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Submitted by: TELMAMI Nesrine

# Needs Analysis as a Tool to Design an Effective ESP Course

# Case of Master One Students of Computing at Mohamed Kheider University of Biskra

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## Dedications

In the Name of God the Most Merciful and the Most Compassionate

I dedicate this work to:

To the pure soul of my brother 'Nacer Allah'

All my family and loved once, thank you for the unconditioned support you have always

given me

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First of all I should be so thankful for Allah

for giving me power, patience and will to accomplish this work

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Abstract

The undertaken research investigates the significance role of needs analysis in elaborating a success English for Specific Purposes course (English course). This paper is concerned with Master one students of Computer Science at Mohammed Kheider Biskra University. Our work investigates the nature of ESP course conducted in higher education level whether it respects the needed procedure and follow the listed approaches or not. Despite of the global awareness of the importance of ESP, teachers still rely on teaching General English. That could be resulted from the misconception of the term ESP, or in the application and elaboration of it. The overwhelming majority of the target students show interest and motivation toward English in general. This research aims to raise awareness of needs analysis importance in ESP courses, also to emphasis on the process of designing ESP courses that fulfil the student's need. English teachers must elaborate their courses based on the learners' target needs. This procedure will better enhance the students' achievement in learning English for Specific Purposes. We hoped that the findings of the current research would provide more attention to the situation of ESP in the field of Computer Science as well as the crucial role of NA in the fulfilment of the learners' purposes.

*Keywords***:** Needs Analysis, English for Specific Purposes, Course Design, Learners' Target Needs

## List of Abbreviations and Acronyms

CNP: **C**ommunication **N**eeds **P**urposes

DA: **D**eficiency **A**nalysis

EAP: **E**nglish for **A**cademic **P**urposes

ELT: **E**nglish **L**anguage **T**eaching

EOP: **E**nglish for **O**ccupation **P**urposes

ESP: **E**nglish for **S**pecific **P**urposes

EST: **E**nglish for **S**cience and **T**echnology

GE: **G**eneral **E**nglish

GEP: **G**eneral **E**nglish **P**urposes

MA: **M**eans **A**nalysis

NA: **N**eeds **A**nalysis

PNA: **P**edagogic **N**eeds **A**nalysis

PSA: **P**resent **S**ituation **A**nalysis

SA: **S**trategy **A**nalysis

TEFL: **T**eaching **E**nglish as **F**oreign **L**anguage

TESL: **T**eaching **E**nglish as **S**econd **L**anguage

TSA: **T**arget-**S**ituation **A**nalysis

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A typical problem for new and experienced English teachers alike is that of having to design course that is efficient, effective, and relevant. As a departure point to reach that course is to take on consideration the specific needs and purposes of the target students. English for specific purposes (ESP) recently has become crucial within teaching English as a foreign or secondary language (TEFL/TESL). ESP is a branch of language teaching that aims at designing an effective course which meet and full fill the student's needs.  Needs analysis has become the necessary process to clearly identify the student's needs which the course will be based and precisely focuses on.

**Statement of the Problem**

At the level of university, it is observed that teachers of English presented the courses as general English, for instance; grammar rules, tenses of verbs, sentences structure; under the term ESP. Besides that, the majority of ESP courses are randomly elaborated, disregarding the needs of the target students, the objectives to achieve and even the used methodology.

ESP teacher does not pay enough attention on needs analysis, which is the core of ESP. Instead, they design the ESP courses based on they prior knowledge of the language.

**Significance of the Problem**

This study spots a considerable light on:

-Raise awareness of needs analysis importance in ESP courses.

-The process of designing an ESP courses that full fill the student's need.

**Aims of the Study**

The present study aims at outlining the importance of needs analysis in elaborating any ESP course. Also, to elevate the teacher's awareness that needs analysis is a crucial process

for an effective ESP courses. Analysing the student's needs can help novice teachers elaborate an appropriate English course.

## Research Questions

According to what we mentioned above, we rise these questions:

1-How do ESP teachers design course?

2-How can needs analysis help teachers of English in designing an effective ESP course?

3-What are the needed purposes do Master one students of Computing consider as fundamental    in their ESP course?

4-Is needs analysis important in the process of course design?

5-How to use needs analysis to design a successful ESP course?

## Research Hypothesis

We hypothesize that:

Analysing the student's needs considers as a perfect tool for designing an effective ESP course.

## Methodology

-APA writing style the 6$^{th}$ Edition.

-This research is a qualitative research tends to rely on the description method to collect and conduct the data. The descriptive method suits the main objectives of this study, that is describing how needs analysis is essential in designing a successful ESP course.

**Data Collection Tools**

In this study, we would use two data gathering tools. A structured questionnaire in order to treat the students' opinion about ESP course. Besides that, a semi structured interview with the teachers of English to undercover the process and methods they use in the ESP course.

# Chapter One

# Needs Analysis

Needs Analysis as a Tool to design an Effective ESP Course

Needs analysis has become a new trend when it comes to identifying the students' needs, purposes and interest. It can be a vital asset for teachers of English for Specific Purposes (ESP) to identify their learners' key requirements or needs and determine the areas in which they are lacking skills. This chapter aims at defining needs analysis and presenting its types, emphasizing the importance of students' needs and needs analysis in ELT. We will also mention the process and the steps should be taking into consideration while conducting the students' needs and reviewing its importance to course design.

**Needs Analysis Definition**

In the entire reviewed ESP literature, scholars and authors considered needs analysis as the "cornerstone" of ESP course design (Munby 1978; Hutchinson and Waters 1987; Nunan 1988; Robinson 1991; West, 1994; Jordan 1997, Dudley-Evans and St John. 1998; Basturkmen 2006; and Basturkmen 2010). The key point of NA is to determine the type of course content, materials and methodology, it is concerned with the description of the required proficiency level of both learners and the adopted language.

Scholars have been debating on the focus of NA. This last was seen as a data gathering process. (Nunan, 1988) stated that: "Needs analysis can be a vital asset for teachers of English for Specific Purposes (ESP) to identify learners' key requirements or needs and determine the skills they need to develop". This means that NA is a critical procedure to language teachers in order to diagnose the learners' specific needs, interest and purposes of learning the language. Moreover, it gives an insight to the course designers to identify the students' lack skills (reading, speaking, listening or writing) needed to be improved.

According to Richards et al. (2002, p. 353-354), NA is defined as "A process that determines the needs of a learner or a group of learners, who require a language and sequence the needs on the basis of priorities". In the process, both subjective and objective information are employed in NA, such as data collected from observation, interviews, tests, and questionnaire, survey. While West (1994) defines NA as "essentially a pragmatic activity focused on specific situations although grounded on general theories, such as the nature of languages and curriculum". The author has expressed the procedure as a "pragmatic activity" that aims at recognizing the students' requirements and the elaboration of the suitable syllabus.

Another practical view was given by Basturkmen (1998, p. 2) presents NA as "The identification of difficulties and standard situations by the observation of participants functioning in target situation in conjunction with interviews and questionnaire". The scholar in this part did not tackle the students' needs and objectives that the course must adopt. However, he spotted the light on the difficulties that the students may encounter during their ESP courses which can simply have been identified by the teacher through the use of questionnaires or the interviews. Basturkmen also argued that NA is "a process of learning about the present situation of the students in the college rather than an object of investigation. It is a process of refining and redefining procedures and concepts" (Basturkmen, 1998, p. 12)

## Types of Needs

ESP practitioners and NA specialists have debated on the various meanings that the world "Needs" carry. Richterich (1980) holds the opinion that "the identification of language needs should include the information of the learners who will attend a language course and how they expect to make use of it when they finish the course". In addition, Brindley (1989) states that "needs may equal to learners' "wants" or "desires" which refers to what the students

themselves would like to learn in addition to their program requirements". Whereas Hutchinson & Waters (1987, 54), who identified the two main sub-divisions of needs analysis, stated that "need analysis covers target needs and learning needs".

**Target Needs**

Conducting NA had to consider several elements in order to achieve the desired objective. Hutchinson and Waters (1987) make a distinction between "target needs" and "learning needs". The target needs refers to "what the learner needs to do in the target situation" (p.54). They further subcategorized target needs into "Necessities, Lacks, and Wants".

**Necessities.** Are introduced as the demands of the target situation (Hutchinson and Waters: 1987), that is to say, what the learner has to know in order to function effectively in the target situation. It is the case of observing what situations the learner will need to function in and analysing the constituent parts of them.

**Lacks.** Are the discrepancy between necessity and what the learner already knows. Lacks can be defined as the gap between the target proficiency and the present existing proficiency of the learners. It is what the learner knows already in the target situation. It would be practical to decide which of the necessities that the learners lack.

**Wants.** Are what the learner hope and expect to learn or what they feel they need from the language course, meaning that the ESP practitioners should consider learners' views and wants and the reasons behind integrating this language in their specialization. In other words, for designing a course, it is important to listen and analyse the learners' opinions and thoughts. Since they are aware of their both necessities and wants, it is easy to them to 'detect' their wants from the course. Benyelles (2001) described this type as "it involves the non-pedagogical limits that control a course planning process such as the role of the national

policy, and financial restriction, which the analysis need to be aware of once they start the process of NA" (p. 31).

