Students’ Attitude Towards ESP Course:
The case of first year Master Biology Students at Tlemcen University

Dissertation submitted to the Department of English as a partial fulfilment of the requirements for the degree of Master in Language Studies

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Academic Year: 2016-2017
Declaration of Originality

We hereby declare that this submission is our own work and that, it contains no material previously published or written by another person nor material which has been accepted for the qualification of any other institution. We also certify that the present work contains no plagiarism and is the result of our own investigation, except where otherwisestated.

Miss Soumia Bouhafs
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Date 17/05/2017
Dedication 1

To those who intensely supported my determination to find and realize my potential; my parents

To my dearest sister for her motivational and moral help, to my little twins brother and sister, and special thanks go to my closest friend Soumia with whom i share the whole academic life.

Amel
Dedication 2

I would like to dedicate this modest work to my father who taught me that the best kind of knowledge to have is that which is learned for its own sake, to my mother who taught me that even the largest task can be accomplished if it is done one step at a time, to my lovely sisters: Hidayat, Rihab, Aya, and Israa and to my intimate friend Amel with whom I shared this work and the whole university life.

Soumia.
Acknowledgement

This research project would not have been possible without the support of many people. First and foremost, our utmost gratitude to our supervisor, Dr. Chams-Eddine Lamri who was abundantly helpful and offered invaluable assistance, support and guidance.

Our appreciation also goes to examiners, Dr. Abdelkader Bensafa and Dr. Wassila Graia Bouklikha that they will provide constructive comment on this thesis, we are thankful that in the midst of all their activities, they accepted to be members of the reading committee. Furthermore, We convey special acknowledgement to Prof. Hafida Hamzaoui for her continuous help and her supportive pieces of advice.

Finally, we would like to express our gratitude to Biology students and ESP teachers in this study for providing the necessary data which helped in the realization of this work.
Abstract

Language attitude is one of the major factors that differentiate between accomplishment and failure in language learning. Indeed, it is one of the learning factors that determine student’s success. This study was conducted in order to gather information regarding the issue of attitude within the context of ESP. The main purpose of the study is to identify first year Biology Master students’ attitudes, in particular towards their ESP courses. Hence, two research instruments were used to collect data; a questionnaire for the students and a structured interview for the ESP teachers at the department of Biology at Tlemcen University. The quantitative and qualitative analysis of the gathered data revealed that the majority of Biology students are motivated to learn English and aware of the necessity of their ESP courses. To further reinforce positive attitude towards ESP, a number of suggestions and recommendations were put forward as the use of ICTs, teacher’s technological skills training, authentic teaching materials and collaboration between language teacher and subject specialist. To conclude, the present work showed that studying learner’s attitudes is a variable of paramount importance for understanding the process of ESP teaching and learning.
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List of Acronyms

**EFL**: English as a Foreign Language

**L1**: First Language

**L2**: Second Language

**LWC**: Language of Wider Communication

**U.S**: United States

**TV**: Television

**ELT**: English Language Teaching

**ESP**: English for Specific Purposes

**EST**: English for Science and Technology
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GENERAL INTRODUCTION
GENERAL INTRODUCTION

Nowadays, it has become extremely important to acquire the English language due to its presence in almost every domain in life. Thus, to have access to any scientific material on the internet or to use technological products, the mastery of the English language is required. So in any country in today’s world, English has become a necessity for inclusion and Algeria is no exception. Due to the fact that English has emerged as an international language and then as a global language, ESP has become one of the main branches since 1960s which is based on learners’ needs for specific level of achievement, therefore it has become an important subject to be taught in different fields in the Algerian universities, such as the field of engineering, biology, law and administrative sciences and so on.

Previous research in the field of Biology showed that the English language is needed for scientific and technological purposes (EST). Biology students are also said to have difficulties in understanding materials written in English that are needed for field of study since most of their documents are published in English. This is why ESP has become part of their curriculum. However, although these students attend their ESP lectures, they still face difficulties with using English in their context, this may act as an obstacle for Biology students and may affect their attitude towards their ESP courses.

The objective of this research is to investigate the Algerian Biology students’ attitude towards their ESP courses, more precisely first year Biology Master learners at the university of Tlemcen. The researchers want to check whether these learners hold positive or negative attitude towards English taught in their department.

This research is set out to answer the following research questions:

1) What attitudes do Biology students hold towards their ESP course?
2) How can Biology students’ motivation towards learning English be stimulated?
The following hypotheses can be formulated on the basis of the above-stated questions:
1) First year Biology Master students have a negative attitude towards their ESP courses.
2) Students’ motivation towards learning English can be raised and stimulated through the application of ICTs.

In order to check whether the hypotheses put forward are valid or not, the researchers undertake a case study of thirty (30) first year Biology Master students. Quantitative and qualitative data are gathered from two different sources relying on two research instruments: a questionnaire for learners and an interview for teachers.

The present dissertation is structured into two chapters. The first chapter highlights the main elements related to the whole topic of research, starting from the status of English in the world moving to the concept of attitude by providing a broad overview of it and more precisely language attitude, attitude and motivation, its different components and its effect on achievement as well as the different factors affecting learner’s attitude. After that, the researchers focus on the concept of ESP highlighting the main elements related to it, including; characteristics of the ESP course, needs analysis and identification, motivation in ESP learning and the role of the ESP practitioner.

The second chapter starts with a description of the situation or the context where this study is undertaken. The researchers first present an overview about the department of Biology, then moving to the general ESP situation in this department. After that, the data collected through the two research instruments mentioned above are analyzed both quantitatively and qualitatively to present the results of the study. Finally, the chapter provides some suggestions and recommendation to better improve the situation and raise the learner’ motivation and interest in the classroom.
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1.1 Introduction

This chapter provides a review of the literature deemed relevant to the research objectives. This includes an overview of the status of English in the world and more precisely the English teaching situation in Algeria. Additionally, it sheds lights on the concept of attitude and its importance in language learning. Besides, it investigates the different factors that can affect the learner’s attitude. This chapter is concluded by a discussion of the most relevant theoretical bases of ESP and the objectives and characteristics of an ESP course that best meet the learner’s needs.

1.2 The Status of English in The World

Until the 16th century, English was not so much important in world communication (Crystal, 2003). Nowadays, English is said to be the *Lingua Franca* of the world. According to Graddol (1997) English is spoken by 750 million as English as a foreign language (EFL) speakers, 375 million as second language (L2) speakers, and 375 million as first language (L1) speakers.

The existence of English in non-native English countries is an important indicator for its worldwide spread. According to some scholars, such status of the English language reflects either the value attached to it (Crystal, 2003) or a sign of imposition, domination and imperialism (Phillipson, 1992; Kachru, 1985).

1.2.1 English as a Global Language

The term “international language” is distinct from “global language” in the sense that, an international language is a language used outside its geographical borders, including; English, French, Spanish, Portuguese…etc. Such languages are called: International Languages of Wider Communication (LWC). English now is qualified as a global language and the purpose behind using such term is to demarcate the English language from other international languages. According to Crystal (2003), a language can become a global language if it achieves a global status, this can be done if a language is given a special place among the world’s countries. There are in fact two ways; first, there must be a change in language
planning, more precisely, a change in the language status. That is to say, a language is made as an official language of the country, it is often described as a second language and more likely to be learned early in life. In fact, the role of an official language is today illustrated by the status of English over several countries, like; Ghana, Nigeria, India…etc. The second way on the other hand is when a language is considered as a foreign language and it is part of foreign language teaching curriculum though it has no official status. It is most likely to be taught at school. English is now the language most widely taught as a foreign language in over 100 countries, such as; China, Russia, Germany, Spain…etc.

