: Match the following terms with their definitions.

Words	Definitions	
	a) Any of a group of chemically similar substances obtained from	
	molds of the genus <i>Penicillium</i> that were the first antibiotic agents	
1) heart rate	to be used successfully in the treatment of bacterial infections in	
	humans.	
2) haemolytic anaemia		
	b) A test that can be carried out quickly and easily in an	
3) penicillin	emergency department. The test can help diagnose some	
	abdominal conditions.	
4)pulmonary embolism	c) A primary care specialty in western medicine that, by using	
	mechanical force and movements [Bio-mechanics or Kinesiology],	
5) physical therapy	d) The speed of the heartbeat measured by the number of	
	contractions of the heart per minute (bpm).	
6) abdominal x-ray		
	e) A condition in which an embolus (blood clot, formed in a vein)	
	breaks off and blocks a pulmonary artery which supplies blood to	
	the lungs. It can result in pain, breathlessness, and sudden death.	
	f) Resulting from the lysis of red blood cells, as in response to	
	certain toxic or infectious agents and in certain inherited blood	
	disorders.	

(The free dictionary, by Farlex)

Word formation is another crucial technique used to enrich medical students' vocabulary. Teachers can ask their learners to derive new words by adding affixes (prefixes or suffixes) to roots. The activity could achieve fruitful results, particularly, when students are asked to use the terms meant for derivation in full sentences because the meanings of words are best understood when they are presented in a context and not in isolation. The task below could be a concrete example of word formation.

Task: Form nouns from the verbs in the table below by adding the convenient suffix, and then use the new obtained words in full sentences of your own.

Verbs	Nouns	Suffix
To vaccinate		
To treat		
To infect		
To discover		
To immunize		
To resist		

Some teachers resort to word classification to teach medical terminology. Students find this sort of tasks very interesting for they will be able to distinguish between various medical items using their previous own knowledge. The task below is a practical model of this kind of techniques.

Task: Classify the following words in the table below.

blood pressure cuff - syringe - blanket - stethoscope - rubber glove - neurological pin - urine bottle - band-aid - face mask - scale - reflex hammer - oxygen outlet - ophthalmoscope -air conditioning heating - overhead loud speaker.

Doctor's equipment	Equipment in the patient	Working materials
	room	

Finally, creating interactions with students through asking questions and receiving answers is a common technique used by many instructors to teach medical terminology. Every time, we ask a question to our medical students, we are, indirectly, teaching a new word or a new expression. For example, a teacher may ask his learners: what does a doctor do to examine the patient? The answer would be: He should measure his **temperature**, test his **heartbeats**, examine his **respiratory system** and measure his **blood pressure**. The four terms written in bold type are new vocabulary items that a student may learn through asking the above question. However, the focus on reinforcing students' medical terminology alone cannot achieve fruitful results if grammar is not taken into account when teaching medical English.

4.5.2- Teaching Grammar

No one can deny that effective scientific writing is based on good syntax and correct arrangement of sentence elements (structure). A successful writer chooses correct words arranged into phrases and sentences to express appropriate relationships between ideas which are well-expressed when they are related to one another. However, relying only on syntax and structure to form sentences and build whole paragraphs is not satisfactory to ensure coherence and convey meanings without grammar and punctuation rules. Thus, applying grammatical rules in writing is efficient to overcome some of the students' difficulties in writing on scientific or medical issues.

Teaching efficient grammar to medical students is a very important factor to enable them to write confidently. Thus, whatever grammar teaching is done, it should be presented as efficiently as possible. To ensure efficiency in teaching grammar, Scott Thornbury (1999), in his book entitled: "How to Teach Grammar," suggests 03 main factors that should be taken into account when assigning writing tasks. These factors are: economy, ease and efficacy. With regard to economy, teachers have to be concise and economical in presenting grammar inputs in order to ensure motivation among learners, i.e. the shorter grammar is presented the better

is grasped. Concerning the second factor, teachers should prepare easy examples to explain the grammatical points and avoid complicated activities to practise the rules of the input. Therefore, the easier an activity is to set up, the better it is. As far as efficacy is concerned, teachers can measure any progress of their students' learning through tests and exams which can provide feedback to teachers on the efficacy of learning teaching process. The efficacy of grammar activities can be, in turn, measured by the degree of the learners' attention which means nothing if there is no understanding. Even the latter is ineffective without memory. So, students should pay attention, understand and memorize grammatical rules in order to use them in their writing attempts.

Another crucial point that should not be neglected in teaching grammar is appropriacy because learners are different in needs, interests, attitudes and even beliefs and values. According to Thornbury, there are some factors that should be considered when determining appropriacy. They are as follow:

- Age of learners
- Their level
- The size of the group
- The constitution of the group, eg. monolingual or multilingual
- The learners' needs, eg. to pass BAC exam
- The learners 'interests
- The available materials and resources
- The learners' previous learning experience.
- Any cultural factors that might affect attitude. E.g. their perception of the role and status of the teacher.
- The educational context. E.g. private school or public school, at home or abroad.

On the whole, teachers should bear in mind that teaching efficient grammar should be based on applying one of the two models: PPP model or Task-based model. In the former, language is learnt in steps starting from: presentation, practice and production. Here, Fluency develops out of accuracy and grammatical

knowledge is acquired through practice. In the latter, language is learnt through communicative tasks and accuracy develops after fluency. Here, grammar is acquired through interaction and the syllabus objectives are expressed in relation with the real language use. So, it is up to teachers to apply the convenient model to teach the different grammatical points taking into consideration the factors that have been already mentioned.

4.5.3- Teaching Spelling

One of the problems that face students to write on scientific or medical topics is spelling. English spelling is difficult because it is irregular i.e. the same sounds can be spelt differently as in the words: *sea* and *see*. Sometimes, the same spelling can be pronounced differently ac in the words: *threw* and *sew*. However, the complexity of the English spelling and the existence of some conceptions do not mean at any rate the absence of certain clear spelling rules which facilitate memorizing words correctly. In this case, it is the role of the teacher who should know how to teach spelling appropriately relying on certain efficient strategies to enable learners to acquire new scientific vocabulary items.

Teaching spelling starts by motivating learners to read extensively because reading helps learners to remember English spelling rules and their exceptions. In this respect, it should be noted that the ESP teacher has to encourage his medical students to read more scientific texts since they belong to the medical field. Teaching students word formation exercises and familiarizing them with spelling patterns through practice is another technique in teaching spelling.

However, not only extensive reading which may bring satisfactory results in learning how to spell English words correctly, but listening skill can also contribute so much in making students more self-confident in writing correct English. Thus, listening to a series of words which share the same sound as in *got*, *bought*, *hot*, *dot* may be also useful to let learners identify how certain sounds are pronounced. In pronouncing words such as: *work*, *our*, *port*, *calm*, pupils will learn if certain sounds are pronounced or silent. This raises what J.Harmer (2004) calls awareness of convergence and divergence of sounds and their spellings.

The spelling of many words changes when they change their grammatical form. This can be taught to learners who should work out spelling rules through doing an exercise as the following one which is presented by J. Harmer (2004).

Look at the following verbs in the infinitive and with a verb ending. Can you say when the final letter of the verb is doubled and when it is not?

Clap	clapping	Limp	limping
commit	committed	pardon	pardoned
crawl	crawling	prefer	preferred
hint	hinted	run	running
hit	hitting	sin	sinned
howl	howled	sing	singing
knit	knitted	sit	sitting

As a comment on previous proposed exercise, learners need more concentration to come upon the three "doubling rules». This exercise also makes it clear for the students that English spelling is not random.

Last but not least, encouraging medical learners to use dictionaries to check the spelling of words and devoting some dictating sessions are considered as excellent techniques for spelling practice. Therefore, ESP teachers had better try these techniques with their learners.

4.5.4- Teaching Punctuation and Capitalization

The findings of the present work indicate that learners are not able to use punctuation and capitalization correctly and appropriately. Most teachers agree that the majority of the students know no more than two punctuation marks which are: the full stop and the comma. This is, indeed, a tremendous handicap for them to

achieve any development in their writing attempts. How can a student produce a coherent paragraph or a well-organized essay if he does not how and when to use the convenient punctuation mark and the appropriate capital letter where necessary?

To enable learners to use capitalization and punctuation correctly, a huge work and much effort should be done from the part of teachers who are responsible of training students about that. Therefore, learners should be taught that the main objective from inserting punctuation marks in any piece of writing is to enable the reader to understand what a writer means. They have to know that any variation in punctuation may lead to a great difference in meaning. For example, the following sentences can never mean the same due to the variation of the punctuation marks. "He is sick." "He is sick?" "He is sick!" The three sentences convey different meanings due to different punctuation marks. With regard to capitalization, most of the students recognize that capital letters are used to announce to the reader the beginning of a new sentence. However, in practice very few students who use capitalization in titles, proper names, days, months, holiday seasons, etc. On one hand, they ignore the right use of capitalization, the reason why they insert capital letters randomly and unconsciously. On other hand, they don't get sufficient practice about the use of capitalization in their writings.

All in all, students can learn to punctuate and capitalize through:

- Writing whole texts on the board without punctuation and capitalization, and then asking learners to punctuate and capitalize.
- Teaching punctuation and capitalization through preparing a rules chart.
- Dictating unpunctuated passages.
- Allowing peer correction before correcting students' products.

4.5.5- Teaching Pronunciation

One of the difficulties students encounter when learning medical English is pronunciation or sound system. It is difficult in the sense that many English terms are not pronounced according to their spelling; in other words, there are no uniform rules for determining spelling-pronunciation relations. For example, students find it quite difficult to distinguish between the sounds of English words:

"Possessions - position, talk-take, take- tick, pool-pull, push-bush, my-me, e-eye, fool-full etc. In addition, doubling of sounds doesn't exist in English, but it is quite a prominent feature in Arabic. For example, the most common name in Arabic is Mohammed. The doubling of sound /m/ is very important in Arabic, but it is not used in English at all."

(Intakhab Alam Khan,2011)

This kind of difficulties may negatively affect comprehensibility of communication and distract listeners. Consequently, the knowledge of correct pronunciation is considered as an essential component of communicative competence. Any failure to misidentify medical words may create ambiguities for the right interpretation of the texts.

In fact, learning pronunciation is a matter of knowing the rhythm of English and how it is created within words. That is why students are required to know the appropriate use of intonation which is characterised by the rises and the falls of the pitch of the voice. They are also needed to know to stress the right syllables in words so as to achieve correct pronunciation. This is not easy, particularly, with some medical terms which are not pronounced according to their spelling.

Teaching pronunciation is very crucial for medical learners for the fact that pronunciation may affect grammar learning and reading. For grammar, this can be noticed first, in writing through the use of punctuation and capitalization. Second, in speaking, through the rise and the fall in the pitch of the voice, and also, through the pauses which indicate that there are new ideas to be presented by the speaker. With regard to reading, students may misinterpret ideas and information if they do not pronounce words correctly. The misidentification of words may lead students to ambiguities in meaning for the interpretation of the texts.

The role of the teacher is very prominent for the fact that students consider him as an ideal model of the right pronunciation. He is required, then to teach them the use of some learning strategies in relation to medical vocabulary use instead of

teaching every vocabulary item encountered. This can be done through a number of ways and techniques. For instance, he should teach them how to divide medical terms into syllables and enable them to mark the stressed syllables theoretically and practically. For the terms:" oxygen, healthy", both contain more than one syllable and the first one is longer than the second one. In this case, learners should know that the lengthening of a syllable is marked by the stress.

Practically, teachers are required to show their learners how words are pronounced correctly each time they come across new terms in vocabulary practice, reading phase or any other teaching sessions. For example, teachers may ask their learners to read or define some medical terms and at the same time may seize the opportunity to let them practice pronunciation of the same terms. Another efficient strategy of teaching pronunciation can be done through encouraging students to listen to native speakers talking about medical issues or making oral presentations in conferences and scientific meetings. Finally, motivating students to engage into conversations and creating dialogues with each other are widely recommended to develop their self-confidence in language sound-system practice.

4.6- Teaching Language skills

The findings of the present work show that medical learners need English to fulfill a wide range of objectives such as: reading scientific articles, journals and reports, taking part in international seminars and conferences, communicating with English foreign scientists and doctors, writing articles and medical reports,...etc. To achieve these objectives, medical learners have to develop their competence in the four language skills altogether. Indeed, the objectives of language teaching are defined in terms of: listening, speaking reading and writing. For Widdowson (1979), "speaking and listening are expressed through the aural medium, and reading and writing are expressed through the visual medium". Thus, it is of a great value to shed light on how to teach the four skills and expose some of the strategies and techniques of an efficient learning process.

In this respect, some suggestions have been offered so as to put the use of English into practice during the ESP course in order to motivate students to participate in class and to do a number of activities to develop the four skills. These activities allow the learners to feel more comfortable and sure when they have to hold a conversation or write about any medical topic in English and they make the skills more effective in order to get a perfect acquisition of the foreign language, covering all the skills: listening, speaking, reading and writing.

4.6.1- How to Teach Listening

Listening is considered the most important skill to optimize. It is the kind of skill mostly demanded when attending conferences or seminars for the fact that participants are supposed to answer a variety of questions and clarify a number of ambiguous points to their audience in English. However, although "our capacity to understand is greater than our ability to talk" (Widdowson, 1979) medical learners of non-English speaking countries find it quite difficult to understand talks and communications made in scientific or medical meetings.

To develop students' listening skill, they should first start by listening to themselves reading out loud. This will make them feel familiar with many English items and able to overcome some of pronunciation deficiencies. It is through loud reading that learners could rehearse their products and realize self-assessment. Another strategy to develop learners' hearing mechanism is to encourage watching English movies with subtitles or TV news bulletins which are obviously not subtitled because they tend to be easier to understand.

The aim of teaching listening comprehension is to enable medical learners of English cope with listening in real life situations such as: listening to announcements, listening to the radio, participating in a conversation face-to-face, Watching TV, Participating in a meeting, seminar or discussion, participating in a telephone conversation,...etc. In the same context, Lindsay and Knight (2006) identify four different purposes of listening such as: listening for specific details, listening for general meaning, listening for gist (general idea) and listening for enjoyment or social reasons. Teachers should decide what they want their learners develop when setting any listening activity. A good teaching method would try to combine all the previous mentioned purposes so as to give students opportunity to listen actively to any authentic situation and enable them to interpret the messages

conveyed by the speakers. It is through following the six-staged process of listening that students would be able to achieve much progress and competence in their hearing mechanism. According to Nunan, (2001) Listening consists of Hearing, Attending, Understanding, Remembering, Evaluating and Responding. These stages occur in sequence and rapid succession.