**Learning Needs**

In the process of elaborating an ESP course, conducting the students' needs does not only rely on the target needs but also on the 'learning needs'. Hutchinson and Waters (1987:61) claim that: "It is naive to base a course design simply on the target objectives, and that the learning situation must also be taken into account, since the target situation is not a reliable indicator". The learning needs "are what the learners' needs to do in order to learn" (Hutchinson and Waters, 1987). This concerns the learners' motivation and attitudes, interests, cultural awareness, learning styles, proficiency level, the available materials and all the related information that can help the teacher to transmit the suitable knowledge to the learners,
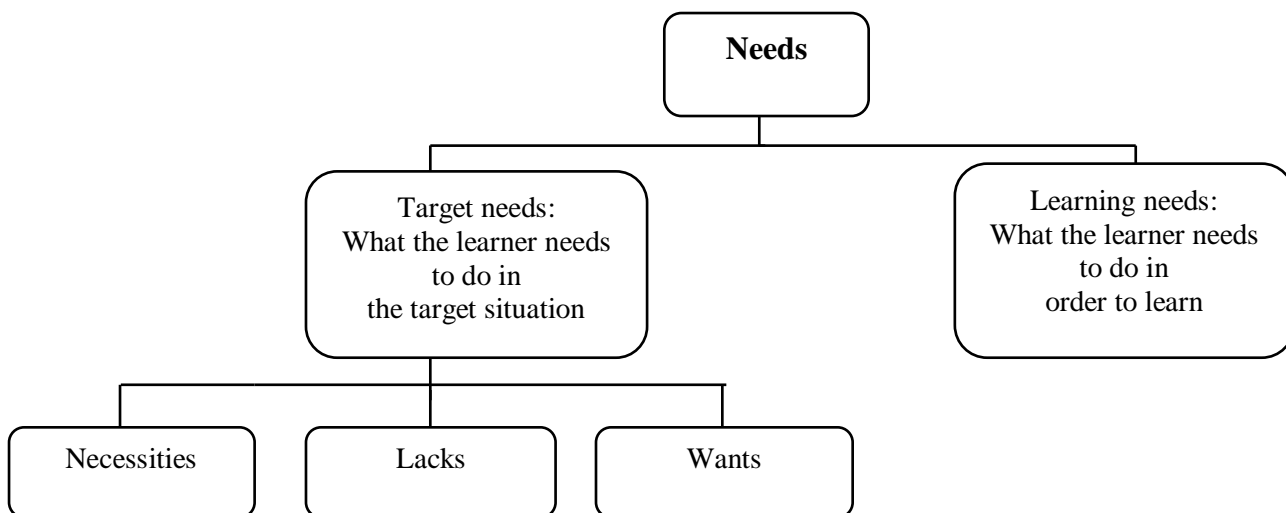
*Figure 1*: 1Hutchinson & waters' (1987) Classification of Needs Analysis

### Needs Analysis Models

Scholars and authors have put various models of needs analysis. However, Jordan (1997) indicates five main models: Target-Situation Analysis, Present Situation Analysis, Deficiency Analysis, Strategy Analysis and Means Analysis.

**Target-Situation Analysis (TSA)**

Target-Situation Analysis (TSA) is the situation in which the language learners will be using the language they are learning (Hutchinson & Waters, 1987). The TSA is a kind of needs analysis which mainly focuses on students' needs at the end of the language course (Robinson, 1991). Therefore, Richards et al (2002: 539) state TSA is:

> The situation or setting in which the student will have to use the target language. This may be a study or work situation or any context in which the learner needs to use the language. Analysis of the communicative and linguistic demands of the target situation is an essential phase in Needs Analysis.

Most ESP practitioners agreed that TSA is best defined in Munby's model (1978); who was the first specialist who had both the systematic and the influential ideas on TSA; by formulating the "Communication Needs Process" (CNP). This model has clearly demonstrated the central core of ESP. Hutchinson and Waters (1987) argue that:

> With the development of the CNP it seems as if ESP had come of age. The machinery for identifying the needs of any group of learners had been provided: all the course designers had to do was to operate it (p.54)

The CNP model present some procedures used to analyse the target needs. It consists of a range of questions about key communication variable (e.g. participants, setting, target level,

purposive domain, interaction, instrumentality, dialect, communicative event, and communicative key) which are organized as parameters and dynamically related with each other. These variables can be used to identify the target language needs of any group of learners (Hutchinson and waters 1987). As Coleman (1988, p.106) illustrates: "Probably the most influential of all needs analysis procedures currently available is Munby's "communication needs processor".

Hutchinson and Waters (1987: 59) believe that TSA "involves asking questions about the target situation and the attitudes towards that situation of the various participants in the learning process". They come up with a framework that outline language teachers and ESP practitioners need to collect from the analysis of target needs. Songhori (2008: 8) approximates Munby's model to Hutchinson and Waters' framework as follows:

| Hutchinson and Waters' framework | Munby's model |
|---|---|
| **8-** Why is language needed?<br><br>• for study;<br><br>• for work;<br><br>• for training;<br><br>• for a combination of these;<br><br>• for some other purposes, e.g. status, examination, promotion | Purposive<br><br>Domain |

| 2. How will the language be used?<br><br>• Medium: speaking, writing, reading, etc.;<br><br>• Channel: e.g. telephone, face to face;<br><br>• Types of text or discourse : e.g. academic text, lectures, catalogues, etc | Instrumentality |
|---|---|
| 3. What will the content areas be?<br><br>• Subjects: e.g. medicine, biology, commerce, shipping, etc.;<br><br>• Level: technician, craftsman, postgraduate, etc. | Communicative<br><br>Event |
| 4. Where will the language be used?<br><br>• Physical setting: e.g. office, lecture theatre, hotel, workshop, library;<br><br>• Human context: alone, meetings, demonstrations, on telephone;<br><br>• Linguistic context: e.g. in own country, abroad | Setting (physical<br><br>and<br><br>psychological) |
| 5. When will the language be used?<br><br>• Concurrently with the ESP course or subsequently;<br><br>• Frequently, seldom, in small amounts, in large chunks | |

*Figure 2:* Hutchinson and Wataers' Framework Vs Munbey Model (Songhoni 2008:8)

TSA is commonly defined under the umbrella of target needs, which are expressed in terms of necessities, lacks and wants (Hutchinson and Waters 1978: 55). Necessities related to "the type of need determined by the demands of the target situation". They are also called

"Objective Needs" (Jordan, 1997. 25). Lacks refer to "the gap between the target proficiency and what the learner knows already" (Jordan, 199726). In other words; lacks match the target proficiency against the existing proficiency of the learner; Wants are unlike necessities in the sense that they are 'Subjective Needs'. They are related to "learners' motivation" to learn. Bowers (1980), as cited in Jordan (1997: 26), believes that students will learn best what they want to learn. Therefore, learners' wants are also important factors besides necessities and lacks in course design and materials writing.

**Present-Situation Analysis (PSA)**

While TSA deals with the analysis of learner's targets and what they are expected to be at the end of the course. Present Situation Analysis (PSA), on the other hand, analyses learner's present situation and shows the differences' between the present and the target one.PSA ascertains the students' state of language development at the beginning of the language course (Jordan, 1997: 24). This exact model helps the language teachers and the ESP practitioner to recognize and decode the students' wants and lacks, as well as investigating their strengths and weaknesses (Robinson, 1991 P,8).Songhori (2008) states that effective NA has to combine both TSA and PSA, in order to meet the needs of learners and reach the desired goals.

Three basic sources of information are suggested by Richterich and Chancerel in 1980: the information about the students themselves, the language-teaching organizations and the user-institution. This is in accordance with Jordan's (1997) who states that "the sources of information in the needs analysis are: the students themselves, the academic institution and the prospective employer". Meaning that ESP practitioners have to gain information about the students' attitude toward the language teaching and learning through a various teaching methods and level of ability.

**Pedagogic Needs Analysis (PNA)**

Three (03) main elements were proposed by (West -1998):  deficiency analysis, strategy analysis and mean analysis.

**Deficiency analysis (DA).** According to Jordan (1997, p. 26) deficiency analysis (DA) is related to the necessities that the students lack. DA bridges the gap between language information about the learners and proficiency information; it connected the current skills, language use and activities learners are/will be using the language for (Dudley-Evans and St John 1998).in other words, the DA is concerned with the differences between the current linguistic competence and the desired competence.

**Strategy analysis (SA).** Strategy analysis (SA) or "learning needs analysis"; in other sources; refers to how the learners want to learn instead of what they need to learn (West. 1998). Strategy analysis (SA) concerns with the learning methods, strategies and styles that the learners adopt in learning a new language. Alwright; who was the "pioneer" of strategy analysis; came up with the idea of making a distinction between needs, wants and lacks which was later adopted by Hutchinson and Waters (1987, p.54), who advocated a learning-centred method in which learners' study needs perform a crucial function .Jordan (1997) asserts that teacher's-centred approach to language teaching is 'inappropriate' and 'inefficient', that is because learners have to select a learning strategies that are realized by the teachers.

**Means analysis (MA).** was presented as an attempt to accommodate the language course to a local situation. MA investigates the considerations that Munby excluded West (1998), as cited in Songhori (2008).Dudley-Evans and St John (1998, p.125) stated that means analysis provides the "information about the environment in which the course will be run" and thus attempts to adapt any ESP course to the cultural environment in which it will be run. It is

concerned with "the acknowledgement that what works well in one situation may not work in another" (Dudley-Evans and St John, 1998, p.124).

ESP researchers, scholars and authors believe that needs analysis is a mixture of both TSA and PSA, that's because these lasts work in accordance of each other. Still, in addition to DA, SA and MA deferent methods to needs analysis were introduced: Set menu analysis (creates a menu including all the main courses from which the sponsors or learners can select), Genre Analysis (focuses on regularities of structure that differentiates texts) ...etc.