Crystal (2003) states two major reasons for why English has become a global language, namely; the geographical historical reasons and the socio-cultural explanations. The former refers to the historical movement of the English language, starting from voyages to America and Asia to the 19th century colonial development in Africa and South Pacific where it began to be considered as an official or semi-official language in many independent states in the mid twentieth century. In a word, English is now represented in every continent, as a result of such representation, it was labeled a “global language”. The later, the socio-cultural explanations, implies that the spread of English is now viewed as a vehicle conducing to economic development and commercial expansion. It is the Lingua Franca which dominates several international domains, such; politics, business, communication, education, media…etc.

1.2.2 Practical Reasons for Learning English

The practical reasons are related to the presence of English in almost every domain in life; that is why it seems extremely important to acquire it. It allows learners to gain access to variety of materials in their own subject of interest, especially in science and technology. The list below stated by Graddol (1997), includes situations where English is used:

1) The medium used in international conferences.
2) A tool for scientific publications.
3) In international banking, for importing and exporting and other economic affairs.

4) Advertisement of the world wide brands.

5) Cultural products which are audio-visual (film, TV, popular music)

6) For tourism affairs.

7) For the university education level.

8) The widely used language for interpretation and translation.

9) The mediator for intercultural communication as well as technological development.

This variety of domains shows that in order to read a scientific article, to use technological products, to get access to research information, the mastery of language is needed. It is especially required to participate in trade, for importing and exporting with the Europe and the US, but it is also of a crucial importance for obtaining an intercultural competence, to enjoy watching world television, to use computers and video games and a huge variety of other activities for which the English language is required. In brief, English is vital to be inserted in any field today. These facts concern any country in today’s world.

1.2.3 English Teaching Situation in Algeria

The Algerian linguistic background is vast and very complex. There are in fact a number of languages taught and used either in academic or non-academic contexts, the fact that led Algeria to be considered as a unique Arab nation. As explained by Ephraim and Mala Tabory (1987):

The Algerian situation is complex, as it is at a crossroad of tensions between French, the colonial language, and Arabic, the new national language; Classical Arabic versus colloquial Algerian Arabic; and the various Berber dialects versus Arabic. The lessons from the Algerian situation may be usefully applied to analogy situations by states planning their linguistic, educational and cultural policies.
Such variety of languages (or dialects) created language conflicts as everyone was inclined to a given language issue: arabization, French-Arabic bilingualism, The English language status…etc.

As a matter of fact, teaching foreign languages in Algeria (more precisely the English language) in Algeria did not gain ground till the 1970s when it was the introduction of a new educational system (The fundamental schooling system). Didactics and educators started being aware of foreign language teaching after the Arabization process was criticized for its ignorance to the population linguistic diversity. This lack of integrating foreign languages in educational curriculum will affect negatively students’ performance at the university as well as for their future career. (Rezig, 2011)

By the development of the fundamental schooling system in 1967, teaching a foreign language, more particularly English, did not gain too much importance as Arabic in the three educational levels (primary, middle and secondary education). Unlike French which started to be taught earlier in primary school and which was re-implemented to many subjects, such as; Math and Biology after the arabisation process, English was taught as a foreign language and it started to be learned in middle school at the age of 13. (Ben Rabah, 1999)

However, starting from 1993, a new process was done to enhance English learning. Primary school pupils were given the opportunity to choose between English and French, yet such program did not last for a long time because the majority of students preferred French rather than English. In a word, since the new educational reform, the Algerian education at the three levels has not witnessed an extensive exposure to foreign language teaching, particularly the English language, yet there has been a focus only in the Arabic language, in addition to the lack of teaching English from the primary level. (Rezig, 2011)

According to Bouhadiba (2006); EFL teaching in middle and secondary school has witnessed much growth in the 1980s. Because of the spoon-feeding nature of the adopted teaching method, EFL teaching was divorced from its communicative nature. It is therefore treated by learners as a mere subject to be restricted to classroom use, such as; getting the required grades that permit them to
pass to the next level. Being the language of globalisation, English language has given a special status, it is learnt since the learner’s middle school as a compulsory subject in the four years, yet with an coefficient lower than other subjects, like; Mathematics and Science. As far as the secondary school is concerned, EFL remains compulsory in the three years stage. Its coefficient depends on which studies stream is it; it is more important for literary streams than scientific ones. (Bouhadiba, 2006). Therefore, Though the considerable efforts have been made by policy makers to enhance EFL teaching in Algeria, many difficulties have encountered such development. In fact, achieving a successful educational reform would not be easy unless having an optimistic vision and expecting positive results on the long term, yet this cannot be achieved if not all levels, from authorities to family, strive to adapt the Algerian social character, making the Algerian citizens more open and divergent to the world of globalization. In parallel, a coordination between educationalists, sociologists and anthropologists may solve most of the problems faced in the Algerian education.

1.3 Attitudes towards Learning English

The study of attitude is regarded as the cornerstone of social psychology. In fact, attitude was first studied deeply in social psychology. According to Allport (1935: 798): “Attitude is probably the most distinctive and indispensible concept in contemporary social psychology”, and so many other writers, like Bogardus (1931); Thomas and Znanicki (1918) and Folsom (1991), consider the field of social psychology as the scientific study of attitude.

1.3.1 Attitude Defined

The term attitude has been defined differently by educationalists and psychologists, and there is no consensus about a single definition which covers all types of attitude, because a concept may overlap with other psychological concepts. Therefore, the term attitude has been defined according to the context in which it is used and is limited to its own scope. Linkert (1932:9) cited in Gardner (1980:267) defines the term attitude as “an inference which is made on the basis of a complex of beliefs about the attitude object”
Chapter one  An Overview of the Main Concepts

Gardner (1980:267) elaborates on Linkert’s definition by defining attitude as “the sum total of a man’s instincts and feelings, prejudice or bias, perceived notions, fears, threats and convictions about any specified topic”.

Another definition which is often mentioned in the literature is the one of Allport (1935) which views attitude as “a mental or neural state of readiness, organized through experience, exerting a directive or dynamic influence on the individual’s response to all objects and situations with which it is related” (Banaji & Heiphetz, 2010: 356). In the same line of thought, Eagley and Chaiken agree on the idea of Allport by identifying the attitude as a “psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Gawronsky, 2007:575). Therefore, according to the mentalist tradition of cognitive psychology: “an attitude is a psychological state that cannot be observed, but must be inferred from the subject’s introspect” (Fishman & Ahegisi, 1970:138).

The behaviorists on the other hand argue that attitudes are only inferred from individuals’ responses to a given situation, i.e. the person’s attitude is strongly related to his overt actual behaviors.

According to Gawronsky (2007:575), Eagly & Chaiken’s definition is an inclusive one to attitude which is supposed to be adapted to any metaphor which describes the inner tendency that constitutes attitude. Such definition can be used for various issues; mainly: attitude expression, attitude construction, structural aspects of attitude, the distinction between implicit and explicit attitudes…etc.

Gawronsky (2007) draws an analogy between attitude and evaluation, which both form an entity. Nearly a decade later, Chaiken (2001) went back and adopted the same definition explaining that the ‘entity’ can represent anything in “a person’s internal or external social environment” (Chaiken, 2001: 899-900). In the same line of thought, Rhine (1958) argued that attitude is more than a cognitive construct, but it is an evaluative dimension which affects the individual’s behavior, that is; an attitude may involves knowledge: the person having an attitude needs to know something about the person or thing about which attitude is held. An attitude may involve feelings: the person may like, hate or enjoy. An attitude may involve experience: the person may have done something or had something done; however,
what is worth considering is that the person has evaluated another person, event or thing, such evaluation may affect the actual behavior.

The above-mentioned definitions show that the idea of attitude has a long and complex history in social psychology describing the individual’s attitude as a cognitive readiness following experience, like Allport (1967), and then when educational psychology started gaining ground in educational settings, teachers started being aware about their students’ attitudes towards their learning and its effect on their performance. Before that, schools and university education lay considerable emphasis on skills of recall, understanding and thinking, attitudes were often largely ignored.