Figure 4.1: Basic Stages of Listening Process and Their Functions. (Nunan, 2001)

In practice, teachers are required to follow a given methodology when setting listening tasks for their learners. It is advisable, throughout the present study, to rely on Bueno, Madrid and McLaren's pattern of teaching listening (2006): Prelistening, listening and post-listening. In the first stage, teachers should motivate and prepare their learners to what they will hear in the next coming stage. The second step starts with asking students to answer questions, follow a route on a map, take notes or any other kind of activities that make learners use their extensive listening to find solutions to a number of situations. In the last stage, students will have the opportunity to consolidate what they have learnt and give feedback to their teachers who should deal with particular listening difficulties and set remedial work.

To apply the previous methodology on the ground, teachers have to select the convenient activities and tasks depending on the purpose and the goals from teaching listening skill. Thus, it is very crucial to develop students' interest and raise their motivation when designing activities. Teachers then should be very attentive and clear when giving instructions and explanations of each task so as to enhance students' participation and enable their learners to interchange ideas, express feelings, share opinions and experiences with each other.

It is of a great value to make students enjoy listening activities and develop interest. There are many different ways of exploiting listening but teachers should not forget that the real success requires clear instructions and explanations in each activity in order to achieve a perfect understanding. It is also advisable to introduce new vocabulary items before any listening task so as to avoid possible doubts or ambiguities, and even explain any grammatical issue they might have difficulties with.

To end with, it is through developing students' listening skill that they become able to speak English fluently because it is generally known that a good listener is a good speaker.

4.6.2- How to Teach Speaking

Developing medical students' speaking skill is the next step in the present work. Once they become able to understand what others say, medical learners feel the necessity to talk about what they think and take part in the different medical meetings or communications. However, being fluent in a foreign language is an extremely demanding task for it requires much self-confidence and more practice to develop speaking abilities. For Bailey and Savage (1994): "Speaking in a second or foreign language has often been viewed as the most demanding of the four skills." The difficulty of this language skill poses even problems for many teachers who generally spent all their classroom time trying to teach their students how to write, read and even listen in a L2 (Bueno, Madrid and Mclaren, 2006) while they neglect teaching oral production and stimulating their learners to talk.

The results of the study showed that the majority of the medical learners contributing to this study agree on putting much focus on reinforcing speaking skill activities and motivating learners who most of them spent years studying English but still feel unable to express themselves. They strongly believe that the need to express their opinions and particularly scientific thoughts in a correct and consistent manner makes the fact of speaking English whenever they want and wherever they go an obligation added to their medical knowledge duty. For them, the use of spoken English cannot be only restricted to a temporary situational occasions such as international meetings or conferences, but the matter goes beyond that narrow space. According to Lindsay and Knight (2006), learners may need to speak English for many reasons:

"to be sociable, because we want something, because we want other people to do something, to do something for someone else, to respond to someone else, to express our feelings or opinion about something, to exchange information, to refer to an action or event in the past, present, or future, the possibility of something happening, and so on (Lindsay and Knight".

To enable medical students to interact and speak English fluently, ESP teachers have much to do so as to involve them and raise their motivation to discuss scientific or medical issues in relation to their field of study or interest. To achieve that goal, they are first required to specify what learners are able to do at certain levels of English learning competencies. This could be done, for example, through following the Common European Framework (CEF) of Reference for languages to provide a guideline for their lessons. In the same context, Segura Alonso, Rocío (2013) stated in his thesis:

"The CEF describes in detail the different levels that a student can obtain in speaking activities and strategies (A1, A2, B1, B2, C1, C2), these levels refer to things that students can do. The table below shows these levels in Spoken Interaction and Spoken Production."

S P E A	Spoken Interaction	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can deal with most situations likely to arise while traveling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).
K I N G	Spoken Production	I can use simple phrases and sentences to describe where I live and people I know.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes and ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.

Table 4.1: The Common European Framework of Reference for languages (CEF: 2001)

ESP teachers should bear in mind when teaching speaking skill that their learners live in a social, cultural and linguistic context where the English language is not often the medium of interaction in their daily life. In other words, they do not have the most convenient conditions to develop the desired or required level. The reason why, Teachers have to make their students explore the characteristics of the speaking skills and should propose some ways of making them practise speaking and give feedback. Thus, they should train their learners how to interpret not only the message that other speakers try to express, but also take into account other possibilities explained by Harmer (2007) in the quotation below:

"Speakers have a great range of expressive possibilities at their command. Apart from the actual words they use they can vary their intonation and stress which helps them to show which part of what they are saying is most important. By varying the pitch and intonation in their voice they can clearly convey their attitude to what they are saying, too; they can indicate interest or lack of it, for example, and they can show whether they wish to be taken seriously. At any point in a speech event speakers can rephrase what they are saying; they can speed up or slow down."

With regard to the activities and tasks that seem appropriate to develop the students' speaking abilities, an ESP teacher may rely on: discussions, free speeches and role-play tasks. It is through putting a scientific or a medical topic for discussion, generally after a listening or a reading session that learners feel the desire to take part and express their opinions freely either individually, in a group or in a pair work activity. In fact, discussions allow learners to fulfill a number of language functions such as: arguing, describing, narrating, prescribing or exposing some scientific information.

The teacher should choose subjects of general interest within the medical field. For example, he could stimulate discussion by showing a photograph of a patient suffering from a given sickness then asking his students to comment the photo. This would create a competition among learners to express their opinions about what they see and describe the situation in different manners.

A good example of raising a successful discussion among learners is to provide them with a reading text on a scientific or a medical issue such as: abortions, terminal care, bioengineering, and then ask them to report what they have read to their partners. In this kind of activities, the focus should be put on meaning than on form. Nevertheless, grammar explanations and other language points should not be excluded. On the contrary, a teacher has to base these aspects of the course to the students' performance through taking care of problem areas when students speak or write without interrupting their conversations or presentations.

Another type of speaking activities that most medical students find interesting, and is therefore worth doing is to prepare a recorded doctor-patient dialogue based on a given case study or give each pair of students a pre-planned role play based on the same case. After listening to the prepared dialogue, students are asked, first to read a case book description of the same case, and then reconstruct the dialogue from the prose passage, working in pairs or groups. The dialogue has to be played sufficiently. The role of the teacher, here is to draw the attention of his students to the linguistic differences between the two different versions; the recorded doctor-patient dialogue and the casebook description. This would impress medical learners to hold a case conference where they can discuss possible solutions to the case; this is a purely authentic problem-solving activity. (Pauline Webber, 1995). In this kind of activities, it is advisable to be clever enough when selecting materials for practice such as: case studies, hypotheses or any scientific findings because relying on articles from the popular press will not usually make the task any easier. This is due to the fact that:

"...the discourse structure, lexis and linguistic features of popular articles are quite different from those of scientific journals, and are usually more difficult for non-native speakers rather than easier. The content is often not scientifically valid, as, for example, a mere hypothesis tends to be represented as a new "breakthrough" in scientific discovery. The vocabulary is often colloquial. In a serious scientific publication, although there may be idioms, we do not expect to find words such as "chum", "run riot" or "be up a gum tree", however popular they may be in newspapers, so it is not worth spending much time on them."

(Pauline Webber, 1995).

On the whole, there are many types of speaking activities; either controlled or less controlled activities that an ESP teacher may rely on when teaching medical learners.

The table below summarizes the possible types of speaking activities and their explanations.

Type of activity	Explanation	
1- Drills	- Repetitive exercise focus on teaching gramma	
 2- Substitution drills 3- Transformation drill 4- Functional- situational drills 5- Information gap activities 	 structures and vocabulary. They are used to practice structures as well as vocabulary (substituting one word for another). Students are asked to transform sentences, for example, an affirmative sentence into a negative sentence or an affirmative sentence into a question. Students are required to practice the language of a function such as giving advice or warning. Students are supposed to be working in pairs. One student will have the information that the other 	
6Ranking activities7- Planning	 partner does not have and the partners will share the information. They consist of creating a list of items about different subjects. They consist of planning activities for a special event or for a place. 	
8- Discussing and solving problems	- Students can talk about a topic (chosen by the teacher or by themselves) and then, they express possible solutions.	
9Debates	 Students can be given a statement and they have to decide whether they agree or disagree and why. Each learner acquires a personality or interprets a 	
10- Role-plays	character and receives a card with some information about their role and the situation.	
11- Games	- They are often useful to liven up a lesson. For example: "I spy, yes/no questions, Simon says,etc.	

Table.4.2: Rocío's Speaking Activities (2013)

4.6.3- How to Teach Reading

Reading is considered as the first step in the learning of a foreign language. It is an essential skill for medical learners who are continuously looking for information which is constantly changing and renewable. The need to read medical articles and publications, mainly in English language, makes the fact of raising students' reading comprehension more than necessary to get more accurate information. The goal in terms of reading would be to make medical learners feel comfortable with reading English papers and documents just the same as they do when they read those with their mother tongue or French which is the medium of instruction in the Algerian medical faculty.

In broad terms, reading is a highly strategic process through which readers use a variety of strategies and follow a number of techniques to construct meaning. Among which, medical students, for instance, are required to activate their background knowledge, make predictions, ask questions, draw inferences, make connections, analyze structures and summarize ideas. These individual comprehension strategies and techniques are acquired through practice under problem solving tasks where students have to think, adjust, modify and shift tactics to achieve successful reading comprehension.

"Being strategic is not a skill that can be taught by drill; it is a method of approaching reading and reading instruction. Much more is required than knowing a strategy; becoming strategic calls for coordinating individual strategies. This coordinating involves altering, adjusting, modifying, testing, and shifting tactics as is fitting, until a reading comprehension problem is solved."

(Trabasso and Bouchard, 2002)

The role of the teacher is very crucial to involve students in active reading which takes place when learners are proactively involved in the reading of a text. They are not only supposed to read words or sentences and answer questions, but better understand the meaning within the text. This can be done through:

A-Highlighting: teachers have to show their learners how to highlight the important information through following a number of proper highlighting

techniques. If students do not understand the important information as they read, they risk highlighting everything they come across. A good example of highlighting is asking medical students to highlight titles of selected subjects, dates, words in bold or italics. By doing so, students feel much actively involved in the process of reading.

B-Reading Aloud and Thinking Aloud: This strategy would enable students to increase their ability to comprehend a text through reading aloud passages and articles. In this respect, teachers would get rid of asking periodic questions related to the topic or subject matter. For instance; students are asked to read a passage about a given medical issue, a teacher may ask aloud:" What is your opinion about the issue? What are its effects? Can you make a diagnosis? This will show students that their teacher is not only reading the passage but he is also involving them indirectly in the act of reading.

C-Making predictions: It is through asking students to guess what would come next in a story or a given event that they would be able to make predictions and get actively involved in the process of reading. They are adept at using their prior knowledge as they read to make predictions about what might happen next and to understand ideas as they encounter them (Paris, Wasik, & Turner, 1991). This may concern narrating stories or past events in particular. For example, after reading the first part of a passage about cholera that swept across a rural town, a teacher may ask his learners to guess what would happen to people living in the town? The teacher is, then asking the students to make predictions. As the students continue reading the next part of the same passage, they will automatically find out whether their predictions were correct.

D-Questioning: By asking questions about what they have read, students would be able to develop their critical thinking skills. The purpose of encouraging learners to ask relevant questions as they read is to check their understanding of the text and test their comprehension of the author's intentions for writing the text. For instance, when reading an article about a given illness, medical students can raise the following questions:

- 1- What are the causes of the illness?
- 2- What are its effects on the patient?
- 3- Is it infectious?
- 4- How to avoid it?

E-Making connections: It is another accessible strategy to enable learners to understand what they have read. For Keene and Zimmerman (1997) there are three kinds of connections that learners should be aware about:

- 1. Text-to-Self connections: the reader is supposed to connect between the text content and his own personal experiences.
- 2. Text-to-World connections: the reader makes connections with what he knows about the world.
- 3. Text-to-Text connections: the reader makes connections to other things he has read.

Making connections to achieve successful reading comprehension requires readers to identify new contents and connect to what they already know. This can be done through a number of activities such as: identifying new information and connecting it to what has been an already known, explaining similarity between the new information and the previous personal one, using other sources to check or confirm information, and making combination between different sources to obtain or organize new information.

On the whole, good novice readers are those who know how to select and take from the parts of the text the most appropriate to their goals. They are competent enough to interpret and filter ideas in the text using their prior knowledge and critical thinking. In addition, they continuously evaluate what they have read and revise the ideas of the text after predicting and hypothesizing. This would lead to make them form mental pictures and images of the different parts of the text. In short, proficient readers are those who are strategic.

4.6.4- How to Teach Writing

Writing has become an absolute necessity for medical learners, particularly for those who are in contact with foreign colleagues or interested in publishing articles in foreign articles. However, teaching writing is quietly different from teaching the other skills. The matter becomes more difficult when asking students to write on scientific or medical topics. This requires from the part of the teacher enough knowledge on science topics and sufficient awareness about the efficient strategies of teaching writing for the fact that, "... teaching the type of writing we get students to do will depend on their age, interests and level." J. Harmer (2001).

When setting tasks for students, teachers make sure that their learners have or can get enough knowledge to complete the task. A good teacher is the one who never leads his students towards failure when asking them to write. Therefore, teachers bear a big responsibility in teaching writing appropriately and providing learners with efficient strategies to be good successful writers.

In fact, among the unsatisfactory results obtained throughout this research is that there are some medical students who have negative attitude to writing. They have anxieties about their ability to construct sentences and paragraphs in well-structured essays. Those learners do not only fear the fact of dealing with scientific topics in writing, but they fear the act of writing on the whole, and they may even rarely write in their own language. According to Jeremy Harmer (2004) students who lack familiarity or confidence with writing need more time to build their writing habits. For him, there is a wide range of solutions to overcome the problem. The most efficient one is to choose the writing tasks and activities that make students emotionally and intellectually satisfied; that's to say tasks which amuse them and make them feel good. This can be done through a variety of ways such as: using pictures, music, watching movies, etc...Among the other techniques in developing students' writing habits, the followings could be more useful.