### Procedures of Needs analysis

When performing a needs analysis, the ESP practitioners can choose from several strategies, but needs to keep in mind that every procedure affects the type of the information acquired (Richards, 2002). Schutz and Derwing (1981) introduced eight (08) stages to carry a needs assessment that is to determine goals, set the limits for target population, delimit the framework of examination, choose a data collecting device, gather evidence, evaluate data, to decipher outcome, and to criticize the research:

1. Determine the goals is related to the establishing the specific objective of the study to indicate and diagnose the appropriate outcome.

2. Setting the limits for target population, that is the teacher can specify the target population of the investigation in order to carry out more pragmatic decisions.

3. Delimitation the examination's frame work includes also outlining the limitations of the analysis mainly to increase its 'potency'.

4. Choose the data collecting device: involves selecting the effective data collecting instruments that suits the main purpose; like distributing surveys, performing personal interviews, or conducting observations depend on the different types of approaches

and subsequently changing the upcoming stages; relies upon the environment, range and goals of the language course.

5.  By gathering the evidence, the necessary information will be compiled via the data collecting device which can be used in this process. Distinctive kinds of data collecting device.

6.  After gathering the needed information, the teacher has to evaluate the data. This kind of analysis may adopt deferent manners whether the use of the computer assist method or simply relying on his observations and calculations. The first method tends to be more practical, time saving and less stressful unlike the second one.

7.  Deciphering the outcome refers to the procedure of decoding the collected data. The analyst seeks to deduce suggestions and solutions regarding the learners' language requirements by using the product of data investigation.

8.  The criticism of this analysis involves writing recommendations for additional studies and clarifying the drawbacks of it.

The above mentioned steps are not the only methods available to conduct the appropriate analysis. Nevertheless, it has been applied by numerous ESP practitioners. However, Gravarr, Richards, and Lewis (1997, as cited in Richards, 2001, p.46) present other practical procedures that have been used in investigating the language needs of non-native students of English at New Zealand University, which are listed as follows:

1.  Literature survey

2.  Analysis of wide range of survey questionnaires

3.  Contact with others who had conducted similar surveys

4.  Interview with teachers to determine goals

5.  Identification of participating departments

6. Presentation of project proposal to participating departments and identification of liaison person in each department

7. Development of a pilot student and staff questionnaire

8. Review of the questionnaire by colleagues

9. Piloting of the questionnaire

10. Selection of staff and student subjects

11. Developing a schedule for collecting data

12. Administration of questionnaire

13. Follow-up interview with selected participants

14. Tabulation of responses

15. Analysis of responses

16. Writing up of report and recommendations

Clearly, these procedures are not fixed to any conducted analysis. The analyst has to distinguish between the suitable steps to be applied as the ones to skip.

## Needs Analysis Data Collective Methods

Deferent methods were applied in ESP when carrying students' analysis, which opt for investigating the various linguistic features of the used language in the target situation. Also, they seek to examine the 'complexities' of the learners' objectives. Jordan (1997) suggested thirteen (13) methods to collect data for NA:

1. Advance documentation

2. Language test (at home and/or on entry)

3. Self-assessment

4. Observation in class; monitoring

5. Class progress test and error analysis

6. Surveys, questionnaires

7. Structured interviews

8. Learners' diaries and journals

9. Case study

10. End-of-course test

11. Evaluation feedback

12. Follow-up investigation

13. Previous research

ESP course designers adopt several methods of data collection methods in order to cover the most needs of learners in a form of priorities. Six data collection methods were presented by Dudley-Evans and St John (1998.p, 132), which are: questionnaires, structured interviews, observations and assessments, discussions, and analysis of both authentic spoken and written texts. Data collections methods are widely used by ESP course designers to well determine the main objectives of learning a language, the target situation where the language used also to define the learners' requirements and the skills needed.

**The Importance of Needs Analysis**

Needs Analysis is a starting point in designing an effective ESP course; it is  very important procedure that guides the teacher to properly design a course that fit perfectly the target learners, as well as designing a suitable syllabus, selecting the right materials, and developing activities. According to Jordan (1997:22) said that "needs analysis should be the

starting point for devising syllabus, course materials and classroom activities". Moreover, NA can identify the language issue among the learners; Schutz and Derwing (19981: 31) confirm that: "...a detailed analysis of the situations of language use is a pre-requisite even to the selection of the particular linguistic forms or structures that ought to be taught."

Hawkey (1980:81) declared that "language training situation with reasonably specific occupational or educational objectives involving a reasonably homogeneous group of learner." Meaning that, NA is an effective tool for designing ESP courses which fulfil the learners' target goals.

Following Shutz and Derwing (1981: 30), NA is known as the initial procedure that any course designer should take into account. They stated:

"Many well-intentioned language programs ... have foundered because either no consideration was given to the actual use the learner intended to make of the language or because the list of uses drawn up by the course designer was based on imagination rather than an objective assessment of the learner's situation, and proved to be inaccurate and in many cases entirely inappropriate to his real needs."

Basturkmen (2006:18) who states that: "the task of the ESP course developer is to identify the needs of the learner and design a course around them". The English teacher (ESP practitioner) has to investigate and analyzes the target learners' purposes in order to develop a precise content in which the target objectives will be well covered and filled, NA is a must for course designers.

Dudley-Evans and St John (1998:125) stated that NA is a mean to identify the following concepts:

**1-Professional information about the learners**: the tasks and activities learners are/will be using English for- target situation analysis and objective needs.

**2-Personal information about the learners:** factors which may affect the way they learn such as previous learning experiences, cultural information, reasons for attending the course and expectations of it, attitude to English- wants, means and subjective needs.

**3-English language information about the learner:** what their current skills and language use are- present situation analysis.

**4-The learners lacks:** the gap between present situation analysis and target situation analysis-lacks.

**5-Language learning information:** effective ways of learning the skills and language-learning needs.

**6-Professional communication information about learners:** knowledge of how language and skills are used in the target situation.

**7- What is wanted from the course.**

**8-Information about the environment:** in which the course will be run- means analysis personal information about learners

### Conclusion

This chapter defines NA based on scholars and researcher's perspectives as well as its deferent types have been provided. It also highlights the procedures should be take into account when performing NA, then, NA models. The current chapter discussed the importance of NA in designing an effective ESP courses. It is a crucial step in developing ESP courses. NA is highly advisable to collect as precise as possible of knowledge about the

target learners. The variety of the data gathering tool in NA helps ESP practitioner to frame the course by classifying the previously collected data and purposes about learners based on their needs.

# Chapter Two

# English for Specific Purposes

# (ESP)

The emergence of English as a global language led to the appearance of a new field named ESP. This last has become a new branch in ELT (English Language Teaching) which focuses on course designing that identifies and meets the student's specific needs and purposes either academic or professional. This chapter presents useful definitions of ESP in an attempt to understand its nature, an overview of EST (English for Science and Technology). Also, we will deal with the deferent approaches used to design ESP course. Furthermore, we will discuss the role of the ESP practitioner.

## English for Specific Purposes (ESP)

**Definition**

Since the 1960's ESP has become one of the important and active branches of Applied Linguistics in general, and of teaching English as a second language or as a foreign language (TESL/TEFL) in particular. Linguists and scholars were debating to come up with a clear definition and idea of the new branch. Some described ESP from an abroad perspective; some others were more precise. Many defined ESP in terms of what it should be and what it should not be, As Anthony (1997: 9-10) stated:

> Some people described ESP as simply being the teaching of English for any
> purpose that could be specified. Others, however, were more precise describing it
> as the teaching of English used in academic studies or the teaching of English for
> vocational or professional purposes.

Some researchers saw that ESP refers to the teaching of the English language in any given field for a general purpose; others mentioned that ESP is related to teaching English to achieve academic, vocational, or professional purposes.

According to Widdowson (1983: 6), ESP focuses on shaping the learners to meet their objectives in a way that they can easily cooperate with different identified tasks to facilitate the process of achievement of the set purposes. According to him, the purpose is related to the practical use to which the language will be put to achieve professional and academic objectives. He defined ESP as:

> A training operation, which seeks to provide learners with a restricted competence to enable them to cope with certain, clearly defined tasks. These tasks constitute the specific purposes, which the ESP course is designed to meet. The course, therefore, makes direct reference to eventual aims.

ESP is a procedure to reach a restricted set of aims in order to fulfil the learners' needs; ESP courses enable the learners to meet their academic or occupational needs effectively.

The definition of ESP has been developed over these past years. (Dudley- Evans and St John 1998, Mackay and Mountford 1978), were constantly argued to come up with a refined definition to ESP and all the possible issues related to it. "ESP is generally used to refer to the teaching of English for a clearly utilitarian purpose." Mackay and Mountford (1978: 2). Meaning that English should be taught to reach a specific language skills using 'real situations', in a way that allows the learners to utilize the language (English) either in their future profession, or to understand and be familiar with the English discourse related to their specific areas. Besides, Mackay (1978) mentions that learners' communication needs are a fundamental requirement in designing both syllabus and materials; he notes:"ESP courses are those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learners" (p. 2).

ESP is a field of teaching / learning English of a specialized content depends on the target purposes. The teaching materials, content, and methodology are determined only by the

specific purposes and needs of the target learners. Thus, ESP is an approach to language learning based on learners' needs; it is "goal-directed". ESP is a way to language teaching regards the learners' needs and reasons for learning a language. As stated in Hutchinson and Waters (1987:19):

> ESP must be seen as an approach not as a product. ESP is not a particular kind of language or methodology, nor does it consist of particular type of teaching material. Understood properly, it is an approach to language learning, which is based on learner need. The foundation of all ESP is the simple question: why does this learner need to learn a foreign language?...ESP, then, is an approach to language teaching in which all decisions as to content and method are based on the learner's reason to learn.