Thinking of science many years ago, Ramsay & Howe (1969) noted that, “a student’s attitudes towards science may well be more important than his understanding of science, since his attitude determines how he will use his knowledge”, and as Gardner (1985) refers to language learner’s attitude as the reason through which he will be motivated or demotivated to learn the language.

1.3.2 Language Attitude

Attitudes play a paramount role in language learning. They are responsible for students’ success or failure in their academic lives. (Al Tamimi et al, 2009:33), (Hussein et al 2009:432), (Karahan, 2007). Pophan (2011) confessed about the importance of attitudes in language learning. According to him, students may become autonomous learners with the future if they develop a positive attitude towards their learning in an academic setting (Indahbozorgi, 2012). In the same vein, Indahbozorgi (2012) explained how the teacher should maintain a positive attitude on his/her students. According to him: “positive attitude is important in entering into the new environment of learning a new language. Teachers can maintain their positive attitude by setting a goal for themselves, building in some fun and pleasure through language, and interacting actively” (Dahbozorgi, 2012:45).

In fact, when studies on attitudes spread its interest towards the area of language, it took a new implementation. During the late 1950s; language attitudes
were studied by social psychologists in coincidence with the emergence of
mentalism as a reaction to the behaviorist approach during which views about
language started to change. Language was no more viewed as only a behavioral
phenomenon, but also as a mental internal activity. In 1960s, research on language
attitude witnessed a growing interest thanks to the works of Labov and Lambert
which both paved the way towards investigating attitudes in relation to language.
Language attitude research, then, has started to play a paramount role in a variety of
disciplines such as: the social psychology of the language (e.g., Lambert et al.,
1960; Ryan & Giles, 1982; Gardner, 1985), the field of education mainly in relation
to motivation. Ethnography (e.g., Saville-Troike, 1989) and also has become among
the major concerns of sociolinguistic research (Garrett et al., 2003:2).

1.3.3 Defining Language Attitudes

According to Smith (1996), providing a clear definition to language attitudes
remains difficult due to the complex connection between many concepts, like;
attitude, language, language attitude and also their connection with society. Another
important reason is related to the two different paradigms (mentalism and
behaviourism) which investigated language attitude into two different perspectives.
Crystal (1997:215) provides a definition of language attitudes which states that they
are “the feelings people have about their own language or the language of others”.
Myers Scotten (2006:109) on the other hand correlates language attitudes with
“assessments that speakers make about the relative values of a particular language”.

Language attitude indeed are not concerned with language itself, but it can
also cover other related subjects. Schmied (1991:164) distinguishes three types of
language attitudes: attitudes towards certain languages (stereotypes), attitudes
towards varieties of the same language (standard language vs non-standard
varieties) and attitudes towards sociolinguistic topics or language uses. Some other
researchers (e.g.; Stern, 1983:376-377) differentiate other three different types of
attitude in language learning: (a) Attitude towards the community and its people
who share the same language. (b) Attitude towards learning the language in
question (c) attitude towards language and language learning as a whole. Schiffman
(1997) on the other hand provides a much more comprehensive summary of the various types of language attitude which includes attitudes towards the status of a language, the status of its speakers or the status of a given form of the language (high vs low), or its use in certain domains, attitudes towards loyalty to own language and attitudes of a minority class towards its own non-standard variety. In brief, language attitude refers to the positive or negative feelings or evaluations that foreign language learners hold towards other languages.

Different definitions have been suggested by different scholars as an attempt to clarify the concept of attitude and language attitude as much as possible. Though no single explanation of attitude and language attitude can be found among different researchers, Kashru and Weiss (1973:761) notes that: “The community among the various definitions is illustrated by noting that attitudes are selectively acquired and integrated through learning and experience; that they are enduring dispositions indicating response consistency; and that positive or negative affect towards a social or psychological object represents the salient characteristics of an attitude”. The following section will provide another very important definition that focuses on the different components of attitudes.

1.3.4 Different Components of Attitude

The previous sections offered different definitions (proposed by different authors) of the concept ‘attitude’ which mainly turn around the positive or the negative evaluations of everything. Many models of attitude have been proposed by different researchers, some of them are: Expectancy-Value Model suggested by Rosenberg (1956), The Multi Attribute Measurement by both Calder& Leetz (1972), The Tri Partite Model offered by Spooncer (1992), The Technology Acceptance Model (TAM) suggested by Davis (1989,1993). The ABC Model is the one that is most cited in the literature (Eagly& Chaiken 1998) (Venden Berget et al 2006). This model views the attitude concept from three different dimensions, i.e. affective, behavioral and cognitive, the three were proposed by Triandis (1971). The affective component denotes the individual’s emotional feeling that is attached to an attitude object. The behavioral component denotes the individual’s attention to
behave in a specific way towards the target language. The cognitive one denotes the individual’s belief about an attitude object.

Schiffman & Kanuk (2004) on the other hand share the same conception of attitude proposed by Triandis (1971) by offering the CAC model that is also constructed around three components: a cognitive component (beliefs), an affective component (feelings) and a conative component (behavior).

Winden (1991) broader definition of attitude concept focuses on three dimension models. According to him, the concept of attitude comprises three components which are; cognitive, affective and behavioral. On the other hand, McGuire (1969: 157), cited in Osccamp (1977:10) suggests that the three components of attitude may be interrelated so closely “ that theorists who insist on distinguishing them should bear the burden of providing that the distinction is worthwhile”. This led Van Els et al (1984:116) to propose that “ it does not really matter whether all or only one of the three components are measured, the relationship between the components is so close that sufficient information on an attitude can be obtained by measuring only one component, no matter which”.

In sum, it could be said that attitude is a multi-layered concept that has stimulated the interest of many authors who have proposed multiple definitions and different models among them, the ABC model or the 3D (Three- Dimension) model of attitude which is based on the correlations between the three components of affect (feeling), behavior (dealing), and cognition (meaning).
The three dimensions are necessary to be taken into account, when they are joined together, they form an overall attitude towards an object that can be either positive or negative.

1.3.5 Attitude and Achievement

The importance of attitude has received much interests during the last two decades in the field of second or foreign language research. Many studies have been conducted focusing on the influence that attitude may have on both students’ success and their failure in language learning. Language learning in fact is strongly correlated to the attitudes towards languages. (Starks & Paltridge, 1996). According to Karahan (2007:84) “positive language attitude let learners to have positive orientation towards learning English”. Within the field of education, it was generally accepted that the learner’s level of intelligence is the first and the major factor that may have a direct influence on student’s level of proficiency in second and foreign language learning. Later on, other hypotheses have been proposed. Researchers begin to acknowledge attitude as one of the main variables impacting the process of language learning in addition to other factors. Indeed, it is believed that negative attitude related to particular subject area can prevent learners from further studies and make them unproductive (Rajab, 2007:26). Attitudes may also be developed and related to specific topics dealt with which can remain with the learner and can carry out into his future living either with positive or negative impact on subsequent decisions (Ibid).

Reid (2003:3) states that in the field of scientific education, attitudes are important in four broad areas which are: attitude about the subject studied, attitude about the study itself, attitude about the implication of what has been studied and the scientific attitude. These areas are significant for any learner in any type of study.

According to Dornyei and Csizer (2002), the positive attitude makes language learning easier while the negative one act as a psychological hindrance against learning. The idea is that having good values and evaluations about a given language may positively increase the rate and the ease of learning and vice versa. Scholars like Chamber (1999) and Ombui (2012) agree on the same idea by saying...
that the student’s attitude towards a given subject is tightly related to his academic achievement.

It is evident that language attitude impacts foreign/second language learning. Many researchers have been conducted in the area of language attitude showing a direct relationship between the type of attitude towards learning a language and the achievement in the language.