- To be clear in information and task information (what do we want them to do?).
- To devote pair and group work among students and encourage collaborative writing.
- To help students with ideas, some patterns or schemes when they need assistance.

- To move gradually in writing tasks staring from sentence writing, moving to paragraph writing and ending with essay writing.
- To motivate learners to read more scientific texts.

Another handicap for many learners when asking them to write is generating ideas. Indeed, teaching learners how to generate ideas should result from many experiences and oral discussions in class. It is also a result of listening to talks and lectures by guest speakers. Thus, the fact of teaching learners scientific issues in different domains of science such as: biology, geology, chemistry, medicine and so on lead them to acquire some scientific vocabulary which can be necessary and form the starting point of any attempt to write about a scientific subject. So, the fact of supplying students with new scientific thoughts largely depends on providing them with the appropriate mechanism of thinking, analyzing and interpreting. It is through living and practising some scientific phenomena that learners feel able to write about and translate the scientific situation into words, sentences, paragraphs and why not whole essays.

Learners can also develop their competence of generating ideas through communicating with people. In the same context, Weisberg (2006) points out that listening and speaking to people may provide input for helping students to write. However, not only listening and speaking which may serve better the act of writing, reading can also play a major role in providing students with a large amount of ideas and thoughts. The reason why many language researchers agree that reading and writing complement each other as skills, thinking processes and as ways of learning (Gordon, 2008) the reason why, it is very crucial to read more so as to write well. Eisterhold's (1991), and Gordon's (2008) claim that reading provides a necessary input for writing and provides vocabulary and main models (formal schematas) from which writing skills can be learned. Consequently, the integration of skills is important because it allows the learner to link all skills together and be fluent and accurate at the same time.

Nevertheless, medical students need more assistance from their teachers to practise writing on scientific topics appropriately. Their need in writing skill does not only concern the scientific way of writing but it also touches the general writing

exercises. This means that students feel the need for more practice of the different mechanics of language such as: grammar, spelling, vocabulary...etc. There are also students who think that scientific writing is different from general writing and it might be difficult for them to grasp how to write scientifically and become aware of the scientific genre. To satisfy these needs, teachers have to devote much time for writing practice to give their learners enough opportunities to write about different subjects in various situations. For Rivers and Temperly (1978):

"Practice is needed in actual sequential writing. Having learned about the various part of the machine and parts of the parts, and how these synchronize in action the students need to set the machine in motion with different parts active in weaving the intricate pattern of meaning. Here guidance is helpful in learning which parts will operate together to form new patterns. Students' aptitudes vary widely in writing. Some need considerable help in developing a smooth and effective operation, others seem intuitively to take off and create interesting patterns of their own".

Generally speaking, students should be encouraged and trained to write using scientific genre. To achieve this objective, they have to read more in their scientific area and be more familiar with scientific style. At the same time, they are required to master the basic skills of writing so as to understand the scientific genre. This is, indeed, the role of the teacher who is supposed to respond positively towards his learners' written products and motivate them to deal more and more with scientific topics.

With regard to students, they expect assistance and feedback from their teachers to see how well they progress in their writing attempts. It is through feedback that teachers make evaluations and give comments on their learners' written products. However, the kind of feedback provided by teachers affects either positively or negatively the students' attitude towards the act of writing. For example, a teacher who provides a negative feedback towards his learners' attempts in their written products creates a frustration among those who feel unable to produce any piece of writing. However, the positive one is much more likely to motivate them to write

about any kind of topics suggested for writing. Therefore, teachers should motivate learners and provide assistance with brainstorming and organizing, reviewing and exploring the extent of content information available.

In practice, the teacher's feedback starts with students' first draft in response to his way of organizing information and the general features of his writing (grammar, spelling, vocabulary, coherence, etc...). It should be noted that the teacher's feedback should not only concern students as individual writers but it may also touch those working in pairs or groups. At the same time, teachers have to decide which feedback they have to give to their learners' writings; whether it is instructional or evaluative feedback. The former means giving instructions to the learners as a response to some possible shortcomings in their products in order to overcome these deficiencies whereas the latter deals with the evaluative assessment to the students' final drafts. On the whole, teachers should be aware about when, where and how to intervene so as to encourage their learners to progress, and not vice versa.

Finally, and as far as error correction is concerned, teachers should take this point into account too since it deals with the affective state of students who fear making mistakes. Indeed, the fear from making mistakes prevents learners from being receptive and responsive. Therefore, responding positively towards their errors may help them to overcome their fear and facilitate the process of learning. In fact, students usually wait for teachers' feedback towards their products and particularly their possible mistakes at any kind of production to know where they are wrong. Here, teachers should correct their students' English and draw their attention to some language problems. First, they are needed to inform learners about their mistakes. Second, they have to help them to detect and correct their written products themselves. In case they could not, teachers should allow student-student correction. It is only when learners fail to find solutions to their language problems that teachers can intervene and correct their mistakes.

4.4.3- Teaching Translation

The practical side of the present work showed the teachers' agreement on the resort to translation when teaching medical English. Some think it is of great value when translating important concepts from English to French or vice versa while others prefer to use translation when giving cues when necessary. Thus, devoting some translation sessions in the students' medical course is very crucial to enable learners to translate medical texts, articles, medical reports....etc.

In the present work, translation is designed during the session of teaching vocabulary or medical terminology. Students are supposed to learn about the techniques of successful translation and are asked to do some practice on the subject matter through translating medical items, full sentences and phrases or translating whole medical passages.

It is very crucial to teach medical learners translation for they need it not only to translate medical documents, articles or reports but to contribute in medical knowledge and share their research and discoveries to the worldwide without being hindered with language barrier. However, medical translators bear a heavy responsibility when translating medical issues such as: researches, medical reports or some chemical formulations. For A.B.M. Naaijkens, C.Koster (2011):

"There are two kinds of translators who have to keep this in mind more than their colleagues. The first of these is the legal translator; the second is the medical translator. They both have more responsibility as mistakes on their parts are greater than translators who translate novels. If, in a normal setting, a mistake is made during the translation process, it will likely be pointed out to the translator and a warning ensues that this better not happens again. However, for the medical and legal translator, the consequences of an error can be graver."

The main difficulties of students' medical translation are the students' lack of medical knowledge, their unfamiliarity with medical terminology and phraseology.

4.8 - The Learning Syllabus Design

Teachers are not the only unique factor to be blamed for the failure of teaching effective medical English, but a part of responsibility should be also put on curriculum developers and those who are charged of designing syllabus. The findings of the present study indicate that one of the reasons behind the teachers' obstacles in teaching medical English is the absence of a clear approach of teaching ESP and the non existence of the real political will to replace French, the actual medium of instruction, by English. This is on one hand, on other hand teachers protest that they are not given opportunity to contribute and suggest what they think is fruitful and useful for their learners. Therefore, and for the sake of preparing suitable English syllabus for medical learners, teachers should be involved in the process of designing any learning syllabus since they are considered as the first to be aware of the students' lacks in learning language. Their participation in setting their learners' syllabuses contribute, undoubtedly, to overcome the shortcomings that any learning syllabus may include. Not far from this context, professor Miliani (2003) pointed out:

"The political and / or educational authorities may intervene to impose their say in the selection of one or several methods. But the final decision is the teacher's who is closer to reality since he works regularly with his students, and should, after a while, have all the information about his students, which is needed to guarantee the success of the course."

Textbooks should be also taken into consideration when setting the learning syllabus. They should be designed to incorporate a variety of authentic contextualized materials and topics, including more medical or scientific subjects so as to satisfy the needs of learners in case of medical culture which is needed when they are asked to write or talk about scientific matters. Equal attention should be given to the teaching of different mechanics of language (vocabulary, spelling, grammar, etc...).

Another important factor that should not be neglected when designing the syllabus is the teaching of reading skill which should be given more emphasis in order to stimulate students' imagination. This can be done through devoting appropriate scientific texts on diverse topics and motivate learners to read more so as to write well. It is through extensive reading that students gain a sufficient lexical luggage which is needed for any writing attempt or any possible conversation.

4.9- An ESP Course Design Model in Medicine

In this section, the researcher would like to expose an English course designed for first year medical learners of Sidi Bel Abbes University, where students of the three departments namely: the department of Medicine, the department of Pharmacy and the one of Dental Medicine, are supposed to take the ESP course all together. They would share the same course, at least for the first year of their medical study, owing to the fact that they revealed many common responses throughout the questionnaire meant for the present research; this is on one hand. On other hand, the data analysis of the medical students' answers showed nearly similar lacks, necessities and wants towards ESP learning. The intended course is based on the communicative language teaching where the focus would be on teaching the four skills together. In this respect, one should point out that translation is also another important feature of the designed course which takes into account the objectives below:

- Promoting medical student's ability in both productive and receptive skills.
- Enabling students to speak fluent English in seminars and conferences.
- Enabling students to write medical reports and scientific articles with much respect to grammatical rules and appropriate use of technical vocabulary.
- Promoting students' ability to understand any piece of written product particularly scientific or medical texts.
- Developing students' ability in translation.

Generally speaking, the findings of the present work have played a major role to shape the objectives and the content of the designed course which includes the most frequent structures and lexis conveyed through a wide range of tasks and activities.

4.9.2- An Outline of the Course

The suggested medical course has been designed for first year students of the medical faculty including the three departments all together namely the one of Medicine, the one of pharmacy and the department of dental medicine. Students who are of non-English speaking backgrounds (NESB) will take the course which is diected at the level of English for Specific Purposes and assumes the learner will have an intermediate level of English language competency and skills. Thus, they do need a minimum intermediate command of the English language and a prior technical knowledge in one of the health disciplines that have been previously mentioned.

To enable students to communicate effectively and work as a future health professional through the use of English language are key philosophical concepts of the intended course. Thus, developing a kind of capacity to interact with professional colleagues and the English speaking community are considered essential language skills required by the medical students, and are addressed throughout the exercises and learning activities within this course.

The pedagogical approach of the text is to teach medical English in a lexical and communicative manner, combined. Comprehensively teaches career-specific language as a subspecialty of English for Specific Purposes, building not only a language repertoire, but also the ability to use language in meaningful ways.

4.9.2- A Sample Unit

The designed course is destined to first year medical students studying medicine, dental medicine or pharmacy. It is based on a number of units which are interrelated in goals and objectives. At this level of study, the researcher regards presenting a sample unit of the course of that great value and importance to illustrate the practical side of the intended course and guide some ESP teachers to the appropriate use of materials and convenient methodology. The unit meant for study is the first one in the proposed syllabus and is entitled: Diseases. The goals and objectives of the chosen unit are as follows:

Goals: to familiarize learners with the medical terminology at hand. The students, by the end of the unit, will be able to talk about some diseases and describe the major caused symptoms. In addition to other medical terms, they also will be able to translate terms, expressions, and little texts from English to French, and produce correct pieces of writing.

Objectives: By the end of the unit, the students will be able to:

- Listening: To listen to the teacher and then to peers reading the text and
 understand what is being read. Reading: To read the text silently and then
 out loud with correct pronunciation, and answer general and detailed
 questions.
- **Speaking:** To be able to answer the questions asked through the construction of correct sentences.
- Writing: To write related essays.
- **Translation**: To translate some medical expressions from English to French and vice versa.

4.9.2.1-The Unit Plan

Units	Content
Unit one	Diseases
Unit two	Human Body
Unit three	The Cell
Unit four	The Digestive System
Unit five	The Respiratory System
Unit Six	Health Care
Unit Seven	Science of Happiness

4.9.2.2- The Detailed Unit Content

Unit One: Diseases

1- Listening Skills

A-Pre-listening

Activity one: Showing pictures about different kinds of diseases / questions/answers task.

Aim: To motivate students for the topic and introduce key words.

B-While-listening

Listen carefully to the following passage then answer the questions below.

OK. So today we're going to talk about dehydration in children. And this can be a very serious health problem for kids, especially infants and toddlers, because their bodies are so small and so sensitive to changes in fluid levels. And infants and toddlers— and even older children— don't always know how to explain their symptoms properly and really tell a doctor what's going on.

So today, what we're going to look at is some common causes of dehy-dehydration, and what kinds of disorders and diseases doctors can screen for and try to treat, so that children are less dehydrated if they're having these health problems.

OK, now, the most frequent causes of dehydration in children are fever, diarrhea and vomiting. Um... so fever, children can sweat a lot, lose fluids that way. Diarrhea or vomiting, the fluids are kinda being thrown up—uh— by the children, due to digestive problems. So what kinds of illnesses cause fever, diarrhea, and vomiting?

Well, um, there are some common viral infections to look out for. Um, if a child is showing symptoms of dehydration, you can check for the rotavirus, the Norwalk virus and the adenovirus. These are very common causes of dehydration.

Um, you can also look for certain bacterial infections. And two of the big ones here are salmonella and e-coli. Both of those come from food poisoning, and they can cause that fever, that diarrhea, that vomiting, sometimes all three. And uh, that can be a serious problem, but a treatable one. So you want to screen for salmonella and e coli.

Uh, finally, don't rule out parasitic infections. Uh, those are a definite possibility. You want to see if a child has a digestive tract parasite that could be causing them to lose fluids in a variety of ways, but especially again by fever, diarrhea, or vomiting. So yes, um, scan for those certain kinds of viruses, those bacterial infections, and those parasites. Hopefully, that can help you find the root cause of dehydration in children, and start treating those children so they can get better.

(Adopted from David Recine, june 13, 2016, Listening, Listening Practice, Vocabulary)

Activity two: Listen then choose the general idea of the passage.

Aim: To check students' global comprehension of the subject.

The passage is about:

- a) Infectious diseases
- b) Causes of dehydration.
- c)- Dehydration in children

Activity three: Listen to the passage then say whether the statements below are true, false or not mentioned.

Aim: To enable students to get information about the disease.

- a) Dehydration is a serious problem for children who can explain their symptoms properly.
- b) The Norwalk virus and the adenovirus cause dehydration.
- c) Fever, diarrhea and vomiting are signs of bacterial infections.
- d) Viruses, bacterial infections and parasites are the main root of dehydration.

Activity four: Listen again to the passage then answer the questions below.

Aim: To enable students to get specific information about different sides of the subject.

- a) Why is dehydration a serious problem for children?
- b) What are the causes of dehydration?
- c) What are salmonella and e-coli?
- d) How can doctors find the root cause of dehydration in children?

C- Post-listening

Activity five: Listen again to the passage then describe dehydration in a short paragraph of your own.