They do not consider ESP as a product, but as an approach in ELT that involves neither a particular teaching methodology nor a specific type of language. According to them, the major key of ESP is the target learner's need which is "the reason for which the student is learning English" (Dudley- Evans and St John, 1998: 3). They set the principles of ESP based on the answer to the question "why does this learner need to learn a foreign language? The given answers will determine the suitable and appropriate methodology, content, and materials used in teaching English, and consequently frame the needs in ESP.

As for Stevens (1988) asserted that "ESP is a particular case of general category of special-purpose language teaching; the same principles apply no matter which language is being learnt and taught" (p. 2). The scholar proposed two distinctive characteristics of ESP which are: absolute (invariable) characteristics and variable characteristics.

According to him, the absolute characteristics of ESP comprise English language teaching which is:

- Designed to meet specified needs of the learners;

- Related to content, to particular disciplines, occupations and activities;

- Cantered on the language appropriate to those activities, in syntax, lexis, discourses, semantics and so on and analysis of the discourse,

- In contrast with "General English".

 Variable characteristics: ESP may be, but is not necessarily:

- Restricted as to the learning skills to be learned (for example reading only);

- Not taught according to any pre-ordained methodology.

 Understanding the key concepts of ESP has become much easier due to Stevens's (1988) division into characteristics which considered as basic standards in ESP teaching. It stresses the target needs of the learners. According to Stevens, ESP teaching should be related with the course content; the scheduled themes have to reflect the quality of the designed language. The elaborated activities must present specific linguistic features such as syntax, text, lexis, discourse, semantics...etc. in contrast with "General English". The variable characteristics of ESP in the scholar's view may be adapted to teach the learners a restricted language skill (reading, speaking, writing, or listening). The methodology may not be much important in teaching ESP course.

 Robinson's (1991) suggested the primacy of needs analysis to identify the nature of ESP courses in order to illustrate the learners needs the language. She tends to define ESP in terms of two basic criteria, referring to ESP as "normally goal-oriented" as it is

designed and elaborated based on the needs analysis (to discover as specific as possible needs of the target learners). Dudley-Evans and St John (1998: 3) declared that:

> Her [Robinson's] characteristics are that ESP courses are generally constrained by a limited time period, in which their objectives have to be achieved, and are taught to adults in homogenous classes in terms of the work or specialist studies that the students are involved in.

The general characteristics described by the scholar set the key concepts of ESP courses; which are as follows: ESP courses are designed for adults who have "an homogeneous classes; 'who have a common professional or job-related reasons to learn English'; depends on their professional background or speciality; the course will take a limited period of time, yet the target purposes must be fulfilled.

The above mentioned definitions seem quite similar concerning the nature of ESP, its general principles, and ideas; others tend to have some detailed similarities. Schleppegrell (1990) proposed some shared components in all ESP performance is that they are designed for adults who have equal constituent elements depends on their professional background or specialty, common setting where the English language is practiced; also, learning strategies that are properly elaborated. In ESP, It is quite clear to affirm that the learners are the reason behind learning and using the language in a certain context, the well-developed learning strategies, and the awareness of the exact purposes (vocational or professional). However, all the definitions do have some weaknesses. That appears in Anthony's (1997), who claim that ESP definition that presented by Hutchinson and Water's appears not pretty convinced when the ESP courses end and GE courses began.

Dudley-Evans and St John's (1998) seem to be interested with the Stevens (1988) definition, which appears to be the most convinced among the others. Stevens definition of ESP stresses on the content in the absolute characteristics, which obviously explained the false impression held by many ESP teachers; that ESP is always and necessarily related directly to subject content. Also, the 'homogenous classes' mentioned by Robinson, as characteristic of ESP may lead to the same conclusion. Dudley-Evans and St John's (1998) took a step further by modifying, developing, and improving the weaknesses of the other researchers, using the "absolute and variable characteristics" presented as follows:

**Absolute Characteristics**

- ESP is designed to meet specific needs of the learner;

- ESP makes use of the underlying methodology and activities of the disciplines it serves;

- ESP is centred on the language, grammar, lexis, register, skills, discourse, and genres appropriate to these activities.

**Variable Characteristics**

- ESP may be related to or designed for specific disciplines;

- ESP may use, in specific teaching situations, a different methodology from that of GE;

- ESP is likely to be designed for adult learners, either at tertiary level institutions or in a professional work situation. It could, however, be used for learners at secondary school level;

- ESP is generally designed for intermediate or advanced students. Most ESP courses assume basic knowledge of the language system, but they can be used with beginners

Dudley-Evans and St John's (1998) maintain Stevens' definition of ESP, but have removed the Fourth absolute criteria; ESP is in contrast of GE; the scholars clarify that teaching  ESP is not necessarily related directly to the content ( discipline); however, it should serve the target concepts in term of lexis, syntax , semantics, and activities. The adopted methodology in teaching ESP should be different from the one used in GE classes, it has to create a sense of interaction between the ESP teacher and the learners and between the learners themselves. They added that the used language must be embraced as a defined characteristic in ESP. As the targets objectives are determined by needs analysis are associated with the implementation of the activities, a major assumption in ESP is that these activities are associated with the language.

Dudley-Evans and St John (1998: 188) noted that:

ESP learners bring to their language learning some knowledge of their own specialist field and the communication within it. Those who are still students or apprentices to the specialist field bring less than those who are already experienced and practicing specialist

ESP is a field that combines both the discipline (subject matter) and the language. ESP and GE not only differ in the learner method, but also in the nature of learners themselves. According to Dudley-Evans and St John (1998) ESP learners are adult, who has a prior knowledge of the language and own a considerable basic in GE; unlike, GE learners who are not familiar with the language. ESP learners bring skills and

experiences of their field of speciality to their classes, looking for learning the language related to their domain.

Accordingly, ESP is consisting of three main aspects: the setting in which the teaching/learning process occur, the learners, and the practiced language. These concepts are closely related. That is to say, ESP is the teaching of a unique language (specialized discourse) to target learners (adults) who will eventually use that language into a particular context, in order to achieve a specific purpose which will be fulfilled. ESP practitioners seem to disagree on two concepts: the type of language to be taught and the way to teach it.

### English for Science and Technology (EST)

It was noticeable that one of area of activity has been important in the development of ESP, this area known as English for Science and Technology (EST) Hutchinson and Waters (1987). Scholars were curious to find out the nature of EST; whether it is a new branch or it is a sub-branch of EOP, EAP, or shared by both. McDonough (1984) was among the fist scholars who were curious to study EST. The scholar had classified EST as a subdivision of EAP (English for Academic Processes); he affirm that; "EST' refers to teaching English for Scientific and Technological purposes".
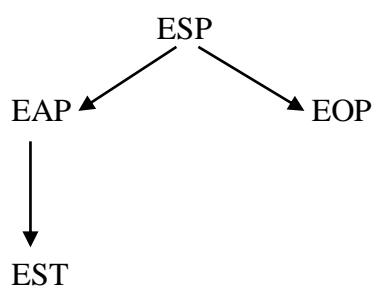


*Figure 3*: Subdivisions of ESP (Adopted from McDonough 1984: 6)

Kennedy et al (1984:6) argue that: "The term 'EST' presupposes a stock of vocabulary items, grammatical forms, and functions which are common to the study of science and technology." They also state that "EST is simply an important branch of ESP dealing with scientific content". EST considered as a major subdivision of ESP in which the scientific discourse is elaborated.

English for Science and Technology was emerged to fulfil the deferent objectives that scientists and technologists were constantly asking for; they needed to learn English in order to meet their purposes related to their special field. Due to the widespread use of both computer and internet; and the development of the world economic, the English language reaches its highest position, Robert Phillipson (1992: 6)view that: English has a dominant position in science, technology, medicine, and computers; in research, periodicals, and software, in transnational business...etc. thus, English is the widely learnt foreign language.

### ESP Course Design

ESP course design (computing) is completely deferent from the usual GE courses. The later is pretty much focuses on the course related to grammar, vocabulary, sentence structure...etc. Learners who are more interested in English Computing have to be aware that the emphasis is put on the language (specific language used). Course designers have to distinguish between the most needed and relevant information from the useless one. According to Hutchinson and Waters (1987) designing an ESP course refers to the process of asking a variety of multiple questions; from general to specific; the provided answers will determine and identify the frame of the courses in terms of syllabus, methodology, and materials. The scholars asserted that course designers must be aware of:

- Students' reasons to learn

- Participants (teachers, sponsors, inspectors, etc) involved in the process

- The setting of learning and its advantages as well as disadvantages

- The amount of time allotted to the learning period

- The teaching materials related to the aspects of language that should be included

- The level of proficiency required and the topics that should be covered

- The learning theory underlying the course and the methodology employed

Following Richards et al. (2002), course design is related to the progress of certain language, or a set of the teaching materials, it involves the way the syllabus will be conducted. It is interested with the following items:

- What teaching method (s) and materials will be needed to achieve the objectives?

- How much time will be required?

- How will classroom activities be sequenced and organised?

- What will sorts of tests be used?

- How will the programme be evaluated?

Course designers have to set precisely the target purposes which need to be well covered during the course, once the needed aims are defined, they will be transformed into a pedagogical items. This process can be the reason behind a suitable decision lead to course description, purpose, language content, objectives, outcomes, assignments, assessment, and evaluation. Hutchinson and Waters (1987: 65), is

The process by which the raw data a learning need is interpreted in order to produce an integrated series of teaching-learning experiences, whose ultimate aim is to lead the learners to a particular state of knowledge.