1.3.6 Factors Affecting Learner’s Attitude

What has mainly interested researchers in foreign/second language learning is the correlation between the learner’s affective state and his proficiency level. Studies have shown that the learner who develops and acquires positive attitudes learns well and more. This means that there is a close and direct relationship between the nature of attitude and the learning outcomes. As a result, a number of scholars have started to look for the determinant factors that may be influential in shaping language attitude.

1.3.6.1 Affective and Personality Factors

a) Affective Factors: According to Gardner (1985), these factors can be divided into two categories:

- Factors that precede the learner’s learning experience: Learners may develop different attitudes before being placed in the learning situation which provide a positive or negative predisposition towards language learning in the sense that the impression that the learner have towards the language, its culture and its community in general is determinant of his attitude towards the learning of that language.
- Factors that develop during the learning experience, the learner can develop a variety of attitudes about the learning situation which may be useful in determining success in language learning. In the sense that the rejection or the acceptance of learning depends on how the learner feels about learning the language. For instance, the learner can build negative attitudes if the learning situation causes anxiety.

b) Personality Factors: Personality characteristics can also have an impact on language attitude. Learning a new language requires from the individual to be opened towards the target culture and the community. So someone who is ethnocentric is likely to hold negative attitudes towards the other language and
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... predisposed to learn other languages with difficulties as opposed to someone who is anomic. Another personality trait is the extroverted learner. Strong (1953) is among the researchers who claim that the extroverted individual is the one who display positive attitudes that help him to learn faster and easier and is likely to communicate with other speakers of the target language and is exposed to more input than that of the introvert. Ellis states that “extrovert learners are sociable, risk taking, lively and active, whereas introvert learners are quiet and prefer non-social activities” (1994:518).

Another negative factor is inhibition. Inhibition in fact can act as a hindrance in learning the target language. The inhibited learner always hesitate to say anything in the other language, it prevents the individual from being successful learner due to his fear from being negatively judged or criticized when acting in the foreign language.

1.3.6.2 The Context

Just like the previous factors, social context or the setting where language learning takes place can also have an impact on the process of learning. Gardner(1988) explains this by exemplifying the social status of foreign/second language in relation to the learner’s own language. For instance, if the target language community is the dominant one, the learner by solidarity may assimilate with the target group and this can impact his attitude towards the target language.

Other sources of influence may include people with different social roles whose attitude can be significant in the process of learning a new language. For instance; parents, learners and teachers’ attitudes can have a significant impact on the learner.

1.3.7 Attitudes and Motivation

Learner’s motivation is regarded as a key factor which influences the role and success of second/foreign language learning (MC Donough,1983; Ellis, 1994). Mc Donough(1983:142) states that “motivation of the students is one of the most important factors influencing their success or failure in learning the language”.

The correlation between attitude and motivation has been regarded as one of the major concerns of language learning research. Gardner and Lambert (1972:3) state that “his (the learner) motivation to learn is thought to be determined by his
attitudes towards the other group in particular and by his orientation towards the learning task itself”. Motivation according to Gardner (1985) is seen as referring to the extent to which the individual works or strives to learn the language because of the desire to do so and the satisfaction experienced in this activity.

Some scholars have suggested that attitude and motivation are closely related. According to them, integrative and instrumental motivations reflect the basic attitude of the target culture, for example, English speaking American’s positive attitude and desire to understand Hispanic Americans will lead to high integrative motivation to learn Spanish. In the same line of thought, Lifrieri (2005:14) asserts that attitudes are necessary but insufficient indirect conditions for linguistic attainment only when paired up with motivation proper do attitudinal tendencies relate to the levels of student engagement in language learning and to attainment.

1.4 English for Specific Purposes (ESP)

Due to the fact that English has emerged as a global language, ESP has become one of the most active branches in Applied linguistics in general and teaching English as a foreign language in particular since the 1960s. Thus, the development of ESP was to cater for the learner’s needs for a specific proficiency in English. In this regard, Harmer (1983) defines ESP as; “Situation where the student has some specific reasons for wanting to learn a language”. This means that the learners want to learn the target language in order to accomplish a specific end.

This definition is supported by Robinson (1980:3) who states that; “an ESP course is purposeful and is aimed at the successful performance of occupational or academic roles”. In other words, ESP is associated with purposes that can be either occupational or educational.

Later on in 1991, Robinson associates the acquisition of linguistic repertoire with the field the learner is interested in. She argues: “The nature of the relationship between context or domain and the learning and use of the language is clearly vital to ESP and highly worth investigating.” (Robinson 1991: 23). This implies that there is a set of linguistic repertoire related to a specific domain.
which the learner has to be aware of and he should make use of an underlying methodology and activities related to the field he is working or studying in. Thus, ESP is not an end in itself, but mainly a means to achieve such end. Its major aim is to increase the linguistic competences of a given group of people who need English to continue their studies or professions. In other words, ESP aims to develop on the learners both the receptive and the productive skills that permit them to understand English written materials or to communicate using the English language; for this reason, ESP is considered as a fundamental part of the ELT sphere towards a more communicative basis for teaching and learning in a given context. (Escribano, 1999)

1.4.1 Needs Identification and Analysis

In ESP, the term “needs” refers to the gap between the actual state regarding a given situation and the desired state. This implies that a serious problem has been raised and needs to be dealt with. Therefore, a needs assessment attempts to identify the nature and the causes of such problem. It is regarded as a systematic approach to identify social problems and to determine their extent as well as to designate the target population and the nature of their service needs.

According to Iwai et.al (1999), the term needs analysis implies the activities which are used for collecting information which is fundamental for developing a suitable curriculum that will meet the needs of a particular category of people. Long (1996) cited four reasons for performing needs analysis:

- Relevance: How materials are relevant to the learner’s situation.
- Accountability: to justify the materials in terms of relevance for all parties concerned (teacher, learner, administration, and so on).
- Diversity of learner: to account for differences in learner needs and styles.
- Efficiency: to create a syllabus which will meet the needs of the learners as fully as possible within the context of the situation.
Sghleppegrell and Bowman (1986) consider needs analysis as an active process which necessitates investigation with three informants at the department, namely; the administrators, the subject-area instructors and the students.

The administration will give the ESP teachers the opportunity to decide about what they expect as new members of the teaching staff and to know the goals of their programs and courses to promote students’ language abilities. The teacher has to ask the administrators about how the grading and the examination do take place in a given department. In addition, he has to take into consideration the materials necessary for testing the students’ abilities. (Sghleppegrell and Bowman, 1986). As far as the subject-area instructors are concerned, The ESP teachers should keep in touch with the subject specialist to provide him with the necessary materials concerning the subject matter, such as; text books and research articles. (Sghleppegrell and Bowman, 1986). Finally, the last step within needs assessment is interviewing students about their understanding level in the subject area and their comprehension of English language items to enable the teacher to prepare his first presentation as well as the following syllabus. According to Sghleppegrell and Bowman (1986), the students- teacher interview before the first class will guide his preparations. These student interviews are considered as informal assessment of learners which gives the teacher an insight about the students’ comprehension as well as their productive and receptive skills.

1.4.1.1 Types of Needs

Needs analysis taxonomy is viewed differently by different scholars, however; almost all researchers agree on two types of needs in ESP literature and practice, namely: ‘Target Needs’ and ‘Learning Needs’.

A- Target Needs:

According to Hutchinson and Waters (1987), target needs is what learners need to do in the target situation. In other words, what are the linguistic elements that bridge the gap between the learners’ needs and the target situation. Accordingly, Hutchinson and Waters divided target needs into three elements: Necessities, Lacks and Wants.
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Necessities

Robinson (1991:7) defines necessities as: “(They) are more appropriately described as objectives to be achieved”. They are the academic or occupational requirements of the target situation which should be clearly defined for the learner to function effectively and appropriately.