Aim: To enable students to summarize a listening passage relying on information from previous activities.

2- Speaking skills

Objective: By the end of the lesson students would be able to:

- 1- Discuss various health issues through reflecting and balancing arguments.
- 2- Be aware and know the category of mistakes.

Activity one: Work in pairs to discuss the following question. Before starting, you'd better study the essential language in the box below.

Aim: To enable students to tackle any medical issue by using reflecting and balancing arguments.

Question: Which of the following is the most important medical development in your opinion?

X-rays laser surgery contact lenses hip replacement

Essential language	
1- Reflecting	If/ when you think about it
	E.g.: When you think about it, almost all of us have had an X-ray at some time.
2- Balancing an argument	But On the other hand
	E.g.: I think contact lenses are a fantastic invention. On the other hand, they don't save lives.

Activity two: Match each mistake below to the correct category. Do you make any of these mistakes regularly?

Aim: By the end of the activity students would be able to recognize the category of their mistakes and correct them.

Mistakes	The category of mistake
a) - The bar graph give information about number of	A Articles
patients suffering from kidney disease.	Sp Spelling
b) - In 2000 there is a slight increase of obese people.	G Subject/verb agreement
c) - Life is very beautiful if you <u>have always</u> good	T Tenses
<u>helth</u> .	P Preposition
d) - How does she feels now?	WO Word order

Activity three: Work in pairs. Take it in turns to speak for about three minutes on the topic below. Do not forget to use some of the reflecting and balancing

arguments when necessary. Before starting talking, you'd better spend a minute thinking about what you are going to say.

Topic: Describe one of the killing diseases you know.

Aim: To enable students to practise the language points they have already taken in a free discussion about a guided topic.

3- Reading skills

Objective: By the end of the lesson, students would be able to describe a disease, refer to its symptoms and propose a cure or preventions.

Pre-reading

Activity one: Question/ Answer task. Talking about diseases and referring to some medical discoveries in the field over the centuries.

Aim: To prepare and motivate students for the reading phase.

While-reading

Read the following text then do the activities below.

The hospital's conference room was overcrowded. News of the emergency meeting had gone quickly round the hospital, and physicians not attending the hospital that day had been informed of it at home.

O'Donnell opened the meeting. "Ladies and gentlemen, I think all of us are aware that epidemics in hospital are not unique and, in fact, are much more frequent than most of the public realize. The picture so far is that we have two definite cases of typhoid and four suspected. Because of the number of cases, I'm sure it's evident to you, as it is to me, that we have a typhoid carrier somewhere in the hospital. For the benefit of those of you who are not familiar with typhoid- and I realize there will be some, because it does not often occur nowadays- I'll run over the principal early- stage symptoms.

Generally speaking, there's a rising fever, chills and a slow pulse. There's also a pea-soup feces and naturally the characteristic rose rash. In addition to all that, a patient will probably complain of splitting headache, loss of appetite and general aching. Some patients may say they feel sleepy in the day time and suffer from insomnia at night. You may also encounter with bronchitis that is quite common

with typhoid, and nose bleeding too, and of course, a tender, swollen spleen. Any questions?"

He looked around: there was a shaking of heads. "Very well. Then, we'll hear from pathology." He announced, Dr Pearson."

"The immediate problem" Pearson said "is to locate the source of infection. Since we could not check food handlers properly over the past six months, it is logical that we should suspect food as a means of contamination and should begin our search there. For this reason there must be a medical inspection of all food-handlers before the next hospital meal is served. That means ninety-five people to be examined with-in the time we have. Of course physical check-ups will not give us the whole story. We may be lucky and find the individual we are looking for that way, but we may not. Most likely the major work will be done in the laboratories. The stool samples of all the people you'll examine must be in the hospital by tomorrow morning. Of course it will take us a few days, two or three at least, to cope with all the cultures"

A voice--- O'Donnell thought it was Gil Bartlett's—said quietly, "Ninety-five people. That's a lot of shit".

Laughter ran around the table. Pearson turned "Yes," he said, "it is a lot. But we shall do our best".

(Source: English for Medical Students, p31)

Activity two: Give a title to the text.

Aim: To check students' general comprehension.

Activity three: Read the text then fill in the table below with information from the reading passage.

Aim: To check students' global comprehension.

Speakers in the conference	Disease	Symptoms	Measures taken
•••••	•••••	•••••	•••••

Activity four: Answer the following questions according to the text.

Aim: Scanning the text to get detailed information.

- 1) Why was the emergency meeting organized in the hospital?
- 2) Did they know the typhoid carriers? Justify your answer from the text.
- 3) List some of typhoid's symptoms mentioned by O'Donnell in the text?
- 4) What were the suggested measures to stop the infection?

Post-reading

Activity five: Present a patient with typhoid fever.

Aim: To enable students to use previous information in writing.

4- Grammar practice Comparing and contrasting

Objective: By the end of the lesson, students would be able to compare and contrast, and use quantifiers appropriately.

Activity one: Work in pairs to discuss which three animals you think kill most humans every year?

Aim: To motivate and prepare students for the practice of the structures by using real life examples.

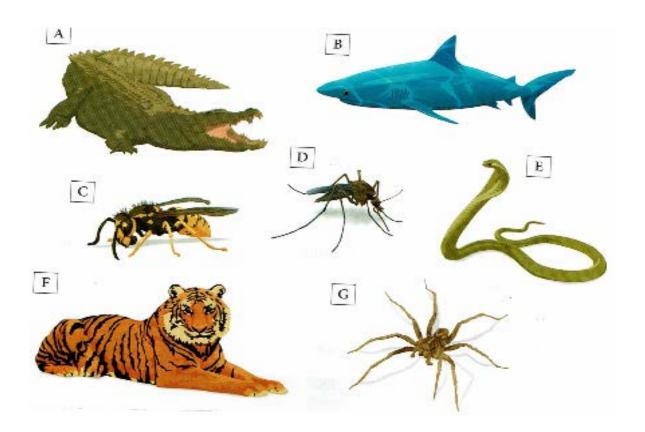


Figure 4.2: Adapted from: Focus on IELTS Foundation, 2006

Activity two: Study the following language then answer the questions.

Aim: To enable students to derive the structures from the given examples.

Essential language

Comparing and contrasting

1) - The use of: while / whereas..... + clause

E.g. are responsible for the deaths of People every year **while/ whereas**.... only kill about

2)- The use of : By comparison/contrast...+ clause

E.g.only kill aboutpeople every year. **By comparison/By contrast**....cause the death of....

Ouestions:

- 1- Which two sentences are normally used at the beginning of a sentence?
- 2- Which two expressions are normally used in the middle of a sentence to link two clauses?
- 3- Which expression suggests a fairly big difference between two things?
- 4- We usually avoid using the same verb in both parts of a comparison. Which two expressions are used to avoid repeating the verb "kill"?

Activity three: Make sentences comparing or contrasting the different animals.

Aim: To enable students to consolidate the structures.

5-Vocabulary Topical lexis related to the field of medicine

Objective: By the end of the lesson, students would be to:

- 1- Know the meaning of some medical terms and use them appropriately in sentences of their own.
- **2-** Use prepositions correctly.
- **3-** Use correct suffixes to form nouns.

Activity one: Complete the table below by writing the correct branch of medicine in each space.

Aim: to enable students to recognize various types medical branches.

Neurology cardiology psychiatry physiotherapy Dermatology bacteriology Ophthalmology Gynecology

Branch of medicine	What it deals with
1-	Heart and arteries
2-	Brain and nerves
3-	Mental illness
4-	Exercise and massage of the body
5-	Germs and bacteria
6-	Diseases of the eyeball and orbit
7-	Health of the female reproductive systems
8-	Skin

Activity two: Point out a wrong word or a group of words in the following sentences.

Aim: To enable students to find the meaning of some technical medical terms and enrich their stock of vocabulary.

- 1-Measles, scarlet fever, plague, chicken-pox are diseases of children.
- 2-Mumps, tuberculosis, hepatitis, smallpox are caused by a virus.
- **3**-Vaccination is made against plague, malaria, influenza, and whooping-cough.
- **4**-A sick person, clothes, boiled water, contaminated milk may be a source of infection.
- **5**-Fever, chill, nosebleed and eruption are common symptoms of infectious diseases.

Activity three: Fill in the missing prepositions. Use a dictionary to check your answers.

Aim: To enable students to use prepositions correctly.

- **1**-The ear canal is about 2,5 cm..... length.
- **2**-The spinal column consists26 separate bones called vertebrae.

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- 3-The thickness of the skin varies5 and 6 millimeters, depending the area of the body.
- **4**-She suffers..... very severe headaches.
- **5**-The human skeletal system is made206 individual bones.
- **6**-Hormones in the blood can have powerful effectson the body's systems.
- 7-Your brain sends messages...... a rate of 386 kph.
- **8**-The circulation pumps blood around the body.....means of the heart.

Activity four: Complete the table by writing the nouns formed from the verbs 1-8.

Aim: To enable students to build new words correctly by adding correct suffixes.

Verb	Noun
Substitute	
Investigate	
Treat	
Dispose	
Erode	
Prevent	
Remove	
Operate	

Activity five: Translate into French the followings.

Aim: To enable students to translate short sentences and some expressions from English to French.

- 1- The flu is an infectious, wide spreading disease affecting all ages.
- **2-** What were the first symptoms of the disease?
- **3-** People suffering from asthma usually complain of difficulty in breathing and high blood pressure.
- **4-** The duties of nurses at an out-patient department are to take temperatures, give injections and prescribe medicines.

6-Pronunciation Shift of stress

Objective: By the end of the lesson, students would be able to recognize the shift of stress from nouns to adjectives ending with "ic" and pronounce words with the correct articulation of stress.

Activity one: Listen to your teacher reading the following words then underline the stressed syllable. What is your remark?

Aim: To enable students to practice stress in nouns and their adjectives ending with "ic"

Noun	Adjective
Symptom	Symptomatic
Organ	Organic
strategy	Strategic
economy	Economic
lymph	Lymphatic
therapy	Therapeutic
diagnose	Diagnostic
system	Systematic

Reminder:

Adding —"ic" to some words does not only change a noun into an adjective, but also shifts the stress from the first syllable to the anti-penultimate syllable (before the last one syllable).

Activity two: write more examples about nouns and adjectives ending with "ic". Practise the articulation of the stress.

Aim: to enable students to practice the articulation of stress.

7-Writing skills

Objective: By the end of the lesson, students would be able to read and describe diagrams, prepare their answers and select information.

Activity one: Study the diagram below then answer the questions.

Aim: To enable students to read a diagram.

- 1- How many groups of diseases does the diagram show?
- 2- What do the figures in the left and right- hand columns represent?

3- Write an introductory sentence in which you describe the diagram. You can start saying:

The diagram shows...

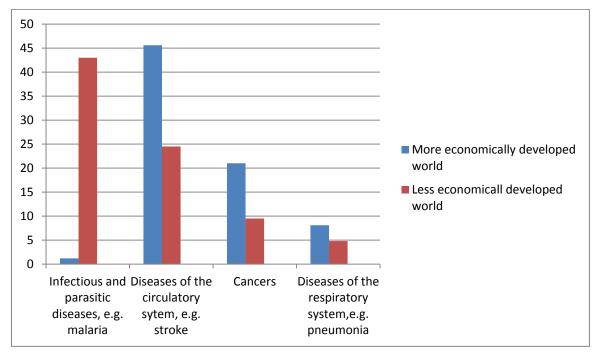


Figure 4.3: Disease Groups in the more Economically Developed and less Economically Developed World (Adapted from: Focus on IELTS Foundation)

Activity two: Answer the following questions according to the diagram mentioned above.

Aim: To enable students to select key information from a diagram.

- 1-Which group of diseases kills most people in the less economically developed world?
- 2-Which group of diseases kills most in the more economically developed world?
- 3- Which group of diseases kills fewest people in both less and more economically countries?
- **4-** In which group of diseases is there the biggest difference between the two areas?

Activity three: Complete the extracts using information from the diagram above.

Aim: To enable students to describe the data.

1-Infectious and parasitic diseases are in the less economically developed world.

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- 2- Cancers representin the more economically developed countries andin the less economically developed world.
- 3- Diseases of the respiratory system kill......in the more economically developed world......in the less economically developed nations.

Activity four: Write a short paragraph in which you compare the effect of the four mentioned groups of diseases in the more economically developed and less economically developed world. (Use the structures: while/whereas, by comparison/contrast).

Aim: Writing guided practice.

4.10- Recommendations for Further Research

The present needs analysis can be considered as a starting point for further research about students' medical English with much focus on teaching methodology, materials development and assessment. In addition, further studies can be conducted on how to adapt the problem-based learning model to English classes and how to enable teachers and instructors improve their teaching act effectively.

A similar research can be done to assess first some problem tasks for the students who use English language as a communicative means to discuss some language problems. Hence, it is of great importance to seek the perceptions of medical students about the efficiency of this type of learning in their academic studies.

Because of the necessity of students needs analysis at any attempt to design an ESP course, future studies can take place during or after the implementation of a curriculum at the medical faculty of Sidi Bel Abbes University to assess the students' possible changing needs.

4.11- Conclusion

The last chapter of the present work aims at raising some pedagogical implications and putting forward a number of recommendations that would, hopefully, contribute to the implementation of effective ESP courses in the field of medicine and enable medical students to use English language appropriately in different situations.

The researcher regards the role of both the teacher and the learner very crucial to achieve a successful ESP teaching/learning process, the reason why, a whole section in this chapter is reserved to shed light on some efficient ESP teaching strategies and learning attitudes. In addition, the researcher puts in the hand of the ESP teachers some valuable practices of teaching the different mechanics of language such as: grammar, vocabulary, pronunciation, spelling and even translation which is one of the most important demands of medical students in this investigation.

Another huge section in the present chapter discusses ESP teaching methodology of the four skills; listening, speaking, reading and writing. In this respect, the researcher presents some efficient ways and correct practices of teaching skills through describing the procedure and suggesting a wide range of tasks and learning activities.

The last part of the concluding chapter is generally devoted to develop a model for a unit sample of an ESP course design for medical students relying on a communicative approach to language teaching which takes into consideration the objectives and aims of the suggested tasks and activities. The proposed model of the designed course is mainly based on the findings of the students 'needs analysis which emphasise the teaching of the four skills together without neglecting grammatical structures, vocabulary and pronunciation phase. It is meant to satisfy the students' needs in communication and appropriate use of English in the medical field.