ESP course design is concerned; Kennedy and Bolitho (1984: 02) believe that the learners is the main concern in the course design, the learners' needs should be valued,

"as central to the problem of deciding course content". Robinson (1991: 34) states that it is the output of the interaction between the results of NA, the course designers' approach to syllabus and methodology, and existing materials. Designing ESP courses demand to take into consideration the following issues: innovation, matching the results of NA, creation of new materials and modification or adaptation of approaches to fit learners' needs (Robinson 1991: 34).  Hence, NA is considered as essential step in ESP course design.

**Approaches to ESP Course Design**

The approaches used by ESP course designers vary depends on the learners' needs that designed for the course. Robinson (1991: 35) proposed four questions to take into consideration in designing ESP courses. 1-How far are the existing syllabuses appropriate for ESP? 2- How far do they offer a suitable conceptual structure within which to realise the objectives of the course? 3- Which of the three elements (language, pedagogy, and content) is paramount? 4-How far do they combine?

Hutchinson and Waters (1987) were able to identify three types of approaches adopted in ESP course design: 1- language-centred course design, 2- skills-centred course design, 3-learning-centred course design.

**Language-centred approach**. It is the most familiar form of course design; it combines the content of ESP course along with the learners' target situation needs. The recognition of the target situation needs of the learners in accordance with the suitable selection of the language code; are the keys steps to start this approach (Hutchinson and Waters: 1987). To put it in other words, Language-Centred Approach refers to the development of the linguistic skill required in the target situation. According to Hutchinson & Waters (1987:100), investigating the learners' objectives provides the

appropriate language of the target situation, leading to the specific illustration of the syllabus which consists of the teaching methodology, materials, and evaluation procedures; meaning that, the designed syllabus should reflect the linguistic structure of the discourse. Though this approach looks logical, it seems to have some shortcomings, Hutchinson and Waters (1987) argue that this particular approach somehow overlooked some key factors concerning the learners such as their motivations, interests, passion...etc. They also view this approach as being "Structure- Centred" as it pays more attention in developing the linguistic form, rather than enhancing the learners' competence to achieve the desired performance.

**Skills-centred approach.** Skills-Centred Approach is based on two significance principles: theoretical and pragmatic (Hutchinson and Waters: 1987). The theoretical principle refers to the reception of the language behaviour and the competence production that learners use to produce or perceive written or spoken discourse. The pragmatic principle is deduced from the fact that the purposes of ESP learners is to elaborate specific procedures and competences that will eventually help them to handle any target discourse outside the class. It seems to be useful for teachers to identify and investigate the possible knowledge and abilities the learner brings to the course (Hutchinson and Waters, 1987). This approach does not treat learners as language learners but as language users, unlike Language-Centred Approach.

**Learner/ Learning-centred approach.** Hutchinson and Waters (1987): "Learning is totally determined by the learner [...] and is seen as a process in which the learners use what knowledge or skills they have in order to make sense of the flow of the new information". They suggested a new approach under the name of Learner-Centred Approach since the other two Approaches (Language-Centred and Skills-Centred) focus

more on analyzing the target needs to identify the learning process. This approach focuses more on the learners in elaborating the course, seeking the compatibility between the course components and both target situation and learning situation. Learning-Centred Approach tends to be more dynamic than the other two; feedback is allowed to discuss ambiguous situations, in with the teachers and learners collaborate effectively to assess the course content, teaching methods and decision-making (Nunan 1987: 02).

➢ The above mentioned approaches should be used in accordance with a specific situation; each approach has to be appropriate to the target situation Robinson (1991: 40).

## The Role of ESP Teachers

Since ESP and EGP defer in multiple concepts; obviously, their teachers are not the same. Scholars were debated to find a suitable term referring to each one of them. Most linguist researchers acknowledge the fact that ESP teachers' work involves more than just teaching. Dudley-Evans & St. John (1998) proposed the term "ESP practitioner". They define the following important roles of the ESP practitioner:

-Teacher

-Course designer and material provider;

- Researcher;

- Collaborator;

- Evaluator

**ESP practitioner as a Teacher**

ESP practitioners must be qualified language teacher. Teaching ESP may not be that deferent from GE teaching (Dudley-Evans & St. John; 1998:13), but the adopted methodology and the role of the ESP teacher may differ from the one of EGP teacher. In ESP classes, the teacher is no longer "primary knower" of the materials and carrier content. Most frequently, the learners seems to be the "primary knower" concerning the nature of ESP courses which includes particular knowledge of the target situation and the field of speciality. The basic role of ESP practitioner as a teacher is to generate authentic communication based on the students' prior knowledge.

**ESP practitioner as a Course Designer and Material Provider**

The role of the ESP practitioner is providing the appropriate material and designing courses in accordance with the learners' target objectives and the learning context. Dudley Evans & St. John, (1998) conform that is not an easy task to come across a reliable textbook for ESP course that covers all the requested communicative and linguistic needs of the learners in the exact context; this is where the difficulty stands. Thus, the ESP teacher has to conduct his/her own teaching materials; either by collecting materials from several sources or by writing his/her own when the desirable is not available (Kennedy & Bolitho, 1984). Besides, he/she has to assess the effectiveness of the adopted materials before and after the course.

**ESP practitioner as a Researcher**

ESP practitioner has to go beyond the field of teaching, the used methodology and the adopted strategies he/she should have passion and an interest in research. In comparison, EGP teachers do not use researches for a simple reason, that is the same traditional grammar structures are being used till this moment of speaking.

**ESP practitioner as a Collaborator**

Dudley-Evans & St. John (1998) advice ESP practitioner to collaborate with the subject of specialists (meaning to cooperate) of the discipline in a particular case; when he/she is proposed to teach a deferent discipline. There are three kinds of collaboration: simple cooperation, specific collaboration and the fullest collaboration. The simple collaboration, the ESP practitioners obtain information about the subject syllabus. In specific collaboration, the subject syllabus presents to the ESP practitioners a vision about the content of the subject course that the elaborated activities may be based on. In the fullest cooperation knowing as "team teaching" is when the ESP practitioner and subject specialists collaborate together.