Lacks

They refer to the gap between the actual situation of the learner in terms of English language knowledge and the one which he should access after the accomplishment of language training. (Lamri, 2010:34)

Wants

They are the personal expectations and hopes towards acquiring English.

In addition to these three components of target needs, West (1994) added the fourth component which is “constraints”. “It involves the non-pedagogic limits that control a course planning process such as the role of the national policy, and financial restrictions, which the analysts need to be aware of once they start the process of NIA” (Benyeless’ 2001:31)

B- Learning Needs

Hutchinson and Waters (1987:54) view learning needs as “what learners need to do in order to learn”, in the same line of thought, Robinson (1991:7) states that learning needs: “…are what the learner needs to do to actually acquire the language”. In this sense, learning needs take into account the pedagogical equipment; such as the available materials and the existing resources, the learner’s proficiency level in English as well as the learner’s background; like the learner’s type, cultural awareness, styles and strategies…etc (Lamri, 2010:35)

Characteristics of the ESP course

According to Dudley-Evans and St.John (1998, p 4), The ESP course designer should take into consideration the needs analysis and identification. Therefore, he should respect the following features:

ESP uses a particular methodology and designed activities for the specific field it serves and it turns around the language (grammar and lexis), skills, discourse appropriate to these activities.
ESP learners are required to attend ESP courses in order to be able to operate in a particular context using the language as a tool. Unlike General English learners who generally possess instrumental and integrative motivations in using the language. In other words, ESP learners are more practical and realistic in their language use, that is, the ESP courses are so restricted to the area studied and they focus on practice as much as possible so that students will be able to fulfill their jobs adequately (Benguerfi, 2016).

The ESP course can be designed according to the major two purposes in ESP, i.e. academic and professional. Academic orientation emphasizes research purposes for language users, thus the English course can be divided into General English for Academic Purposes and Discipline Specific English for Academic Purposes. Professional orientation in an ESP course deals with teaching professional discourse for practical job-related tasks. It can include different subcategories, such as; Business English for Professional Purposes. (Belyaeva, 2015)

In addition to these qualities, Carver (1983) mentions three feature common to ESP courses, namely; authentic materials, purpose-related orientation and self-direction. Concerning the use of authentic materials, it is a common feature in ESP course mainly in self-directed study and research-based tasks, according to Dudley-Evans et al (1998:28):

Authenticity lies in the nature of the interaction between the reader (or hearer) and the text. Part of the process of needs analysis is finding out exactly how learners use different sources so that activities in the ESP class can reflect what happens in real life.

This means that authenticity is a key concept in ESP. ESP learners are selective and more attentive to authentic textbooks which reflect their target situation. The second feature as expressed by Carver (1983) is “The purpose related orientation”, i.e; the communicative tasks required by the target situation, since the major aim of ESP course is to enable the learner to be communicatively competent in the target situation through conducting research, presenting oral tasks, opening
debates...etc. The last feature is “self-direction”, Carver refers to as “...turning learners Into users”, i.e; It is vital for the teacher to encourage his students to decide about what, when and where to study. In this respect, Kennedy et al (1984:14) write; “A prime concern for the teacher is to enable a student to become more and more autonomous in his learning as the course goes on”. ESP learner are adult learners, and they are more aware about their subject matter.

To sum up, ESP courses hold specific characteristics which may differ from one course to another; thus, needs analysis and identification is considered as the primary step for the teacher to decide about the nature of the course.

1.4.3 Motivation in ESP Learning

Instructors are considered as one of the most determinant factors for learner’s motivation. Some studies (e.g; Sakai & Kikuchi.2009) claim that teachers who are in charge of teaching a second language play a great role to help students indulge in and continue within the language acquisition process. As a matter of fact, teacher-related factors can be categorized into two main components: (a) teaching materials and methodology, (b) instructor personality and the way he interacts with students. One of the most important issues in ESP is materials selection, in fact; both general and subject specific materials will make students equipped with the necessary skills and knowledge, yet subject-specific materials nevertheless better cater for ESP learners’ specific needs. Consequently, ESP learners will be motivated and persistent to their English courses when they find that the materials are relevant to their area of specialty. ( Gonzaléz,2016)

The second component, instructor personality and the way he interact with the learners, is also necessary for the learning process to be fully successful. Building a good rapport with students can lead learners to be highly motivated and interested about the language since the content preferred to be studied is already discussed between the teacher and learners. Ibid

Additionally, ESP learners need to be stimulated about the importance of their needs; as stated by Donna (2000:3): “Even students who are tired and preoccupied and apparently uninterested in English can become highly
motivated if the need for English in their works is made clear to them and if they are treated as partners in the business of learning.”

Therefore, the positive position towards the value of academic work has an influence on the motivation of students for ESP learning. If students do not receive an encouragement towards the subject learnt, it is inevitable that he will not be motivated to study it. Interesting themes and content in ESP instruction must be accompanied by students who have a desire to learn as “learners know specifically why they are learning a language” (Hutchinson and Waters, 1992:6), as a result, it will facilitate the task of the teacher to meet his students’ needs and expectations.

### 1.4.4 The Role of The ESP Teacher

In ESP, courses varied depending on the learner’s target situation, as a result, teachers who tend to teach these courses need to play different roles and acquire a specialized knowledge.

Because of such variety of domains, Swales (1980) prefer to use the term “practitioner” rather than “teacher” to suggest that ESP task requires more than teaching. According to Robinson (1991:97), “The role of the ESP teacher is a controversial issue…since there is no single ideal role description”. Henceforth, the ESP teacher plays different roles; collecting and analyzing the needs, designing an appropriate syllabus, finding the materials that suit learners’ needs and evaluating the learners’ achievement. In the same vein, Swales (1988) represents the five roles that ESP practitioner has perform, he claims: “The ESP practitioner has five key roles: teacher, course designer and material provider, collaborator, researcher and evaluator” (1988:13). Being a teacher does not mean being a knowledge provider about the language only, but also being able to analyze the needs of the learners and adopt the methodologies and the activities suitable for the target situation (Harmer, 1987). A course designer and a material provider on the other hand requires from the teacher to gather data from needs identification and analysis then to adapt them within his strategies in designing his syllabus and providing materials. Thus the ESP courses are designed based on the needs analysis since there is a lack of teaching materials and text books (Hutchinson et al, 1987 and Basturkman; 2006).
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Sometimes, published materials can be used after being adapted to satisfy the learner’s needs. As a researcher and a collaborator, the ESP teacher has to engage in research-based tasks, such as; investigating the language, the genre of the texts and skills required before designing a course. In addition to collaborating with the subject specialists to be familiar about the subject matter and adjust his syllabus and materials to meet the students’ needs. (Dudley Evens and St. John, 1998). As the last and least role of the ESP teacher is to be an evaluator. In other words, the teacher should get a feedback about students’ level and achievement; to assess whether a given material or course has been suitable and effective for the learner, if not, then there must be a change or an adjustment of it. Such evaluation has to be conducted through a test, through which the teacher knows whether his learners have enough skills to undertake a particular academic course. (Johns and Dudley Evans 1998).