General Conclusion

General Conclusion

The formal teaching of English, overloaded with a theoretical content and much focus on teaching grammar and terminology, has not achieved the required objectives of English language teaching. As a result, many students withdraw from the formal learning of English which has, unfortunately, become a failed subject for most of them. Only the most determined have continued studying. The matter worsens more and more when it comes to teach learners of special domains who wish to learn English. Medical students are just a concrete example of those who seek developing their knowledge at an international scale relying on English as the most appropriate vehicle of worldwide communication. Hence, the need for English as a professional language in the medical field is nowadays beyond doubt.

In Algeria, medical students and doctors need English to communicate and share knowledge with other health professionals. The desire to contribute to the international medical network and take part in worldwide conferences as well as scientific meetings makes the fact of learning English more than a necessity. Thus, the present study has been undertaken in response to a growing need for specific English in the medical field. While many studies tended to focus on teaching medical terminology and grammar, this investigation regards the narrow focus offered by a vocabulary-building and grammar focus based strictly on medical terminology and grammar that lack a communication purpose. Therefore, a great number of doctors and health professionals find it quite ineffective to meet the communicative and functional needs of their English language; the reason why, they usually struggle in conferences and medical seminars to understand a lecture or speak to foreign colleagues.

The present study was conducted to investigate the needs of medical learners in the use of English for specific purposes in the University of Sidi Bel Abbes. The students' language needs were analyzed through the use of two questionnaires and a structured interview; one questionnaire was submitted to a group of medical learners belonging to three medical departments namely: the department of Medicine, the department of Pharmacy and the one of Dental Medicine. The second questionnaire concerned a number of ESP teachers working in the medical faculty. The interview was held with the Dean of the faculty who represents the administrative authority in the University.

Taking into account the main factors that surround English language teaching in the medical faculty, the researcher attempted to describe the current situation of teaching ESP for medical learners through carrying out an experimental approach which fitted the objectives of the study. The descriptive study aimed at providing explanations of the target situation while the experimental study tended to test the gathered data and confirm or disconfirm the findings of the study.

The findings revealed, from the very beginning, the great importance of learning English and the necessity to design effective ESP courses for medical students as well as the urgent need to provide ESP teachers with the required training to achieve successful English medical teaching. This confirmed strongly the two first hypotheses raised by the researcher at the opening of the concerned research; the idea of implementing effective ESP courses for medical students. The participants contributing to this study agreed on the absence of real ESP courses in the medical faculty and asked for teaching real effective English in the field through taking brave decisions and providing serious measures to change the situation and the prospects of English language teaching in the Algerian medical sector.

As far as the third and the fourth hypotheses are concerned, the results of the two submitted questionnaires for both teachers and students showed that medical learners were not enough proficient in English let alone ESP. Their major difficulty lied in the interactive English learning i.e. speaking and listening because of which they expressed their failure to hold conversations in English, understand native speakers and pronounce correct medical terminology. In addition, the respondents did not hesitate to recognize their immense weakness in translating documents from English to French or vice versa. Besides, the findings also revealed that medical participants thought they always needed writing skill to write research papers, take notes in lectures and conferences, chat and write replies to English speaking key pals and even write essays in English. Moreover, a great number of the medical students regarded reading medical journals and articles in English as important as

reading scientific newspapers and magazines believing that devoting more listening sessions to understand discussions on medical issues and comprehend spoken presentations could undoubtedly achieve satisfactory results and develop their learning abilities. This is, in turn, a plain confirmation of the researcher's fifth hypothesis which concerned the priority of teaching language skills. Although the results showed a slight emphasis on teaching interactive skills, medical students did not hide their wish to develop reading and writing skills at the same time.

With regard to the group of the ESP teachers taking part in the present research, the findings revealed that most of them lacked the necessary qualifications and the required experience to teach ESP in the university. This is due to the absence of any kind of training in the teaching field in general, and the field of ESP in particular. However, the participants were determined on the necessity of designing real ESP courses for medical learners, and they contributed effectively to the investigation by identifying and evaluating the learners' weaknesses in the different aspects of language learning such as: grammar, spelling, pronunciation, writing style, speaking abilities...etc. At the end, they shared their opinions about the duration and the timing of the proposed ESP courses as well as the choice of the convenient syllabus and the use of the appropriate materials. These are among the main factors contributing to a successful course design, without forgetting of course, the crucial role of conducting a deep analysis of the learners' language needs. Likewise, the researcher confirmed the last hypothesis of the present investigation and put forwards some strategies and techniques for better achieving effective ESP courses for the school of medicine.

The third tool of research used in this study was a structured interview with the dean of the medical faculty. The latter represented the administrative authority, and his vision towards implementing ESP courses in the medical field was of such a great importance. As a matter of fact, the dean of the faculty seemed much reserved in his responses and did not raise such a deep analysis of the situation and did not provide the necessary information required for the research. Nevertheless, he was totally convinced about teaching students effective medical English and he asked for a kind of a collaborative work between ESP teachers and Medical subject

lecturers. He was for the maximum use of all the available materials at the level of the faculty to set appropriate content and design convenient learning syllabus. He believed that developing a real medical knowledge could never be in isolation of acquiring good English language. In reality, the dean of the faculty reflects the political will of the decision makers and the curriculum developers who are strongly convinced of giving English an advanced status not only in the medical field but in the domain of science and technology on the whole. However, this cannot realize satisfactory results if they do not take clear measures and steps forward to the real implementation of ESP courses.

To sum up, the researcher carefully analyzed and triangulated the data generated from the abovementioned three research tools that report the following main results. There seems an agreement on the points below:

- The majority of the students lacked the required English language proficiency.
- All the participants are for implementing ESP in the medical field immediately.
- Much time should be assigned to the English language course.
- Designing convenient syllabus and providing teachers with appropriate materials is a must.
- All the four language skills should be emphasized with more priority to interactive skills.
- Translation is an important subject for teaching in the English language course.
- EAP should be emphasized more instead of EOP.
- Teachers should receive training sessions on how to teach ESP.
- Collaboration between ESP teachers and subject instructors is recommended.

At the end, the researcher strongly believes that the previous theoretical discussion and its practical use will undoubtedly provide medical students, their teachers and even the curriculum developers with useful information of how to

General Conclusion

learn, teach and design effective courses which should be based on a clear methodology, a convenient syllabus and an appropriate selection of materials. To improve the quality of ESP teaching in the medical field of the Algerian university, a real reform is required at different levels and with the contribution of many practitioners who should work together to implement a strong medical English in our faculties and institutes. This will, undoubtedly, open the door for doctors and health professionals to overcome the language barrier in sharing their knowledge and taking part in the international meetings and conferences without fear or anxiety.

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Appendix N° 01

Student Questionnaire

Dear Student,

The purpose of this questionnaire is to know your specific language needs with regard to English. This will help design a course based on your answers. Hence, you are kindly requested to provide responses to the questions. Be sure that the information given will be totally confidential and used for this project work only.

Pa	rt one: Background	l information	Thank you for	r your co-operation
	Name:			
	Age:		Gender	
	Name of your Depa	rtment:	Level: .	
		Tick in the right box		
1-	What is the medium	n of instruction (language	e) in your faculty?	
	Arabic □	French □	English □	other language \square
2-	Do you learn Engli	sh in your faculty?		
	Yes	No □		
3-	Have you learnt En	glish before?		
	Yes	No 🗆		
4-	How long have you	ı learnt English		
	One year □ two y	ears □ three years □	four years □ five year	rs or more (specify)
Pa	rt two: Importance	of Using English in the	Medical Field	
		Circle the number yo	ou think it is appropria	te
5-	English is importar	at in your study.		
	(1) disagree	(2) agree	(3) not	sure
6-	English is importar	at to succeed in academic	studies.	
	(1) disagree	(2) agree	(3) not	sure
7-	English is importar	nt for your future professi	onal career.	
	(1) disagree	(2) agree	(3) not	sure

(1) disagree	(2) agree	(3) not sure	
Part three: The Medical students'			
Tart timee. The Medical students	Linguistic Net	eus	
A- Lacks			
9- You feel your current overall lev	vel of English is	S	
(1) Very poor (2) poor	(3) good	(4) very good	
10- How would you rate your English Listening		n the following skills?	
-			
Speaking	·		
Reading			
Writing			
(1) Very poor (2) poor	(3) good	(4) very good	
Tick in the right box			
11- Do you have a problem in:		Yes	No
(a) Holding a conversation in Englis	h?		
(h) Enguing simula questions?		П	
(b) Framing simple questions?			Ц
(c) Providing responses to simple qu	estions?		
(d) Choosing the right word while sp	beaking?		Ш
(e) Expressing ideas and thoughts clo	early?		
(f) Pronouncing medical terminology	y correctly?		
(g) Writing correct meaningful sente	ences?		
(h) Encountering difficulties while	translating		
articles from English to French?			
C- Necessities			

12 - Ho	ow often do you t	hink you need the Eng	glish writing skill?			
a)) always	b) sometimes	c) never			
13 - Why	y is learning the w	vriting skill necessary	for medical studies?			
(Ple	ase use the scale	below to circle the ap	propriate answer)			
	a) always	b) sometimes	c) never			
Writing	research papers			a	b	c
Writing	medical reports			a	b	С
Taking 1	notes in lectures/c	conferences		a	b	С
Writing	replies/emails to	English speaking key	y pals	a	b	С
Writing	essays			a	b	С
Others (please specify)			a	b	С
15-	a) always	b) sometimes the reading skill neces b) sometimes	English reading skill? c) never ssary for medical studies? c) never			
Reading	medical journals	s and articles		a	b	c
Reading	English textbook	ks and lecture handou	ts	a	b	С
Reading	Scientific newsp	papers and magazines		a	b	С
Reading	medical prescrip	otions		a	2	c
Reading	stories and nove	ls		a	b	c
Reading	graphs, charts an	nd tables		a	b	С
Others (please specify)			a	b	c
			English speaking skill?	a	b	С

19- Why is learning the speaking skill necessary for medical studies?

a) always b) sometimes c) never			
Making presentations at seminars and conferences	a	b	c
Taking part in daily conversations	a	b	c
Presenting oral reports	a	b	С
Talking to foreign doctors / researchers	a	b	С
Participating in negotiations	a	b	c
Attending Web-English-Talks	a	b	С
Others (please specify)	a	b	С
20- How often do you think you need the English listening skill?	1	l	
a) always b) sometimes c) never			
21- Why is learning the listening skill necessary for your medical studies?			
a) always b) sometimes c) never			
Understanding discussions on medical issues	a	b	С
Understanding daily conversations.	a	b	С
Understanding spoken presentations in seminars / conferences.	a	b	С
Understanding English radio and TV programs.	a	b	С
Understanding visitors / guests from native speaking English countries.	a	b	С
To understand English phone calls.	a	b	С
Others (please specify)	a	b	С
	1	<u>I</u>	
22- The medical English course should emphasize more			
medical conversation (listening / speaking)			
medical reading			
medical writing			

Please put them in order of importance assigning number 1 to the most important, number 3 to the least important (1 2 3).

B- Wants

23- Why do you want to study English?

(Circle the appropriate letters)

- a. For personal interest
- b. For future work
- c. For academic studies
- d. For no special reason
- e. Other reasons (specify)
- **24-** How do you prefer to learn English?

(Circle the appropriate letters)

- a. In pairs
- b. In small groups
- c. I individually
- 25- Which of the following make(s) the learning process easier for you?

(Circle the appropriate letters)

- a. Audio materials.
- b. Video materials.
- c. Handouts and/ or other printed materials.
- **24** How often would you like the course to be held? (Circle the appropriate letters)
 - a. Twice a week
 - b. Thrice a week
 - c. More than thrice a week (precise)

Thank you for your co-operation

Mr BOUGUENOUS Abdallah

Appendix N° 02

Teacher's Questionnaire

Dear colleague,

I am presently carrying out a research on The Need for Teaching Effective ESP Courses for medical Students in Algeria. I will be grateful if you contribute in this study by completing the attached questionnaire. I can assure you that the information you give will be kept confidential and used for this project work only.

Thank you for your co-operation

Direct.	ion: Please tick $()$ in the appropriate space (es.) which you think best express your opinion
1-	Sex: Male () Female ()
2-	Qualifications: Licence (Classical system) () Master (LMD) () Magister ()
	Doctorate ()
3-	Your experience in teaching English 1 year () 2 years () 3 years () others(
	precise) ()
4-	Did you have any training in teaching ESP? Yes () No ()
5-	Is it necessary for medical students to learn English? Yes () No ()
6-	If yes, what are the reasons?
7-	In your opinion, how long should an ESP course for medical students last?
	01 Year () 02 years () 03 years () More than 03 years () specify
	()
8-	Do you think that students require English to:
	- Understand medical lectures in English ()
	- Take part in oral English discussions ()
	- Read medical textbooks in English ()
	- Write medical reports or publications in English ()
9-	Do you work in collaboration with the subject lecturers? Yes () No ()
10	- In which aspects of English do you think medical students are usually weak?
	- Vocabulary ()
	- Grammar ()
	- Spelling ()
	- Speaking ()
	- Reading ()

	-	Writing ()	
	-	Listening to natives ()
11.	Ву	means of number (1-	most important, to 4- least important) Which of the following
	ski	ills do you emphasize w	hen teaching English to medical students?
	-	Listening skill ()
	-	Reading skill ()
	-	Speaking skill ()
	-	Writing skill ()
12-	Is	it easy for you to obtain	the necessary materials needed for teaching?
	-	Yes ()	No ()
13-	Do	the provided materials	cover the needs of the entire course?
	Ye	es ()	No ()
14-	Do	you resort to translation	n to French or Arabic when teaching?
15.	То	what extent do you thin	k translation into French or Arabic is useful?
	- (Giving clues if necessary	()
	-T	ranslation of important o	concepts ()
	- F	Full translation into Arab	ic or French ()
	-	Yes ()	No ()
16-	Do	you use audio-visual ai	ds in your teaching?
	-	Yes ()	No ()
17-	· H	ow much do you think N	Medical students are interested in learning English?
	-	Most of them ()	
	-	Some of them ()	
	-	Very few of them ()	
18-	In	your opinion, how many	students should an ESP class/group consist of?
	-	10 students ()	20 students () More () specify ()
19.	Ho	ow do you assess your st	udents?
	-	Oral test ()	
	-	Written test ()	
	-	Both ()	
20-	· W	hat can you suggest to n	nake English medical courses more effective and useful? Please
	pro	ovide your suggestions.	
			Thank you for your co-operation
			Mr BOUGUENOUS Abdallah

Appendix $N^{\circ}03$

The Dean's Interview

De	ar Sir,
I a	m a teacher of English at the University Centre of Relizane and I am presently
car	rying out a research on the need for designing effective ESP Courses for medical
Stu	idents. Thus, you are kindly requested to answer the Following questions:
1-	What qualifications do you have?
2-	How long have you been a Dean of the Faculty (Head of the Department of
	Medicine)?
3-	Do your students learn English?
_	
4-	If no, what are the reasons behind not teaching English to medical students
	knowing that English courses are officially provided in all the other Faculties?
	•••
	••••
5-	In your opinion, to what extent is English important for the medical students at
	Sidi Belabes University?
6-	Are you for the implementation of an ESP course for medical students? If yes,
	for how many years?