**ESP practitioner as an Evaluator**

Evaluating the students' progress is not a new function to be done, but assessing the effectiveness of the course and the materials used seems new. Thus, ESP courses are often "tailor- made", the evaluation is must. Dudley-Evans & St. John (1998) asserted that "an ESP practitioner should not only evaluate the linguistic knowledge and skills of students but also the courses and materials he himself devised". The evaluation of the ESP learners and the discussion of the on-going needs help the practitioner to know the compatibility of the course and the materials used, thus the constant evaluation is crucial. In EGP, tests and exams are permanently used by the teacher to evaluate his/her students.
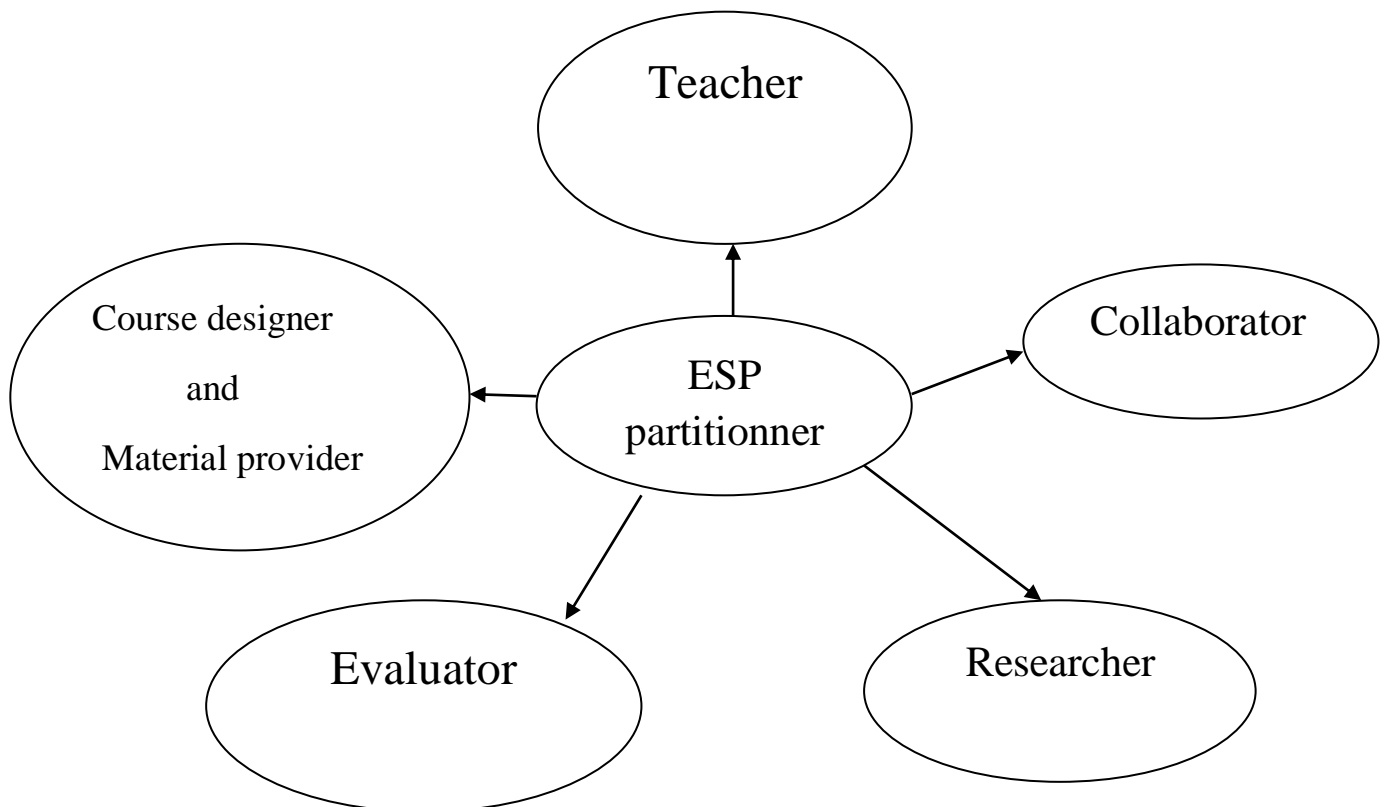
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                          ┌─────────┐
                          │ Teacher │
                          └─────────┘
                               ▲
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┌──────────────┐          ┌──────────┐          ┌──────────────┐
│Course designer│◄────────│   ESP    │─────────►│ Collaborator │
│     and       │         │partitionner│        └──────────────┘
│Material provider│        └──────────┘
└──────────────┘          ╱          ╲
                         ▼            ▼
                  ┌───────────┐  ┌───────────┐
                  │ Evaluator │  │ Researcher│
                  └───────────┘  └───────────┘
```

*Figure 4*: The role of ESP practitioner, Dudley-Evans & St. John (1998)

**Conclusion**

The current chapter defines ESP from deferent perspective that is to be as narrow as possible to its exact definition. Also, discusses the three deferent approaches of ESP course design in order to help ESP practitioners to decently select the appropriate approach to enhance learners' language proficiency level. This chapter spots a considerable light on the role of ESP practitioner from various angles. This part of the research focuses on the significance of ESP course design. ESP practitioners (teachers of English course) should consider their learners target objectives via the elaboration of a suitable NA, which will be the bases development of the course in order to satisfy the learners' needs. In few, ESP course success is relying on the fulfillment of the target learners' needs.

# Chapter Three

# Data Analyzing and Interpretation

This chapter is devoted to analyze, investigate, and interpret the results which have been conducted via the collection of the target learners' data. Master one students of Computer Science was selected as a sample to reveal their learning needs and to provide answers to the questionnaire (a structured questionnaire distributed online). The present study aims at outlining the importance of needs analysis in elaborating any ESP course. Also, to elevate the teacher's awareness that NA is a crucial process for an effective ESP courses. Moreover, analysing the student's needs can help novice teachers elaborate an appropriate English course.

It is highly important to acknowledge that, at the fist beginning of this work, we adopted two (02) of data collection tools: a semi-structured interview for Master one Computer Science' English teacher to undercover the process and methods used in ESP course; as well as a structured questionnaire for master one Computer Science learners in order to treat the students 'opinion about ESP course. Because of pandemic of COVID-19 and the imposed quarantine, it becomes quite difficult to conduct this work. We managed to do an online interview with the English teacher of the target students; unfortunately, it did not go as we planned. The same with the questionnaire, the proposed questions were partially answered or completely avoided; it could be a reflection of the general depression resulted from the lookdown and the increasing number of the infected people, or the misunderstanding of the questions. The reason why we decided to adopt the structured questionnaire as a data collection tool to conduct this research.

## Description of Students' Questionnaire

Students' questionnaire took a digital form as it was distributed online on master one Computer Science Facebook group; in order to treat the students 'opinion about ESP course. The number of questions was purposely decreased to avoid unanswered questions, by keeping

only the key questions related to the nature of the work. However, we faced some unanswered once. The asked questions investigated the nature of ESP course and the means used in elaborating that kind of courses. Also, students' attitude and opinion toward their English course.

**Analysis of Students' Questionnaire**

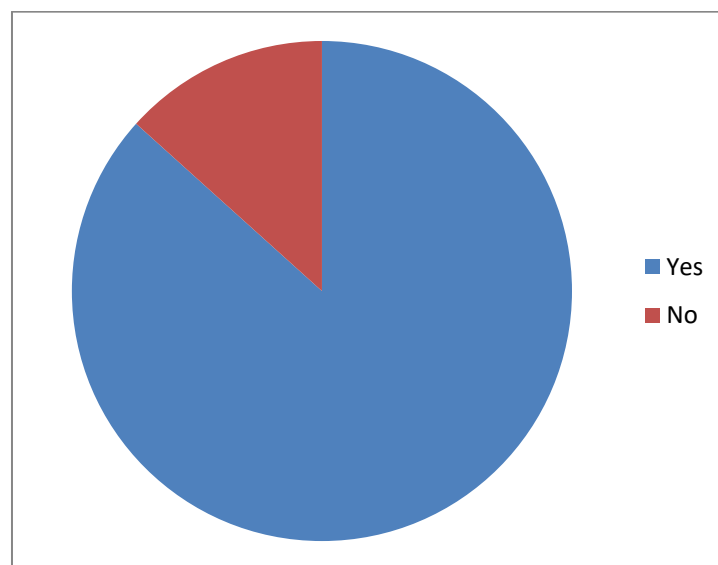Question 01: Do you consider English important in your study?



*Figure 5*: The Importance of English

According to the result recorded in this figure, 87% of the learners answered "yes", while 13% answered "No". Basically, the question was asked in order to investigate the importance of English for the target learners, the majority of the Master-One Computing students show the importance of the English language towards their studies, unlike the minority of the rest.

One can conclude that English is very important in their studies, as the overwhelming majority expresses the importance of it; they are likely to be very motivated in their studies.

Question 02: Do you use English in your studies?
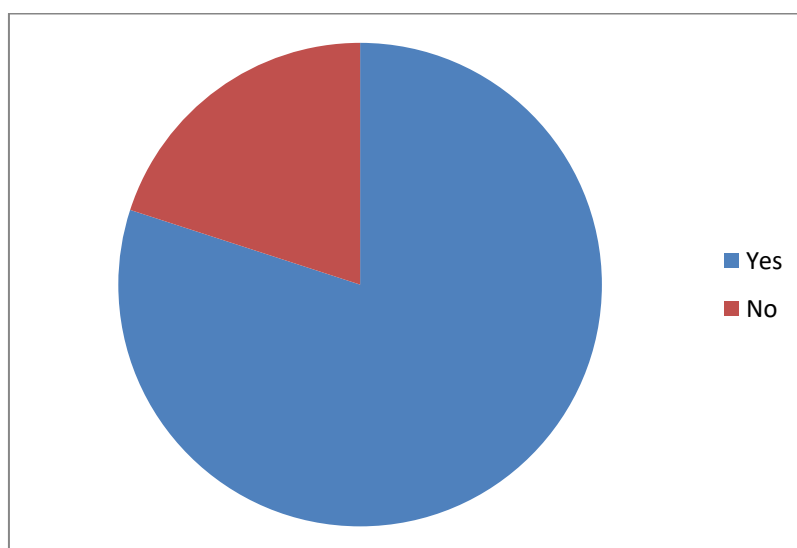


*Figure 6*: The Use of English

The figure indicates that: 80% of the responses do use English in their field of study; however, 20% of the giving responses show the opposite. Even though French is the dominant language in our education system, especially for Computer science; teachers tend to present, write, and explain lesson using the French language. The result seems interesting, it presents that also English is used in some fields of study.

Question 03: If "yes", is it

*Table 1*

*The Medium of English Used in Students' Studies*

| Responses | To write | To speak | To do both | Not answered |
|---|---|---|---|---|
| Participants | 05 | 02 | 04 | 04 |
| Percentage | 33,33 | 13,33 | 26,66 | 26,66 |

The above table indicates that: 05 participants (33,33) reported that writing form is the most used in Computer science, 04 others (26,66) reported that they used both medium, 02 of the learners (13,33) say that the speaking form seems to be used by some. As the English reaches its dominant position worldwide, writing in English become highly required which took deferent academic forms (research, application, letters...etc). Speaking in English language is obviously absent due to the fact that oral conversations are unpractised.

Question 04: Evaluate your current level in English.

*Table 2*

*Evaluation of the Learners' Current Level*

| Levels | Very weak | Weak | Average | Good | Very good |
|---|---|---|---|---|---|
| Frequency | 02 | 4 | 6 | 3 | 0 |
| Percentage | 13,33 | 26,66 | 40 | 20 | 0 |

The above table indicate that: 13, 33% of the responses reported that they have very weak level in English, 26,66% of them consider their level as weak, 40% shown an average level in English, 20% of the responses reported that they have a good level. The results conducted from the table indicate that a respected percentage of the responses do have an average level in English.

Question 05: Describe your English proficiency level in the following language area.

*Table 3*

*Students' Proficiency Level*

| Language area | Very weak | Weak | Appropriate | Good | Very good |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| Grammar | 6,66% | 13,33% | 60% | 13,33% | 13;33% |
| General vocabulary | 6,66% | 6,66% | 53;33% | 20% | 13,33% |
| Specific vocabulary | 20% | 26,66% | 33,33% | 20% | 0% |
| Pronunciation | 6,66 | 20% | 46,33 | 13,33% | 13,33% |