2. Conclusion

Due to the paramount role of English worldwide nowadays, and its significant status it developed progressively from being an international language to a global one mastering it becomes a necessity in order to be able to engage in further academic as well as professional career. The reasons for which English has been learned differ from one domain to another depending on the learner’s field of interest. This leads to shed lights on ESP (English for Specific Purposes) to investigate how English used in specific domain can satisfy the students’ needs, and how the needs are identified and analyzed so that to develop an appropriate English course that best meet the students’ needs. Additionally, it focuses on ESP learner’s motivation, to what extent students are motivated, and how their motivation can be fostered. ESP learner’s motivation is in fact a key factor determining learner’s attitude towards their English course. That is to say, ESP learners, more precisely, Biology students tend to have different view towards English language taught in their department. Learning attitude has been carefully explored to find out the major
factors that may affect such social and psychological trait and what is the relationship that exists between attitude and learners’ achievement. In particular, what views do Biology students hold towards their English course, as a result, how this end can lead to their success or failure in the subject. Then, conducting a research design and a methodology including the sampling, research informants and research instruments were necessary to obtain the needed data.
CHAPTER TWO: RESEARCH DESIGN, ANALYSIS AND SUGGESTIONS
2.1 Introduction

2.2 Situation Analysis

2.2.1 The faculty of nature, life and earth sciences.

2.2.2 The department of Biology

2.3 Research Design and Procedure

2.3.1 Sampling

2.3.2 Instrumentation

2.3.2.1 Student’s Questionnaire

2.3.2.2 Teacher’s Interview

2.4 Data Analysis

2.4.1 Student’s Questionnaire

2.4.2 Teacher’s Interview

2.5 Interpretation and Discussion

2.6 Recommendations and Suggestions

2.7 Conclusion
2.1 Introduction

This chapter aims at exploring the teaching situation of ESP at the department of Biology. The first part deals with a general background of Biology department in Faculty of Biology, Earth and the Universe at Tlemcen University, its infrastructure and the main specialties taught in the department as well as an overview of the ESP teaching situation in Biology department. Then the second part provides a description of the research design, the informants under investigation and the research instruments. The gathered data was analyzed both qualitatively and quantitatively.

2.2 Situation Analysis

The current section attempts to describe the situation under investigation. It provides an overall view about the University of AbouBakrBelkaid, and then it shifts to deal with the faculty of Biology, Earth and the Universe, with a precise focus on the department of Biology and the ESP teaching and learning situation in the department.

2.2.1 The Faculty of Biology, Earth and the Universe

AbouBekrBelkaid University of Tlemcen, was created by the decree of 1989 and has witnessed a rapid expansion. Nowadays, it encompasses four poles, namely; La Rocade, Imama, City-Centre and Chetouane; making provision for 280 formations in graduation; 80 in post-graduation and 60 specialties in Medicine. On the whole, the university receives nearly 40.000 students taken in charge by 1.600 teachers. The university consists of mainly eight faculties each consists of one or more departments:

- The faculty of Biology, Earth and the Universe.
- The Faculty of Science
- The faculty of Technology.
- The faculty of Medicine.
The faculty of Art and Languages.

The faculty of Humanities and Social Sciences.

The faculty of Economics, Business Sciences and Management.

The Faculty of Law and Political Sciences. (BerexiReguig, 2014)

The faculty of Biology, Earth and the Universe as one of the eight faculties is comprised of mainly five departments:

- Department of Biology.

- Department of Ecology and Environment.

- Department of Earth Science and the Universe.

- Department of Agronomy.

- Department of Forest Resources. (Bereksi, 2014)

The faculty of Biology adopted the LMD system as a new educational system (Licence, Master and Doctorate). The Licence level contains three years of studies. In the third year, the student has to select his/her specialty to carry on for Master studies. In addition, it is obligatory for the student to possess the credits of the former six semesters to be able to continue their studies for Master. In order to pass to the Doctorate level, the students are obliged to sit for a written test, if they succeed, they will be able to continue their studies of three or five years. (Baghli, 2015).

2.2.2 ESP Situation in the Department of Biology

EST (Teaching English for Scientific and Technological Purposes) is a sub-branch of ESP that is widely used in Algeria, more particularly in the department of Biology. According to Baghli (2015), Biology students are said to have an average level in English and they are incapable of understanding lot of written materials in English and particularly the teacher’s spoken language. Nevertheless, they are willing and highly motivated towards learning the language of the target situation,
because they are aware of its status and relevance in all scientific fields and particularly in the Biology field.

The coefficient of the English language in the department of Biology is lower than other modules (1). Nonetheless, students always justify their absences to the teacher which means that Biology students are inevitably aware and serious about their English courses. Ibid. In addition, the lectures are presented using different languages (English and French) so that students will better grasp the target language, because sometimes the teacher find himself obliged to use translation to transmit the message. Ibid

As far as the content is concerned, Basically, the teacher starts with scientific terminologies and concepts (register) related to the Biology field, such terms are carefully explored, then he/she moves to text analysis using students ‘communicative competence to discuss to what extent a given text is understood for them . Those ideas that were discussed orally should be well elaborated in the form of an academic writing, thus, in this step, the teacher focuses on grammar, words formation and syntactic structure of words. So it is the task of the teacher to vary in the kind of activities in a progressive order from less difficult to a more difficult one. Ibid

According to Baghli (2015), At the end of their learning process Biology students still have an average level in English because they have difficulties to comprehend written materials in English and to understand their teachers when speaking. Nevertheless, they come to classroom motivated to learn the language of the target situation, because they are aware of its status and relevance in all scientific fields and particularly in the Biology field.

2.3 Research Design and Procedure

Due to the fact of being interested in in-depth data regarding the actual situation of English language in Algeria, particularly in the department of Biology and in teacher’s and Biology student’s vision towards English course, the researchers opt for a case study approach. Thus, the present research is a case study
of first year Master Biology students at the University of Tlemcen. The aim is to describe and present the situation through investigating Biology students’ attitude and propose solutions to the observed facts. It is exploratory in nature, i.e. It represents the value of English course for Biology students (To how much extent their English courses are valuable for them) in order to find out some solutions for improving the existing situation.

According to the encyclopedia of case study research, case study methodology has gained an important role due to its suitability in the analysis of detailed phenomena taking place in different research areas. (Mills et all, 2010). On the other hand, Yin (1994) claims: “a case study is an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident.” (Cited in Woodside, 2010: 01). This implies that the case study research investigates phenomena whose contexts are clearly defined, i.e. a contemporary problematic taking place in a well-defined context. McKernan (1991) provides a general definition to the case study, he states:

Case study is eclectic, using a variety of research styles and methods; it is idiosyncratic and specific; it is process rather than product-oriented, and it is rich in description, interpretation and narrative, working more for understanding than for rigorous scientific measurement, prediction and control of settings, respondents, actions and so on. It is qualitative as opposed to quantitative, yet a good case study worker knows how to quantify masses of qualitative data. (Quoted in Bulter, 2006:132)

This implies that case study is an all-encompassing method which is composed of specific styles and methods to data collection and analysis which, in turn, results in a combination of quantitative and qualitative data. McKernan (1991) states that case study is the process rather than the product. This alludes to the idea
that the researcher cannot begin with a theoretical definite judgment about the case under investigation; all what he/she has at the beginning is a set of hypothetical uncertain answer to the research problem. After proceeding with a given steps of scientific research, he/ she (the researcher) then would be able to reach a comprehensible conclusion which either prove or disapprove the proposed hypotheses, as Flyvbjerg (2006) explains that: “The case study is useful for both generating and testing of the hypotheses” (Flyvbjerg, 2006:229). Therefore, case study carries out a well-defined and comprehensible knowledge about the case under investigation. Its purpose may differ from being descriptive (The what), explanatory (The why) or exploratory (The what and the how). (Vener and Abdullah, 2012)

2.3.1 Sampling

Marshal (1996) asserted that it would be unreasonable to study the whole population. Therefore, sampling implies a confess that it is not possible to investigate absolutely everything of interest at the same time. (Johnson & Johnson, 1998). The target population of this study is first year Biology Master students, during the academic year of 2016-2017 in the faculty of Biology, Earth and the Universe, the department of Biology at AbouBakrBelkaid university of Tlemcen. The selected sample is composed of thirty students, having approximately the same age and nearly the same level of proficiency in English since all the participants had been learning English for approximately six to eight year before starting their higher education. The English language has a great impact for their achievement and success, yet not every student has recognized and be aware about its vitality, that is why it is worthy investigating their “attitude” towards English course. The second group of respondents is English teachers at the department of Biology with whom a structured interview was conducted. Four teachers (three males and one female), with different qualifications; two of them have a doctorate in English, and two others have a magister/master degree in English were interviewed. Two out of four teachers are subject specialists (One has a magister degree in Biology and the other one is preparing for his doctorate in Geology).
Concerning their experience of teaching English at the department of Biology; two of them have an experience of two to three years, one of them spent nine years teaching ESP and the other one has an experience of thirteen years.