7-	Is the available technological equipment (materials) adequate for teaching efficient medical English?
0	 WI - 1
8-	What do you suggest for the course content?
9-	Should the English language teachers know about the medical literature?
the tog	What do you think about the medical knowledge of the English language chers? They may not be knowledgeable in the medical field. Do you think that medical content teachers and the English language teachers should work gether? If yes how?
•••	-Do you think that resorting to translation is useful when teaching medical English? If yes, why?
12	-Do you have further opinions and considerations?

Thank you for your co-operationMr BOUGUENOUS Abdallah

Students' Questionnaire (Translated into French)

QUESTIONNAIRE

Cher étudiant,

Le but de ce questionnaire est de connaître vos besoins spécifiques en ce qui concerne l'anglais. Cela me aider à concevoir un cours pour vous en fonction de vos besoins linguistiques. Par conséquent, vous êtes priés de donner des réponses honnêtes aux questions. Je peux vous assurer que l'information que vous donnez restera confidentielle et utilisé pour ce travail de projet seulement.

Première pa Nom: Âge:		ions générales		
Sexe: (Homme	e / Femme)			
Nom de votre	e département:			
1- Quelle est la	a langue d'ensei	gnement dans vo	otre faculté?	
Arabe □	Français 🗆	Anglais □	autre langue	(précisez) 🗆
2- Est-ce que v	ous apprenez l'a	anglais dans votre	e faculté?	
Oui □	Non □			
3- Avez-vous a	appris l'anglais a	vant?		
Oui 🗆	Non □			
4- Combien de	e temps avez-vo	us appris l'anglais	; ?	
(1) un an	(2) deux ans	(3) trois ans	(4) quatre ans	(5) cinq ans ou plus
(précisez)				
Deuxième par	tie: Importance	de l'utilisation d	e la langue anglais	se dans le domaine médical
(Cercle	le numéro que	vous pensez qu'il	est approprié)	
5- Vous pense	z que l'anglais e	st important dans	s votre étude.	
(1) En désa	iccord	(é) D'accord	(3) ne sais pas	
6- Vous pense	z que l'anglais e	st important de r	éussir dans vos étu	des universitaires.
(1) En désa	iccord	(é) D'accord	(3) ne sais pas	
7- Vous pense	z que l'anglais e	st important dans	s votre carrière pro	fessionnelle future.
(1) En désa	ccord	(é) D'accord	(3) ne sais pas	

8- Apprendre l'anglais est	un défi que vous a	imez.					
(1) En désaccord	(é) D'accord	(3) ne sais pas	;				
Troisième partie: Les be	esoins linguistiques	des étudiants en	médecine				
A-Vos manques:							
9 - Vous sentez que votre n	iveau global actuel	de l' anglais est					
(1) Très mauvais	(2) mauvais (4)	bon (5) Très	bon				
10- Comment évaluez-vous	s votre maîtrise de l	'anglais dans les c	ompétences suiv	vant	tes?	(Cod	chez
votre avis :)	Écouter						
	Parler						
	lire						
	Écrire						
(1) Très mauvais	(2) mauvais (4)	bon (5) Très	bon				
11- Avez-vous un problè	me dans:	O	ui			N	Non
(A) Faire une conver	sation en anglais?						
(B) poser des questio	ns simples?						
(C) Donner des répoi	nses à des question	as?					
(D) Choisir le mot ju	ste en parlant?						
(E) Exprimer vos ide	ées et vos pensées	clairement?					
(F) Prononcer la term	ninologie médicale	correctement?					
(G) Écrire correctem	ent des phrases sig	nificatives?					
(H) Rencontrer des o	difficultés lors de la	a traduction					
	l'anglais au frança	is					
B-Vos nécessites							
12- Combien de fois per	isez-vous que vou	s avez besoin d'	écrire en Angl	ais?	,		
a) toujours	d) rarement	d) jamais					
13- Pourquoi apprendre	l'écriture en Angla	is est nécessaire	pour vos étude	s de	e mé	deci	.ne?
(S'il vous plaît utiliser	l'échelle ci-desso	us pour encercle	r la réponse app	proj	priée	;)	
(1) En désaccord	(é) D'accord	(3) ne sais pas	i e				
Pour rédiger des docu	ments de recherche			1	2	3	
Pour rédiger des rappo	orts médicaux			1	2	3	
Pour prendre des note	es en cours / confére	ences		1	2	3	

Pour écrire des réponses / e-mails à copains anglophones	1	2	3
Pour écrire des essais	1	2	3
Autres (si il vous plaît spécifiez)	1	2	3

14- Combien de fois pensez-vous que vous avez besoin de lire en Anglais?			
a) toujours d) rarement d) jamais			
15- Pourquoi apprendre à lire en Anglais est nécessaire pour vos études de mé	deci	ne?	
(1) En désaccord (é) D'accord (3) ne sais pas			
Pour lire des revues médicales et des articles	1	2	3
Pour lire les manuels d'anglais et des documents de cours	1	2	3
Pour lire les journaux scientifiques et les revues	1	2	3
Pour lire les prescriptions médicales	1	2	3
Pour lire des histoires et des romans	1	2	3
Pour lire des graphiques, diagrammes et tableaux	1	2	3
Autres (s'il vous plaît préciser)	1	2	3
16 Combien de fois pensez-vous que vous avez besoin de parler en Anglais ?			
16 Combien de fois pensez-vous que vous avez besoin de parler en Anglais?a) toujoursd) rarementd) jamais			
	étude	es d	e
a) toujours d) rarement d) jamais	étude	es do	e
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é	étude	es do	e
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é médecine?	étude 1	es do	e 3
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é médecine? (1) En désaccord (é) D'accord (3) ne sais pas		ı	
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é médecine? (1) En désaccord (é) D'accord (3) ne sais pas Pour faire des présentations lors des séminaires et conférences	1	2	3
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é médecine? (1) En désaccord (é) D'accord (3) ne sais pas Pour faire des présentations lors des séminaires et conférences Pour mener à bien les conversations quotidiennes	1	2	3
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é médecine? (1) En désaccord (é) D'accord (3) ne sais pas Pour faire des présentations lors des séminaires et conférences Pour mener à bien les conversations quotidiennes Pour présenter des rapports oraux	1 1 1	2 2	3 3
a) toujours d) rarement d) jamais 17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é médecine? (1) En désaccord (é) D'accord (3) ne sais pas Pour faire des présentations lors des séminaires et conférences Pour mener à bien les conversations quotidiennes Pour présenter des rapports oraux Pour parler aux médecins / chercheurs étrangers	1 1 1	2 2 2	3 3 3

18- Combien de fois pensez-vous que vous avez besoin d'écouter en Anglais?	,		
a) toujours d) rarement d) jamais			
19- Pourquoi apprendre l'écoute en Anglais pour vos études de médecine?			
(1) En désaccord (é) D'accord (3) ne sais pas			
Pour comprendre les discussions sur les questions médicales	1	2	3
Pour comprendre les conversations quotidiennes	1	2	3
Pour comprendre des présentations dans des séminaires / conférences	1	2	3
Pour comprendre les programmes de la radio et de la télévision en anglais.	1	2	3
Pour comprendre des visiteurs / invités des pays anglophones natifs	1	2	3
Pour comprendre les appels téléphoniques en anglais.	1	2	3
Autres (s'il vous plaît préciser)	1	2	3
20- Le cours d'anglais médical devrait insister davantage			
La conversation médicale (écoute / parole)			
Lecture médicale			
Rédaction médicale			
S'il vous plaît , mettez-les par ordre d'importance attribuer le numéro 1 à la pl	lus in	por	tante
numéro 3 au moins important (1 2 3).			
C- Vos besoins			
21- Pourquoi voulez-vous apprendre l'anglais? (Encerclez les lettres approprié	es)		
a. Par intérêt personnel			
b. Pour les travaux futurs			
c. Pour les études universitaires			
d. Pour aucune raison particulière			
e. D'autres raisons (préciser)			
22- Comment préférez-vous apprendre l'anglais?			
•Par deux			
• En petits groupes			
• individuellement			

- **23** Lequel des marques suivantes, le processus d'apprentissage plus facile pour vous? (Cochez votre choix (s).
 - Les documents sonores.
 - du matériel vidéo.
 - Documents et / ou d'autres documents imprimés.
- 24 Combien de fois voulez-vous le cours qui se tiendra?
 - Deux fois par semaine
 - Trois fois par semaine
 - Plus de trois fois par semaine (précise)

A Sample of Students' Questionnaire

(Students of Medicine)

Cher étudiant,

Le but de ce questionnaire est de connaître vos besoins spécifiques en ce qui concerne l'anglais. Cela me aider à concevoir un cours pour vous en fonction de vos besoins linguistiques. Par conséquent, vous êtes priés de donner des réponses honnêtes aux questions. Je peux vous assurer que l'information que vous donnez restera confidentielle et utilisé pour ce travail de projet seulement.

_		ions générales		
Nom: Âge:				
Sexe: (Homme	e / Femme)		-	
Nom de votre	e département:			
1- Quelle est la	a langue d'ensei	gnement dans vo	tre faculté?	
Arabe □	Français 🗆	Anglais □	autre langue (précisez) □
2- Est-ce que v	ous apprenez l'a	anglais dans votre	faculté?	
Oui □	Non □			
3- Avez-vous a	ippris l'anglais av	vant?		
Oui 🗆	Non □			
4- Combien de	temps avez-voi	us appris l'anglais	?	
(1) un an	(2) deux ans	(3) trois ans	(4) quatre ans	(5) cinq ans ou plus
(précisez)				
Deuxième par	tie: Importance	de l'utilisation de	e la langue anglais	e dans le domaine médical
(Cercle	le numéro que	vous pensez qu'il e	est approprié)	
5- Vous pense	z que l'anglais e	st important dans	votre étude.	
(1) En désa	ccord	(é) D'accord	(3) ne sais pas	
6- Vous pense	z que l'anglais e	st important de ré	ussir dans vos étud	des universitaires.
(1) En désa	ccord	(é) D'accord	(3) ne sais pas	

7- Vous pensez que l'ang	lais est important dan	s votre carrière profess	ionnelle future.
(1) En désaccord	(é) D'accord	(3) ne sais pas	
8- Apprendre l'anglais e	st un défi que vous ai	mez.	
(1) En désaccord	(é) D'accord	(3) ne sais pas	
Troisième partie: Les	besoins linguistiques	des étudiants en médeo	ine
A-Vos manques:			
9 - Vous sentez que votre	niveau global actuel o	de l' anglais est	
(1) Très mauvais	(2) mauvais (4)	bon (5) Très bon	
10- Comment évaluez-vo	ous votre maîtrise de l'	anglais dans les compét	ences suivantes? (Cochez
votre avis :)	Écouter		
	Parler		
	lire	-	
	Écrire		
(1) Très mauvais	(2) mauvais (4)	bon (5) Très bon	
11- Avez-vous un prob	lème dans:	Oui	Non
(A) Faire une conv	ersation en anglais?		
(B) poser des quest	ions simples?		
(C) Donner des rép	onses à des question	s? 🗆	
(D) Choisir le mot	juste en parlant?		
(E) Exprimer vos i	dées et vos pensées	clairement?	
(F) Prononcer la ter	rminologie médicale	correctement?	
(G) Écrire correcte	ment des phrases sig	nificatives?	
(H) Rencontrer des	s difficultés lors de la	traduction 🗆	
des articles d	e l'anglais au françai	S	
B-Vos nécessites	J ,		
12- Combien de fois p	ensez-vous que vous	avez besoin d'écrire	en Anglais?
a) toujours	d) rarement	d) jamais	
13- Pourquoi apprendr	e l'écriture en Anglai	s est nécessaire pour v	vos études de médecine?
	_	us pour encercler la ré	
(1) En désaccord		_	/

Pour rédiger des documents de recherche	1	2	3
Pour rédiger des rapports médicaux	1	2	3
Pour prendre des notes en cours / conférences	1	2	3
Pour écrire des réponses / e-mails à copains anglophones	1	2	3
Pour écrire des essais	1	2	3
Autres (si il vous plaît spécifiez)	1	2	3

	Pour ecrire des reponses / e-mails a copains anglophones				
	Pour écrire des essais				
	Autres (si il vous plaît spécifiez)				
			•	•	
14-	Combien de fois pensez-vous que vous avez besoin de lire en Anglais?				
	a) toujours d) rarement d) jamais				
15-	Pourquoi apprendre à lire en Anglais est nécessaire pour vos études de	médeci	ne ?	ı	
	(1) En désaccord (é) D'accord (3) ne sais pas				
Pot	ur lire des revues médicales et des articles	1	2	3	
Pot	ur lire les manuels d'anglais et des documents de cours	1	2	3	
Pour lire les journaux scientifiques et les revues					
Pot	ur lire les prescriptions médicales	1	2	3	
Pot	ur lire des histoires et des romans	1	2	3	
Pot	ur lire des graphiques, diagrammes et tableaux	1	2	3	
Aut	tres (s'il vous plaît préciser)	1	2	3	
16	Combien de fois pensez-vous que vous avez besoin de parler en Anglais ?	L)			
	a) toujours d) rarement d) jamais				
17-	Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vo	s étude	es de	9	
mé	decine ?				
	(1) En désaccord (é) D'accord (3) ne sais pas				
Pot	ur faire des présentations lors des séminaires et conférences	1	2	3	
Pot	ur mener à bien les conversations quotidiennes	1	2	3	
Pot	ur présenter des rapports oraux	1	2	3	
Pou	ur parler aux médecins / chercheurs étrangers	1	2	3	
Pou	ur participer aux négociations	1	2	3	

Daymassistan X Walt Analaia Diversity	1	_	
Pour assister à Web-Anglais-Discussions	1	2	3
Autres si il vous plaît spécifiez)	1	2	3
40 Cambian de fair agus agus agus agus agus agus agus agus			
18- Combien de fois pensez-vous que vous avez besoin d'écouter en Anglais	?		
a) toujours d) rarement d) jamais			
19- Pourquoi apprendre l'écoute en Anglais pour vos études de médecine ?			
(1) En désaccord (é) D'accord (3) ne sais pas			
Pour comprendre les discussions sur les questions médicales	1	2	3
Pour comprendre les conversations quotidiennes	1	2	3
Pour comprendre des présentations dans des séminaires / conférences	1	2	3
<u> </u>			
Pour comprendre les programmes de la radio et de la télévision en anglais.	1	2	3
Pour comprendre des visiteurs / invités des pays anglophones natifs	1	2	3
Pour comprendre les appels téléphoniques en anglais.	1	2	3
Autres (s'il vous plaît préciser)	1	2	3
21- Le cours d'anglais médical devrait insister davantage			
La conversation médicale (écoute / parole)			
Lecture médicale			
Rédaction médicale			
S'il vous plaît, mettez-les par ordre d'importance attribuer le numéro 1 à la p	lus im	por	tante
numéro 3 au moins important (1 2 3).			
C- Vos besoins			
21- Pourquoi voulez-vous apprendre l'anglais ? (Encerclez les lettres appropri	ées)		
a. Par intérêt personnel	,		
b. Pour les travaux futurs			
Di i dai ies tiavaax iatais			
c. Pour les études universitaires d. Pour aucune raison particulière			

22- Comment préférez-vous apprendre l'anglais ?