| Speaking | 26,66 | 20% | 40% | 13,33% | 0% |
| Listening | 13,33% | 26,66% | 46,33 | 13,33% | 0% |

| | | | | |
|---|---|---|---|---|
| Reading | 6,66% | 26,66% | 46,33% | 6,66% | 13,33% |
| Writing | 6,66% | 20% | 53,33% | 13;33% | 6,66% |

The results that have been summed up in the table reported that master one Computer Science have an average proficiency in English in all language skills: 40% in grammar, 53,33% in general grammar, 33,33% in specific grammar, 46,33% in pronunciation, 40% in speaking, 46,33% in listening, 46,33% in reading, and 53% in writing. The table shows some learners do have lack of proficiency level in English (weak or very weak) naming that: special vocabulary and speaking 46,66% , 39,99% in listening, 33,32% in writing. In other words, learners seem to have problems in the productive skills (speaking and writing) which are the reflection of the poor linguistic input they have on both skills.

Question 06: Which aspect(s) of the course you want the teacher to focus on:

*Table 4*

*The Aspect that Teacher Should Focus on*

| The aspects | Frequency | Percentage |
|---|---|---|
| Grammar | 1 | 6,66% |

| General ocabulary | 0 | 0% |
| Specific vocabulary | 2 | 13,33% |
| Pronunciation | 3 | 20% |
| Speaking | 3 | 20% |
| Listening | 1 | 6,66% |
| Reading | 2 | 13,33% |
| Writing | 3 | 20% |

Pronunciation, speaking and writing are ranked fist as the lost needed skills (aspects) to be focused on in English for computer science, both specific vocabulary and reading ranked the second, grammar and listening were ranked in the third place, but it seems like no one voted for general vocabulary (0%) which means that non of master one students needs general vocabulary to be focused on or even included in their course. As shown in table 04 , the learners want the focus of the English course revolve on the productive skills (pronunciation, speaking and writing) as it shows the knowledge and skill the learners have (speaking related to communication and the oral practices of the outside world for instance: voice calls…etc. Meanwhile, writing used in e-mail, letters,…etc.)

Question 07: Does the English course content have a relation with your discipline (computing)
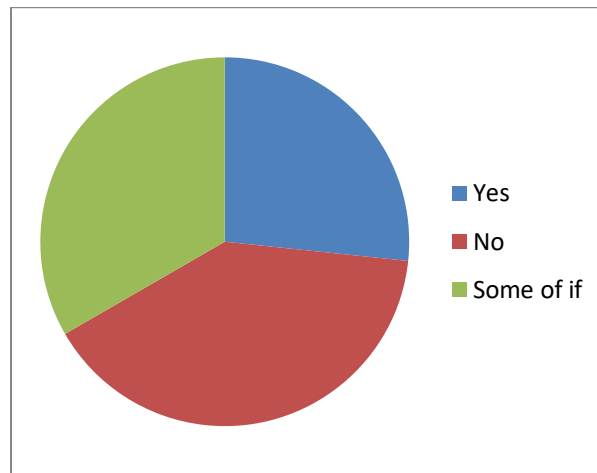
*Figure 7:* Relationship between the English Course Content and Computer Science

Figure 7: expresses the relation between the English course of master one of computer science and their field of study. 40% reported 'no', 27% said 'yes', 33% reported that' some of it'. The provided result indicate that a respected number of learners do not find a relation between their field of study and the English course, however 60% of the learner do find/ may find a relation between both their field of study and the English course.

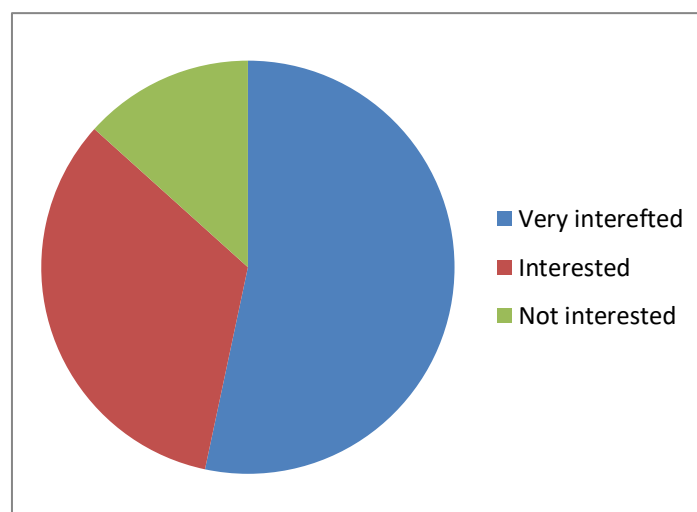Question 08: How interested are you in the English course?



*Figure 8:* Students Interest in Their English Courses

According to the result, 13% of the answers provided showed a negative attitude about the course. However, the rest of the learners were positive; 33% were interested and 54% were very interested about the English course. The participants who express their positive attitude toward the English course may be motivated to attend, or feel that the course satisfied his objectives needed, or consider English as an absolute necessity, unlike the rest.

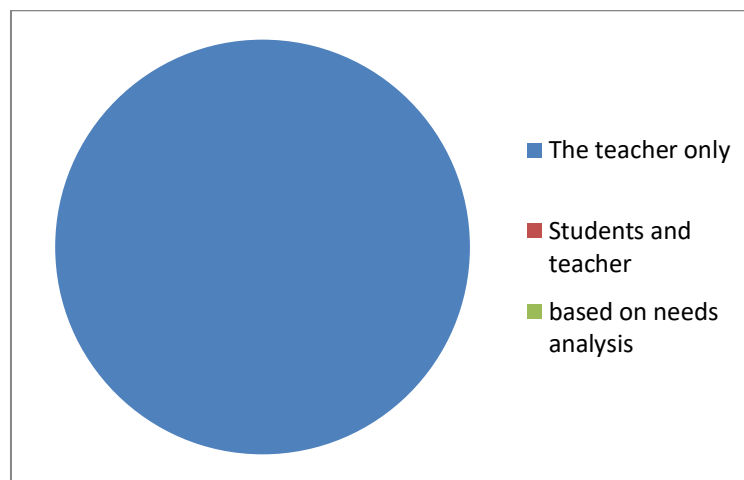Question 09-Is the current course designed by:



*Figure 9:* The Basis of the Course Design

Figure 9 said it all, 100% reported that the current ESP courses (English courses) are designed by the teacher only. Meaning that the learners' objectives are completely neglected, also the absence of the learners' needs analysis implementation.

Question 10: Do you use books/documentation in your own field printed in English?
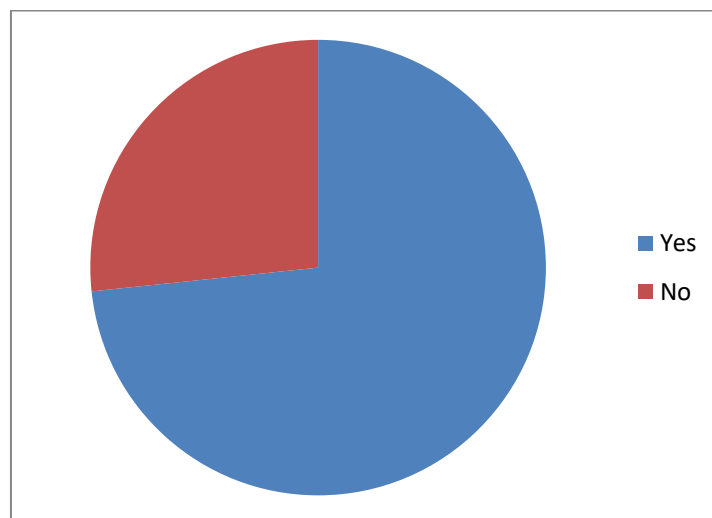


*Figure 10*: The Use of Computer Science Books/ Documents in English

The recorded results indicated that 27% of the responses said 'No' while 73% of them said 'Yes'. The percentage showed the majority of the learners do use specific documents/books printed in English, however the rest do not. According to Kennedy and Bolitho (1984: 11) argue that "providing access to technology and science" meaning that using documents/books in English considered as a course to access to technology and science.

Question 11: If "Yes", how often:

*Table5*

*Percentage of the Use of Books/Documents in English*

| Responses | Rarely | Sometimes | Often | Always |
|---|---|---|---|---|
| Frequency | 1 | 7 | 5 | 2 |
| Percentage | 6,66 | 46,66 | 33,33 | 13,33 |

According to the result 6,66% of the answers select 'rarely', 13,33% select 'always', 33,33% selected 'often', 46,66% as the highest percentage answered 'sometimes'. The results show that the majority of the learners do sometimes used documents/books written in English.

Question 12: Does your English teacher encourage you to use specific documents in English?



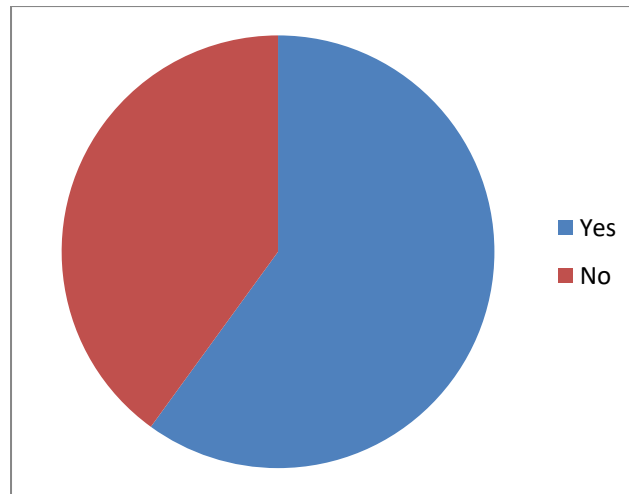*Figure 11*: The Use of English Book/Documents

From the result shown in Graph 07, the majority of the learners 60% reported 'yes', while the rest 40% answered 'no'. From the previous question and the result of the current one, we can notice that master one students are encouraged to use English via documents/books.

Question 13: If "yes", is it:

*Table 6*

*The Purposes of Using English Books/Document*

| Objectives | Frequency | Percentage |
|---|---|---|
| To develop your knowledge in the domain of Computing. | 06 | 40% |
| To write summaries/essays related to your field. | 06 | 40% |
| Others | 03 | 20% |

Table 06 presents the purposes of using the documents/book which written in English, 40% of the responses selected the first option, 40% were for the second one, 20% expressed deferent objectives. The documents/books used in computer science English classes were used under the purposes of both developing the learners' knowledge in their domain of computing, and to write summaries/essays related to their field of study.

Question 14: Are you really satisfied with English courses at your university
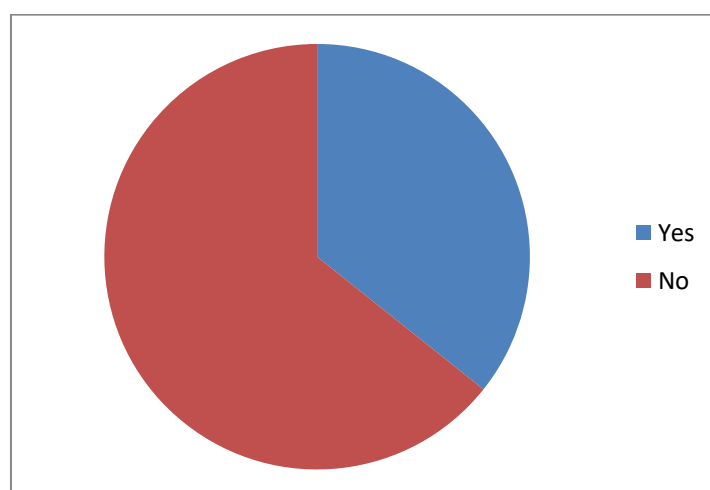


*Figure 12:* Students' satisfaction

Figure 12 Sum up the results recorded about the learners' satisfaction about their English course. The majority voted for 'no' by 64%, 36% voted for 'yes'. We can clearly notice

master one students of computer science are quite disappointed about their English course. Because of multiple reasons (the learners who answered the questionnaire did not provide us with accurate reasons of their dissatisfaction).

### Discussion of Findings of Students' Questionnaire

After the analysis of the result provided in the students questionnaire, in which we opt for investigating and interpreting the English course of master one students of Computer Science at Mohamed Kheider Biskra University. Also, to raise awareness of needs analysis importance in ESP courses. Based on the results obtained and despite the dissatisfaction and the inappropriateness of the content, Computer Science students are aware of the importance of English in their field of study and career; a respected number of them are quite motivated and interested about the English course because of its position. Unlike the rest who seems lack motivation in learning English as the French language dominates our education system and it is the widely spread in the world of computing. Moreover, the target students do have lack of proficiency level concerning the productive skills (speaking and writing) which they asked for reconsideration of the course content, developing communicative activities and oral practises would be helpful.