2.3.2 Instrumentation

The researchers’ work is based on collecting and analyzing data then drawing a conclusion about it. In fact, data takes a variety of forms, including measurements, survey responses, observation…etc. The current study data was carefully collected using a student’s questionnaire and a teacher’s interview in order to achieve an overall understanding of what is actually happening in the teaching/learning situation under investigation, and finding out the factors that affect such situation positively or negatively.

2.3.2.1 Student’s Questionnaire

The questionnaire is the first instrument of research used in this study (Appendix 1). It is done to First year Master students of Biology. It is the most suitable instrument for the selected participants. According to Richards (2005:6): “Questionnaires are one of the most common instruments used. They are relatively easy to prepare, they can be used with large number of subjects, and they obtain information that is easy to tabulate and analyze.” That is to say, the questionnaire is the most appropriate tool for a large number of respondents. Besides, it is easy to be analyzed, because the researcher will have responses to the questions he/she is looking for and which will be dealt with using both the qualitative and quantitative method.

In the same vein, Ellis (2004) asserts that: “the favored method is a survey questionnaire consisting of liker scale items that require learners to self-report on some aspects of their language learning”. This implies that the questionnaire is the most favorable tool when it comes to tackling an issue in language learning. It has an organized structure, that is, informants answer the same questions in the same order. Therefore, such instrument was chosen for its convenience to the current research topic in order to collect data from a large group of participants. The type of
questions are different according to the answers the researcher is seeking to find. Closed questions require a variety of responses by providing the respondent with a limited set of variables. They are quick to complete and request the informant to opt for one of the proposed possibilities without any extra remarks or information. Open questions, however, give freedom to the respondents to write their responses in their own terms. As Richterich and Chamcerel (1980) claim that such type of questions (Open questions) do not need readymade answers, and therefore, they permit the respondents to freely express opinions.

The following designed questionnaire is divided into two rubrics. The first part aims at questioning students’ views towards English language, and particularly investigating their attitudes towards their English courses. It is composed of a number of close questions, like in:

What is your proficiency level in English?

Beginner           Intermediate           Advanced

And mixed questions, which ask the informant to choose one of the proposed possibilities, then justify his answer, e.g.

Are you motivated to learn English?

Yes               No

If no, please justify your answer.................................................................

In addition, a Likert scale was used to check the student’s views about the necessary reasons for learning English by listing a number of reasons that seem important for Biology students to learn English, and they show their level of agreement by ticking one of the variables (from agree to strongly disagree).

The first question of rubric one aims at evaluating students’ proficiency level in English as being either beginner, intermediate or advanced. In the second question, informants were asked whether they appreciate their English course or not with a justifiable answer. The third question is a Likert scale where students were
asked about the extent to which they agree or disagree with the proposed reasons about why English is necessary to be learned. The objective of using Likert scale is because of its reliability and simplicity. It refers to its inventor Rensis Likert 1932. It is composed of a series of statements all of which are linked to a particular target. According to Dornyei (2003:37); “characteristic that is expressing either a positive/favorable or a negative/unfavorable attitude towards the object of interest”.

In the following Likert scale, students were asked to indicate the extent to which they agree or disagree with these items by ticking one of the responses ranging from ‘strongly agree’ to ‘strongly disagree’. Each response option was given a number of scores before the mean has been counted for each item. For example:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Strongly agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>It will help me to communicate easily with people who speak English.</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Question four and five inquire about whether English courses meet students’ needs as a result, whether they are motivated to study those courses.

In the second part of the questionnaire, the position and the situation of English learning and teaching was put under study. In the fist question of this part, the concern is about the skill(s) students find it difficult to learn English, a set of variables is provided (to interact with English speakers, to write in English, to comprehend English speech, to read English texts) in a sort of activities that correspond to each type of skill. In the second question, the respondents have to choose among the linguistic levels the most difficult one for them, including phonological, syntactic or lexical. The lexical level contains 3 main variables which seem quite different from each other according to the degree of their difficulty at the lexical level (from understanding a word meaning to grasping the whole text). In the third and fourth questions, students are questioned about the time allocated to teaching ESP per week as well as the number of years of English instruction.
meanwhile suggesting solutions for the current situation. The fifth question has to deal with technology, i.e. whether including ICTs can bring about fruitful result or not. The sixth question and the last one within rubric 2 is an open-ended question seeking for other means that can be applied by Biology students apart from attending formal classes of English in order to cater for their lack in English.

2.3.2.2 Teacher’s Interview

The present research opts for a structured interview. (Appendix 3). This research instrument has a fixed format with questions prepared in advance and ordered in the same way for all interviewees. The structured interview seems as a complementary instrument to the questionnaire for providing further explanation and accuracy of the result. While the questionnaire tackles the learner’s attitude towards English and ESP teaching and learning situation from the perspective of the learner. The current interview sheds lights on the teacher’s evaluation to such situation and the students’ readiness to tackle their courses based on their attitudes towards English (from the teacher’s perspective).

The interview turns around the two research questions. All the participants under investigation taught ESP in the department of Biology, each used his/her own methodology as no official training is available, thus their views about their students may differ. Four teachers were interviewed. They teach ESP to students of different specialties (Biology, Ecology, Earth Science...etc). Two of them are both language teachers and subject specialists.

The researchers explained the purpose of the structured interview and how it would be conducted ensuring for the teachers that their responses would stay confidential. The following structured interview consists of 3 rubrics (See Appendix 3). The first rubric seeks to gather information about the teacher. It contains questions about gender, qualification, status at the university, years of experience, training for teaching ESP, availability of ESP syllabus, the use of technology, the use of French and Arabic and finally the problems encountered when teaching ESP. The second rubric of the structured interview contains
information concerning the students in his classroom as; their proficiency level in English, their motivation and awareness about English course which may affect their attitudes towards English, then the researchers asked about the use of Arabic and French by the students. The third rubric of the interview is about exploring the teaching situation as well as it seeks for techniques that can stimulate students’ motivation. The researchers enquired about the class size and the student’s attendance of the English course, this would show the learners’ desires and willingness to learn the language. Then the respondents were questioned about the time allocated to teaching ESP and their suggestions. After that, the participants were asked about the importance devoted to teach skills during ESP teaching meanwhile the skills that seem interested for their students. Moreover, investigating the teacher’s views about integrating ICTs in ESP teaching and whether it could be an impetus for students’ motivation. Finally, an open question was provided to the respondents to suggest ways and techniques that can stimulate students’ motivation to learn English.

2.4 Data Analysis

The process of collecting and organizing data is a key element for providing a clear image about what data contain. In the current study, data takes a variety of forms, including measurements and survey responses. Thus, in order to highlight the problem of attitude in the ESP classroom, the investigators submitted a students’ questionnaire and a structured interview to teachers. The aim is to reach an overall understanding of what is actually happening in the teaching/learning situation under study, and be able to identify the reasons affecting such situation either positively or negatively.
2.4.1 Student’s Questionnaire

Rubric 1:

Question 1 Learners’ Level of Proficiency in English

<table>
<thead>
<tr>
<th>Beginners</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>46.66%</td>
<td>43.33%</td>
<td>10%</td>
</tr>
</tbody>
</table>

The results showed in the table above, according to students’ answers, reveal that the majority of learners vary between beginners and intermediate in their level of proficiency in English (89.99%). While, only 10% of students have an advanced level in English.