- •Par deux
- En petits groupes
- individuellement
- **23** Lequel des marques suivantes, le processus d'apprentissage plus facile pour vous ? (Cochez votre choix (s).
 - Les documents sonores.
 - du matériel vidéo.
 - Documents et / ou d'autres documents imprimés.
- **24 –** Combien de fois voulez-vous le cours qui se tiendra ?
 - Deux fois par semaine
 - Trois fois par semaine
 - Plus de trois fois par semaine (précise)

A Sample of Students' Questionnaire

(Students of Dental Medicine)

Cher étudiant,

Le but de ce questionnaire est de connaître vos besoins spécifiques en ce qui concerne l'anglais. Cela me aider à concevoir un cours pour vous en fonction de vos besoins linguistiques. Par conséquent, vous êtes priés de donner des réponses honnêtes aux questions. Je peux vous assurer que l'information que vous donnez restera confidentielle et utilisé pour ce travail de projet seulement.

_		tions générales		
Nom: Âge:				
Sexe: (Homm	e / Femme)			
Nom de votr	e département:			
1- Quelle est l	a langue d'ensei	ignement dans vo	tre faculté?	
Arabe □	Français 🗆	☐ Anglais ☐	autre langue (précisez) 🗆
2- Est-ce que	vous apprenez l'	anglais dans votre	e faculté?	
Oui □	Non □			
3- Avez-vous a	appris l'anglais a	vant?		
Oui 🗆	Non □			
4- Combien de	e temps avez-vo	us appris l'anglais	?	
(1) un an	(2) deux ans	(3) trois ans	(4) quatre ans	(5) cinq ans ou plus
(précisez)				
Deuxième pa	rtie: Importance	e de l'utilisation de	e la langue anglais	e dans le domaine médical
(Cercle	e le numéro que	vous pensez qu'il	est approprié)	
5- Vous pense	z que l'anglais e	st important dans	votre étude.	
(1) En désa	accord	(é) D'accord	(3) ne sais pas	
6- Vous pense	z que l'anglais e	st important de ré	éussir dans vos étud	des universitaires.
(1) En désa	accord	(é) D'accord	(3) ne sais pas	

7- vous pensez que i ang	giais est important dar	is votre carrière professionnelle n	uture.
(1) En désaccord	(é) D'accord	(3) ne sais pas	
8- Apprendre l'anglais e	est un défi que vous a	imez.	
(1) En désaccord	(é) D'accord	(3) ne sais pas	
Troisième partie: Les	besoins linguistiques	des étudiants en médecine	
A-Vos manques:			
9 - Vous sentez que votre	e niveau global actuel	de l' anglais est	
(1) Très mauvais	(2) mauvais (4)	bon (5) Très bon	
10- Comment évaluez-vo	ous votre maîtrise de l	'anglais dans les compétences suiv	vantes? (Cochez
votre avis :)	Écouter		
	Parler		
	lire		
	Écrire		
(1) Très mauvais	(2) mauvais (4)	bon (5) Très bon	
11- Avez-vous un prob	olème dans:	Oui	Non
(A) Faire une conv	ersation en anglais?		
(B) poser des ques	_		
(C) Donner des rég	oonses à des question	ns? □	
(D) Choisir le mot	•		
. ,	idées et vos pensées	clairement?	
. , .	rminologie médicale		
,	ment des phrases sig		
	s difficultés lors de la		_
(11) Nemontrer de	3 difficultes for 5 de 10	a traduction	
des articles o	le l'anglais au frança	is	
B-Vos nécessites			
12- Combien de fois p	ensez-vous que vous	s avez besoin d'écrire en Angla	ais?
a) toujours	d) rarement	d) jamais	
13- Pourquoi apprendr	e l'écriture en Angla	is est nécessaire pour vos étude	s de médecine?
(S'il vous plaît utili	ser l'échelle ci-desso	us pour encercler la réponse app	propriée)
(1) En désaccord	(é) D'accord	(3) ne sais pas	

Pour rédiger des documents de recherche	1	2	3
Pour rédiger des rapports médicaux	1	2	3
Pour prendre des notes en cours / conférences	1	2	3
Pour écrire des réponses / e-mails à copains anglophones	1	2	3
Pour écrire des essais	1	2	3
Autres (si il vous plaît spécifiez)	1	2	3

	1	2	3			
	Pour écrire des essais					
	Autres (si il vous plaît spécifiez)					
14-	Combien de fois pensez-vous que vous avez besoin de lire en Anglais?					
	a) toujours d) rarement d) jamais					
15-	Pourquoi apprendre à lire en Anglais est nécessaire pour vos études de mé	decii	ne ?			
(1) En désaccord (é) D'accord (3) ne sais pas					
Pou	ur lire des revues médicales et des articles	1	2	3		
Pot	ur lire les manuels d'anglais et des documents de cours	1	2	3		
Ροι	ur lire les journaux scientifiques et les revues	1	2	3		
Ροι	ur lire les prescriptions médicales	1	2	3		
Pou	ur lire des histoires et des romans	1	2	3		
Pot	ur lire des graphiques, diagrammes et tableaux	1	2	3		
Aut	res (s'il vous plaît préciser)	1	2	3		
16	Combien de fois pensez-vous que vous avez besoin de parler en Anglais?					
	a) toujours d) rarement d) jamais					
17 -	Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos é	tude	es de	9		
mé	decine ?					
(1) En désaccord (é) D'accord (3) ne sais pas					
Pou	ur faire des présentations lors des séminaires et conférences	1	2	3		
Pot	ur mener à bien les conversations quotidiennes	1	2	3		
Pot	ur présenter des rapports oraux	1	2	3		
Pou	ur parler aux médecins / chercheurs étrangers	1	2	3		
Pot	ur participer aux négociations	1	2	3		

Pour assister à Web-Anglais-Discussions	1	2	3	
Autres si il vous plaît spécifiez)				
18- Combien de fois pensez-vous que vous avez besoin d'écouter en Anglais	7			
a) toujours d) rarement d) jamais	•			
19- Pourquoi apprendre l'écoute en Anglais pour vos études de médecine ?				
(1) En désaccord (é) D'accord (3) ne sais pas				
(1) Lit desaccord (e) D accord (3) file sais pas				
Pour comprendre les discussions sur les questions médicales	1	2	3	
Pour comprendre les conversations quotidiennes	1	2	3	
Pour comprendre des présentations dans des séminaires / conférences	1	2	3	
Pour comprendre les programmes de la radio et de la télévision en anglais.	1	2	3	
Pour comprendre des visiteurs / invités des pays anglophones natifs	1	2	3	
Pour comprendre les appels téléphoniques en anglais.	1	2	3	
Autres (s'il vous plaît préciser)				
1- Le cours d'anglais médical devrait insister davantage				
La conversation médicale (écoute / parole)				
Lecture médicale				
Rédaction médicale				
S'il vous plaît , mettez-les par ordre d'importance attribuer le numéro 1 à la p	lus im	por	tante,	
numéro 3 au moins important (1 2 3).				
C- Vos besoins				
21- Pourquoi voulez-vous apprendre l'anglais ? (Encerclez les lettres appropri	ées)			
a. Par intérêt personnel				
b. Pour les travaux futurs				
c. Pour les études universitaires				
d. Pour aucune raison particulière				
e. D'autres raisons (préciser)				

22- Comment préférez-vous apprendre l'anglais ?

- •Par deux
- En petits groupes
- individuellement
- **23** Lequel des marques suivantes, le processus d'apprentissage plus facile pour vous ? (Cochez votre choix (s).
 - Les documents sonores.
 - du matériel vidéo.
 - Documents et / ou d'autres documents imprimés.
- **24 –** Combien de fois voulez-vous le cours qui se tiendra ?
 - Deux fois par semaine
 - Trois fois par semaine
 - Plus de trois fois par semaine (précise)

A Sample of Students' Questionnaire

(Students of Pharmacy)

Cher étudiant,

Le but de ce questionnaire est de connaître vos besoins spécifiques en ce qui concerne l'anglais. Cela me aider à concevoir un cours pour vous en fonction de vos besoins linguistiques. Par conséquent, vous êtes priés de donner des réponses honnêtes aux questions. Je peux vous assurer que l'information que vous donnez restera confidentielle et utilisé pour ce travail de projet seulement.

_		ions générales		
Nom: Âge:				
Sexe: (Homme	e / Femme)		-	
Nom de votre	e département:			
1- Quelle est la	a langue d'ensei	gnement dans vo	tre faculté?	
Arabe □	Français 🗆	Anglais □	autre langue (précisez) □
2- Est-ce que v	ous apprenez l'a	anglais dans votre	faculté?	
Oui 🗆	Non □			
3- Avez-vous a	ppris l'anglais a	vant?		
Oui 🗆	Non □			
4- Combien de	temps avez-voi	us appris l'anglais	?	
(1) un an	(2) deux ans	(3) trois ans	(4) quatre ans	(5) cinq ans ou plus
(précisez)				
Deuxième par	tie: Importance	de l'utilisation de	e la langue anglais	e dans le domaine médical
(Cercle	le numéro que	vous pensez qu'il	est approprié)	
5- Vous pense	z que l'anglais es	st important dans	votre étude.	
(1) En désa	ccord	(é) D'accord	(3) ne sais pas	
6- Vous pense	z que l'anglais es	st important de ré	ussir dans vos étud	des universitaires.
(1) En désa	ccord	(é) D'accord	(3) ne sais pas	

7- vous pensez que i a	ngiais est important dar	is votre carrière professionnelle fut	ure.
(1) En désaccord	(é) D'accord	(3) ne sais pas	
8- Apprendre l'anglais	s est un défi que vous a	imez.	
(1) En désaccord	(é) D'accord	(3) ne sais pas	
Troisième partie: Le	es besoins linguistiques	des étudiants en médecine	
A-Vos manques:			
9 - Vous sentez que vot	re niveau global actuel	de l' anglais est	
(1) Très mauvais	(2) mauvais (4)) bon (5) Très bon	
10- Comment évaluez-	vous votre maîtrise de l	l'anglais dans les compétences suiva	ntes? (Cochez
votre avis :)	Écouter		
	Parler		
	lire		
	Écrire		
(1) Très mauvais	(2) mauvais (4)) bon (5) Très bon	
11- Avez-vous un pro	oblème dans:	Oui	Non
(A) Faire une con	nversation en anglais?		
(B) poser des que	estions simples?		
(C) Donner des r	éponses à des question	ns?	
(D) Choisir le mo	ot juste en parlant?		
(E) Exprimer vo	s idées et vos pensées	clairement?	
(F) Prononcer la	terminologie médicale	e correctement?	
(G) Écrire correc	tement des phrases sig	gnificatives?	
(H) Rencontrer o	les difficultés lors de l	a traduction $\qquad \Box$	
	de l'anglais au frança	ilS	
B-Vos nécessites			
12- Combien de fois	-	s avez besoin d'écrire en Anglais	s ?
a) toujours	d) rarement	d) jamais	
	_	is est nécessaire pour vos études o	
(S'il vous plaît uti	liser l'échelle ci-desso	ous pour encercler la réponse appro	opriée)
(1) En désaccord	(é) D'accord	(3) ne sais pas	

Pour rédiger des documents de recherche	1	2	3
Pour rédiger des rapports médicaux	1	2	3
Pour prendre des notes en cours / conférences	1	2	3
Pour écrire des réponses / e-mails à copains anglophones	1	2	3
Pour écrire des essais	1	2	3
Autres (si il vous plaît spécifiez)	1	2	3

	Pour ecrire des reponses / e-mails à copains angiophones	1	2	3					
	Pour écrire des essais	1	2	3					
	Autres (si il vous plaît spécifiez)	1	2	3					
14-	Combien de fois pensez-vous que vous avez besoin de lire en Anglais?								
	a) toujours d) rarement d) jamais								
15-	Pourquoi apprendre à lire en Anglais est nécessaire pour vos études de r	nédeci	ne ?)					
	(1) En désaccord (é) D'accord (3) ne sais pas								
Pot	ur lire des revues médicales et des articles	1	2	3					
Pot	ur lire les manuels d'anglais et des documents de cours	1	2	3					
Pot	ur lire les journaux scientifiques et les revues	1	2	3					
Pot	ur lire les prescriptions médicales	1	2	3					
Pot	ur lire des histoires et des romans	1	2	3					
Pour lire des graphiques, diagrammes et tableaux			2	3					
Aut	tres (s'il vous plaît préciser)	1	2	3					
16	Combien de fois pensez-vous que vous avez besoin de parler en Anglais?	 !							
a) toujours d) rarement d) jamais									
17- Pourquoi l'apprentissage de L'anglais parlé est nécessaire au nom de vos études de									
mé	decine ?								
	(1) En désaccord (é) D'accord (3) ne sais pas								
Pot	ur faire des présentations lors des séminaires et conférences	1	2	3					
Pot	ur mener à bien les conversations quotidiennes	1	2	3					
Pour présenter des rapports oraux				3					
Pour parler aux médecins / chercheurs étrangers				3					
Pot	ur participer aux négociations	1	2	3					