As far as the current findings are concerned, it is revealed that most on the conducted ESP courses (English courses) do not meet the target students' purposes; instead, ESP practitioners deliver the course relying on previously planned syllabus, that is the major reason behind the learners' dissatisfaction, lack of motivation, lack of proficiency and lack of interest. It is highly important and recommended to the teachers of ESP to consider their target students' purposes and aims via conducting a suitable NA. This last, is the essential step in the procedure of designing an effective ESP course to satisfy the learners aims.

## Delimitation of the Study

The research at our hands has encountered some inconvenient circumstances. The pendemic of COVID-19 was the major obstacle Faced while conducting this work. It is common that the English course taught in the deferent departments elsewhere but the department of foreign languages is considered as irrelevant session, it is quite difficult to name the current English courses as 'ESP courses'.  The sampling is only concerned with Master one students of Computer Science at Biskra University; therefore the study is restricted to a small number of students and the data collected might not be generalized to other settings. Moreover, the digital form the questionnaire took, the absence of face-to-face clarifications and contacts made it quite difficult to gather reliable responses in case of misunderstanding the questions or the embarrassment toward others.

## Recommendation

The finding of this research may contribute in the improvements of ESP course of Computer Science at Mohamed Kheider Biskra University, it is necessary to suggest some helpful solutions in order to fulfil the target learners' purposes. It is recommended that:

**The curriculum:**

- The common English courses taught under the name of ESP course have to be modified and developed to a pure ESP courses that obeys the rules mentioned earlier.

- NA must be the initial step in the procedure of conducting the learners' specific objectives as it limited the focus of the learners which the ESP courses should be elaborated based on. Deferent data gathered methods are proposed to get as close as possible to the learners' needs.

- Based on the collected data, the productive skills (speaking, writing) needed more attention in conducting the course, more oral practises and written activities must be involved in the course not only to enhance the learners' achievements but also to motivate them in their future career of specialization, since speaking and writing are the main factor of impression and evaluation in any domain.

**The ESP practitioner :**

- ESP practitioner must be qualified and aware of his/ her role in teaching/ learning process.

- ESP practitioner should be aware of his/ her learners' target purposes, thus the development of the course will be based on in order to satisfy the target learners and fulfil their specific needs.

### Conclusion

The chapter survey's target students' needs, it dealt with the analysis of the data gathered from the questionnaire. This work tried to analyze, to interpret, and to conduct master one students of Computer Science' purposes and objectives toward the English course. Moreover, this part of the work investigated the satisfaction of the learners' needs. Depending on the result mentioned earlier in this chapter, NA is an important tool to elaborate a suitable, proper, and satisfying ESP course. The ESP practitioner should not rely on the 'already planned syllabi' but on the investigation and the collecting of the target students' objectives from the course, he/she should not neglect his/her learners' purposes, in fact he/she should berry in mind that the target learners' needs must be fulfilled. NA is significant when it comes to the success of the ESP course.

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**Appendix A**

Students' Questionnaire

The presented questionnaire is designed or a Master Two dissertation. It intended to investigate 'Needs analysis as a tool for designing an effective ESP course'. Your participation would be a great help for this research.

You are expected to read carefully the questions and to provide as much honest and straightforward answers as possible.

**Please tick ( ✓ ) the appropriate box or make full answers to express to opinion.**

Thank you in advance.

Sincerely yours,

Miss N. Telmami

1-Do you consider English is important in your study?

Yes ☐          No ☐

2-Do you use English in your study?

Yes ☐          No ☐

3- If 'yes', is it mainly:

a) To speak ☐

b) To write ☐

c) To do both ☐

4-Do you consider your current level in English :

Very low ☐    Low ☐    Medium ☐    Good ☐    Very good ☐

5-Describe your English proficiency level in the following language area. Tick (✓) the

appropriate box.

| Language area | Very weak | Weak | Appropriate | Good | Very good |
|---|---|---|---|---|---|
| Grammar | | | | | |
| General vocabulary | | | | | |
| Specific vocabulary | | | | | |
| Pronunciation | | | | | |
| Speaking | | | | | |
| Listening | | | | | |
| Reading | | | | | |
| Writing | | | | | |

6-Which aspect(s) of the course you want the teacher to focus on more :

| | |
|---|---|
| Grammar | |
| General vocabulary | |
| Specific vocabulary | |
| Pronunciation | |
| Speaking | |

| Listening | |
|---|---|
| Reading | |
| Writing | |

7-Does the English course content have a relation with your discipline ( computing )

Yes ☐                              No ☐                              Some of it ☐

8-How interested are you in the English course?   Not interested at all ☐

Somehow interested ☐

Very interested ☐

9-Is the current course designed:   By the teacher only ☐

By students and their teacher ☐

According to students' needs ☐

10-Do you use books/documentation in your own field printed in English?

Yes ☐                              No ☐

11- If "yes", how often:

| Rarely | |
|---|---|
| Sometimes | |

| Often | |
| --- | --- |
| Always | |

12- Does your English teacher encourage you to use specific documents in English?

Yes ☐          No ☐

13- If "yes", is it for:

Objectives                        Responses

To develop your knowledge in the

domain of Computing.

To write summaries/essays related to

your field.

Others

14- Are you really satisfied with English courses at your university?

Yes ☐          No ☐

15- Please justify

.............................................................................................................................................

.............................................................................................................................................

....................................................................................

**الملخص**

المذكرة التي بين أيدينا هي عبارة على تحقيق حول الدور المهم لتحليل احتياجات الطلبة في تطوير دورة اللغة الإنجليزية للأغراض الخاصة في نجاح الحصة (دورة اللغة الإنجليزية). هذا البحث مخصص لطلبة الأولى ماستر في علوم الإعلام الآلي بجامعة محمد خيضر بسكرة. يدرس عملنا طبيعة حصص اللغة الانجليزية لإغراض خاصة التي يتم إجراؤها على مستوى التعليم العالي سواء كانت تحترم الإجراء المطلوب وتتبع الأساليب المذكورة أم لا. على الرغم من الوعي العالمي بأهمية هذه اللغة ، لا يزال الأساتذة يعتمدون على تدريس اللغة الإنجليزية العامة. قد يكون ذلك ناتجًا عن سوء فهم المصطلح أو في تطبيقه وتفصيله. تظهر الغالبية العظمى من الطلاب المستهدفين اهتمامًا وتحفيزًا كبيرين تجاه اللغة الإنجليزية بشكل عام. يهدف هذا البحث إلى زيادة الوعي بمقررات أهمية تحليل الاحتياجات ، وكذلك للتأكيد على عملية اجراء تحليل لاحتياجات الطلبة التي تلبي احتياجاتهم بالكامل. يجب على أساتذة اللغة الإنجليزية تطوير و بناء حصصهم بناءً على الاحتياجات المستهدفة للطلبة. سيعزز هذا الإجراء بشكل أفضل تحصيل الطلاب في تعلم اللغة الإنجليزية لأغراض محددة. نأمل من نتائج البحث الحالي توفير مزيدًا من الاهتمام لوضع الراهن لحالة اللفة الانجليزية في مجال الإعلام الآلي بالإضافة إلى الدور الحاسم لتحليل الاحتياجات في تحقيق أهداف الخاصة للطلبة.