Pour assister à Web-Anglais-Discussions	1	2	3
Autres si il vous plaît spécifiez)	1	2	3
18- Combien de fois pensez-vous que vous avez besoin d'écouter en Anglais	?		
a) toujours d) rarement d) jamais			
19- Pourquoi apprendre l'écoute en Anglais pour vos études de médecine ?			
(1) En désaccord (é) D'accord (3) ne sais pas			
Pour comprendre les discussions sur les questions médicales	1	2	3
Pour comprendre les conversations quotidiennes	1	2	3
Pour comprendre des présentations dans des séminaires / conférences	1	2	3
Pour comprendre les programmes de la radio et de la télévision en anglais.	1	2	3
Pour comprendre des visiteurs / invités des pays anglophones natifs	1	2	3
Pour comprendre les appels téléphoniques en anglais.	1	2	3
Autres (s'il vous plaît préciser)	1	2	3
		1	<u> </u>
1- Le cours d'anglais médical devrait insister davantage			
La conversation médicale (écoute / parole)			
Lecture médicale			
Rédaction médicale			
S'il vous plaît , mettez-les par ordre d'importance attribuer le numéro 1 à la p	lus im	npor	tant
numéro 3 au moins important (1 2 3).			
C- Vos besoins			
21- Pourquoi voulez-vous apprendre l'anglais ? (Encerclez les lettres appropri	ées)		
a. Par intérêt personnel			
b. Pour les travaux futurs			
c. Pour les études universitaires			
d. Pour aucune raison particulière			
e. D'autres raisons (préciser)			

22- Comment préférez-vous apprendre l'anglais ?

- •Par deux
- En petits groupes
- individuellement
- **23** Lequel des marques suivantes, le processus d'apprentissage plus facile pour vous ? (Cochez votre choix (s).
 - Les documents sonores.
 - du matériel vidéo.
 - Documents et / ou d'autres documents imprimés.
- **24 –** Combien de fois voulez-vous le cours qui se tiendra ?
 - Deux fois par semaine
 - Trois fois par semaine
 - Plus de trois fois par semaine (précise)

A Sample of Teachers' Questionnaire

Dear colleague,

I am presently carrying out a research on The Need for Teaching Effective ESP Courses for medical Students in Algeria. I will be grateful if you contribute in this study by completing the attached questionnaire. I can assure you that the information you give will be kept confidential and used for this project work only.

Thank you for your co-operation

Dire	ction: Please tick ($\sqrt{\ }$) in the appropriate space (es.) which you think best express your opinion
2	22- Sex: Male () Female ()
2	23- Qualifications: Licence (Classical system) () Master (LMD) () Magister ()
	Doctorate ()
2	24- Your experience in teaching English 1 year () 2 years () 3 years () others(precise) ()
2	25- Did you have any training in teaching ESP? Yes () No ()
2	26- Is it necessary for medical students to learn English? Yes () No ()
2	27- If yes, what are the reasons?
2	28- In your opinion, how long should an ESP course for medical students last?
	01 Year () 02 years () 03 years () More than 03 years () specify
	()
2	29- Do you think that students require English to:
	- Understand medical lectures in English ()
	- Take part in oral English discussions ()
	- Read medical textbooks in English ()
	- Write medical reports or publications in English ()
3	30- Do you work in collaboration with the subject lecturers? Yes () No ()
3	31- In which aspects of English do you think medical students are usually weak?
	- Vocabulary ()
	- Grammar ()
	- Spelling ()
	- Speaking ()
	- Reading ()

	-	Writing ()	
	-	Listening to natives ()
32-	Ву	means of number (1-n	nost important, to 4- least important) Which of the following
	ski	ills do you emphasize wh	en teaching English to medical students?
	-	Listening skill ()
	-	Reading skill ()
	-	Speaking skill ()
	-	Writing skill ()
33-	Is i	it easy for you to obtain t	he necessary materials needed for teaching?
	-	Yes ()	No ()
34-	Do	the provided materials c	over the needs of the entire course?
	Ye	es ()	No ()
35-	Do	you resort to translation	to French or Arabic when teaching?
	•••		
36-	То	what extent do you think	translation into French or Arabic is useful?
	- C	Giving clues if necessary	()
	-Tı	ranslation of important co	oncepts ()
	- F	full translation into Arabi	c or French ()
	-	Yes ()	No ()
37-	Do	you use audio-visual aid	ls in your teaching?
	-	Yes ()	No ()
38-	Н	ow much do you think M	edical students are interested in learning English?
	-	Most of them ()	
	-	Some of them ()	
	-	Very few of them ()	
39-	In	your opinion, how many	students should an ESP class/group consist of?
	-	10 students ()	20 students () More () specify ()
40-	Но	ow do you assess your stu	dents?
	-	Oral test ()	
	-	Written test ()	
	-	Both ()	
41-	Wl	hat can you suggest to m	ake English medical courses more effective and useful? Please
	pro	ovide your suggestions.	
	•		Thank you for your co-operation
			Thank you for your co-operation

Mr BOUGUENOUS Abdallah

The Deans' Interview

(His answer)

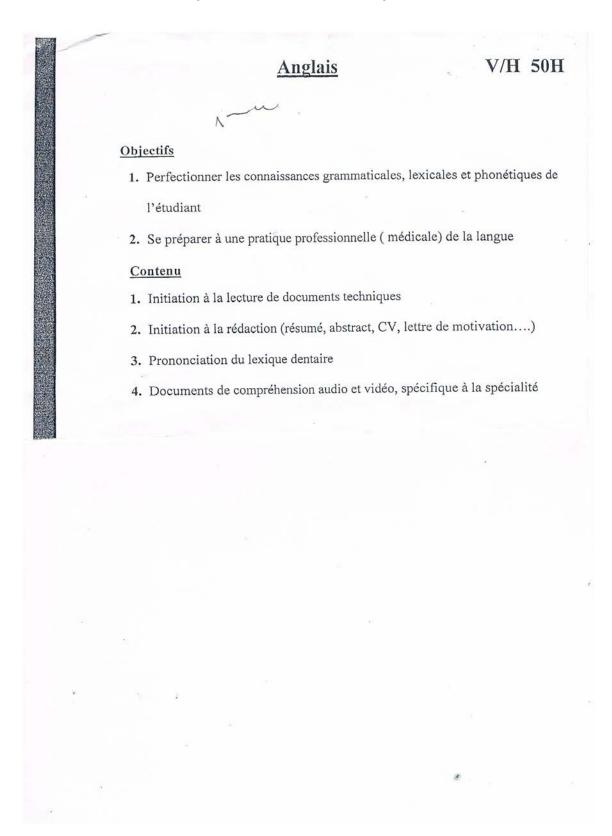
	Interview
har M	fonsieur.
Je s	suis un professeur d'anglais au Centre universitaire de Relizane et je fais actuellement
ne rec	herche sur la nécessité de concevoir des cours d'anglais efficaces pour les étudiants en
	ne. Ainsi, vous êtes priés de répondre aux questions suivantes :
1-	Quelles qualifications avez-vous?
	Rooferens
2-	Combien de temps avez-vous été doyen de la Faculté (Chef du Département de
	médecine)?
	Achielle out depis 3 mg
3-	Est-ce que vous enseignez l'anglais a vos étudiants dans votre département?
	Non.
	Si non, quelles sont les raisons sachant que des cours d'anglais sont désignés
	officiellement dans toutes les autres facultés?
	no profescus
	Y
	À votre avis, dans quelle mesure est l'anglais important pour les étudiants en
	médecine à l'Université de Sidi Belabes?
V	2 pan = 15 en feint fip et de
8	france of the second
6-	Fire-vous pour la miss on ourse de II
	Etes-vous pour la mise en œuvre de cours d'anglais pour les étudiants en médecine?
	on on the factor of the factor
	Jan Julia
540	

7- Est-ce les équipements technologiques disponibles (matériaux) adéquats pour
l'enseignement efficace de l'anglais médical? 1 2 5/0 m² lly (m² ghada, m² 1 af c'ely
8- Que proposez-vous pour le contenu des cours? Dit it you fair par des experts Au Collabration avec & viile solonage
sa collabrat avec & villa soloney
9- Doivent les professeurs d'anglais connaître la littérature médicale?
ov.
10-Que pensez-vous de la connaissance médicale des enseignants de langue anglaise? Ils
peuvent ne pas être bien informés dans le domaine médical. Pensez-vous que les
professeurs de contenu médical (les enseignants des différents modules de médecine)
et les professeurs d'anglais devraient travailler ensemble? Si oui pourquoi et comment?
on af - b soaple in programs,
11-Pensez-vous que la traduction (en français ou en Arabe) est utile pour enseigner
l'anglais médical? Si oui, pourquoi?
La Vas Quelin so troping of Co.
12 to the second
12- Avez-vous d'autres opinions et considérations? Note par hist et le par elle liter note For - shi a Jongue
Augare Language
Bowl
Merci votre coopération M. BOUGUENOUS Abdallah

Orientation letter

PP MELLOUK MOHAMED SIDI BEL.ABBES: LE 27.04.2016 DEPARTEMENT D'ANGLAIS UNIVERSITE DES LETTRES ET DES LANGUES SIDI DEL ABBES. MONSIEUR LE DOYEN DE LA FACULTE DE MEDECINE SIDI BEL.ABBES. OBJET: LETTRE D'ORIENTATION. monsieur, g'ai l'honneur de vous demander respectueusement de bie vouloir recevoir et permettre à M.BOUGUENOUS Abdellah, préparateur en doctorat d'anglais de spécialité à l'université DJILLALI Liabes de Sidi-Bel-Abbes, à entreprendre des recherches sur l'enseignemen de la langue anglaise aux médecins, et ce, dans le capre de sa prép paration au poctorat d'Anglais de specialité. Il serait appele à proceder a des interview, et des questionnaires avec les professeurs et etudiants. yeuillez croire, monsieur, à l'assurance de mon profond respect et mes vifs remerciements. professeur M.MELLDO

1st year Dental Medicine Syllabus



2nd year Dental Medicine Syllabus

Summary

The present dissertation is an initial attempt to investigate the needs of the medical learners in the use of English for specific purposes at the faculty of medicine of Sidi Bel-Abbes University. The primary purpose of the present research is to ask for implementing English in the medical field and designing effective ESP courses for students who wish to pursue their high academic studies or even for their professional career. For this reason, the author decided to identify the learners' language needs and describe the current situation of teaching ESP in the medical faculty through a questionnaire survey and a structured interview. The findings show the non-existence of real ESP courses for medical students in the field and the absence of any kind of training for the so-called ESP teachers in the faculty. The participants show also a remarkable weakness in general English competence let alone ESP. Thus, they need to develop the four skills all together ranking the interactive skills such as: listening and speaking of prior importance. Accordingly, the author presents a sample unit of a designed ESP course for medical students and recommends a number of efficient practices of successful ESP teaching referring to the role of both the teacher and the learner, and with much focus on strategies of an ESP course development.

Résumé

Cette thèse est une première tentative pour étudier les besoins des apprenants en médecine dans l'utilisation de l'anglais à des fins spécifiques à la faculté de médecine de l'Université de Sidi Bel Abbes. L'objectif principal de la présente enquête est de demander la mise en œuvre de l'anglais dans le domaine médical et la conception de cours ESP efficaces pour les étudiants qui souhaitent suivre leurs hautes études universitaires ou même pour leur carrière professionnelle. Pour cette raison, l'auteur a décidé d'identifier les besoins linguistiques des apprenants et de décrire la situation actuelle de l'enseignement de l'ESP dans la faculté de médecine à travers une enquête par questionnaire et une interview structurée. Les résultats montrent l'inexistence de cours ESP réels pour les étudiants en médecine sur le terrain et l'absence de toute forme de formation pour les enseignants ESP dans la faculté de médecine. Les participants montrent également une faiblesse remarquable dans la compétence en anglais général, sans parler de l'ESP. Ainsi, ils doivent développer ensemble les quatre compétences de classement des compétences interactives telles que: écouter et parler d'importance préalable. En conséquence, l'auteur présente une unité d'un cours ESP conçu pour les étudiants en médecine et recommande un certain nombre de pratiques efficaces d'enseignement ESP qui se réfèrent au rôle de l'enseignant et de l'apprenant, en mettant l'accent sur les stratégies.

ملخص

هذه الرسالة هي محاولة للتحقيق في احتياجات المتعلمين في مجال استخدام اللغة الإنجليزية في كلية الطب بجامعة سيدي بلعباس. الغرض الأساسي من البحث الحالي هو طلب تطبيق اللغة الإنجليزية في المجال الطبي وتصميم دورات فعالة لمقياس "الانجليزية لإغراض محددة" للطلاب الذين يرغبون في متابعة دراستهم الأكاديمية العالية أو حتى في حياتهم المهنية. لهذا السبب ، تم تحديد الاحتياجات اللغوية للمتعلمين ووصف الحالة الراهنة لتعليم هذه المادة في كلية الطب من خلال مسح استبيان ومقابلة منظمة. تظهر النتائج عدم وجود دورات حقيقية للمقياس لطلاب الطب في الميدان وغياب أي نوع من التدريب لمعلميه على مستوى الكلية. كما أظهر المشاركون ضعفًا ملحوظًا في الكفاءة فيما يخص الإنجليزية العامة. وبالتالي ، فهم بحاجة إلى تطوير المهارات الأربعة مجتمعةً خاصة التفاعلية منها مثل: الاستماع والتحدث نظرا لأهميتهما. وبناءً على ذلك ، تم تقديم وحدة عينة من دورة للمقياس السالف الذكر مصممة لطلاب الطب كما تم التوصية بعدد من الممارسات الناجحة التي تشير إلى دور كل من المعلم . والمتعلم ، مع التركيز بشكل كبير على استراتيجيات تطوير ها