Question 2 Learners’ Appreciation of their English Course

The obtained data show that 90% of the informants do appreciate their English courses due to different reasons. Some of them justified their answers by saying that English is the global and the international language of communication, others claimed that their ESP course helps them to develop their English and the speaking skill in particular, the remaining stated that they need English for their academic achievement.

Question 3 For What Reasons Acquiring English is Necessary?

On this scale, there were eleven items that would show students’ views towards the necessity of learning English. The descriptive statistics concerned all the participants (30).

The following table summarizes students’ reasons for learning English
### Table 2.2. Students’ Reasons of the Necessity of Acquiring English.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>it will help me to communicate easily with people who speak English.</td>
<td>2</td>
<td>4</td>
<td>11</td>
<td>13</td>
<td>5.50</td>
</tr>
<tr>
<td>I would like to know more about the English culture.</td>
<td>0</td>
<td>6</td>
<td>17</td>
<td>7</td>
<td>3.40</td>
</tr>
<tr>
<td>it will make me a more intellectual person.</td>
<td>1</td>
<td>6</td>
<td>13</td>
<td>10</td>
<td>3.5</td>
</tr>
<tr>
<td>I will be always updated to what is happening in the world.</td>
<td>1</td>
<td>5</td>
<td>12</td>
<td>12</td>
<td>3.9</td>
</tr>
<tr>
<td>as an educated person, I am supposed to use that language.</td>
<td>1</td>
<td>5</td>
<td>14</td>
<td>10</td>
<td>3.88</td>
</tr>
<tr>
<td>so that I will be able to understand English movies, songs…etc.</td>
<td>2</td>
<td>2</td>
<td>17</td>
<td>9</td>
<td>3.55</td>
</tr>
<tr>
<td>success in any field requires the English language.</td>
<td>1</td>
<td>4</td>
<td>11</td>
<td>14</td>
<td>4.10</td>
</tr>
<tr>
<td>it helps me for further studies to have access to any materials published on the net in English.</td>
<td>1</td>
<td>4</td>
<td>11</td>
<td>14</td>
<td>4.10</td>
</tr>
<tr>
<td>I will be at ease when I operate in international conferences.</td>
<td>0</td>
<td>5</td>
<td>14</td>
<td>11</td>
<td>4.10</td>
</tr>
<tr>
<td>I will need it for my future career.</td>
<td>2</td>
<td>2</td>
<td>11</td>
<td>15</td>
<td>4.50</td>
</tr>
<tr>
<td>it has become a necessity to get a job.</td>
<td>2</td>
<td>5</td>
<td>14</td>
<td>09</td>
<td>4.76</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.11</td>
</tr>
</tbody>
</table>

The mean scores, which represent the average of the responses of the items provided, illustrate that participants both agree and strongly agree with all the reasons suggested. With an overall mean score of 4.11; the informants have a quite high degree of agreement on the different reasons provided for the necessity of learning English. One can conclude that most of first year Master Biology students are aware of the importance and the necessity of acquiring English.
Question 4 ESP Course Correspondence to the Students’ Target Needs.

Through the data obtained, it was found that 14 students out of 30 asserted that English course does meet their needs and 12 students said that ESP course answers their needs to a certain extent.

Question 5 Students’ Motivation towards English

Figure 2.1. Biology Students’ Motivation towards English Courses.

The findings of this question stated that the majority of Biology students (93.33 %) are motivated to acquire English.

Rubric 2 The actual Situation of ESP Teaching and Learning in Biology Department.

Question 1 Linguistic Skills’ Difficulties.

The results of this question are illustrated in the figure bellow:
This question is reported and analyzed through the use of frequencies that summarize data in terms of the number of times of the occurrence of similar items. The findings reveal that the first answer is the most repeated one by an absolute frequency of 19. The majority of students find difficulty when interacting with English native speakers.

The second part of this question asks about the learners’ difficulties at the level of syntax. To report the results of this question, frequencies were used to summarize the number of occurrences of the three suggestions provided. The results of this question are illustrated in the figure below:
As it is shown in the figure above, the majority of the informants indicate that their difficulty at the lexical level is concerned with understanding the meaning of English words in particular.

**Question 2** Learners’ Difficulties at the Three Levels: Phonology, Syntax and Lexis.

The findings of this question are represented in the following figure:

**Figure 2.3.** Learners’ Difficulties at the Level of Syntax.

**Figure 2.4.** Learners’ Difficulties in Three Levels.
When asking learners about their difficulties at the level of Phonology, syntax and Lexis, 36.66% of them claimed to have difficulties at the level of phonology, i.e. Understanding the system of the English Language, 20% of the informants pointed that their difficulty is at the syntactic level, that is to say understanding how sentences are grammatically structured. While the majority, about 76.66% have different difficulties at the lexical level.

**Question 3** The Time allocated to ESP Courses.

The results of this question are reported in the following table:

**Table 2.3.** ESP Learning Time Sufficiency.

<table>
<thead>
<tr>
<th></th>
<th>Sufficient</th>
<th>Insufficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
<td>13</td>
<td>24</td>
</tr>
</tbody>
</table>

Regarding this question, the findings show that a considerable number of learners with a total of 24 out of 30 (80%) pointed that the time devoted to their English course per week is not enough, and when they were asked how many hours they suggest per week, the majority of them agreed on raising the number to three hours divided between two sessions instead of one session.

**Question 4** The Number of Years devoted to Teaching English.

The following figure represents the findings of this question:
Figure 2.5. Learners’ Views about the Years of English Teaching

When asking learners whether the number of years of teaching English in their department is sufficient or not, 73.33% said no. Their suggestions were that the ESP curriculum should be modified and it must be incorporated from their first year at the university.

Question 5 Using ICTs to Stimulate Students’ Motivation.

The figure below gives an idea about the learner’s responses regarding this question.

Figure 2.6. Learners’ Views towards the Use of ICTs.

As it is illustrated in the figure above, a great majority of the informants (90%) are in favor of using ICTs as a tool to stimulate their motivation towards studying English.
Question 6 Other Means to answer Learners’ Needs.

At this level, the researchers opened the door for learners to reflect upon their opinions freely in an open question. When asking students about other means that can compensate for their requirements in this language, most of the informants gave nearly the same opinions. The majority of them agreed on the following:

- Communicating with others in English.
- Reading books in English and scientific articles.
- Watching films and documentaries in English.
- Using internet and applications on smartphones like dictionaries.
- Making research projects in English and including translation.

2.4.2 Teacher’s Interview

In order to cross-check the results achieved, a structured interview was used as a second instrument. (Appendix 3). It was addressed to four English teachers in the department of Biology. After a preliminary analysis of Biology students’ views towards English course and the situation of English teaching as far as their target needs are concerned (form the perspective of the learner), the following interview provides further explanation about the teacher’s experience in the field, the attitude his/her learners hold towards their English course as well as the teacher’s evaluation of the teaching situation (from the perspective of the teacher).

The structured interview was divided into three rubrics: The first part was an investigation of the teacher’s profile, his/her training in the field, the syllabus and the techniques used for teaching ESP, as well as the problems encountered. The second one concentrated on students’ awareness as far as English is concerned and the third one aimed at investigating the teaching and the learning situation, the respondents gave opinions about how to stimulate students’ motivation to learn English based on their teaching experience. The questions were analyzed both
Qualitatively and quantitatively. The objectives and the findings of the questions of each rubric were as follows:

**Rubric 1: Teacher’s Profile**

**Question 1, 2, and 3: Qualification and Time allocated to Teaching ESP**

Teachers are three males and one female. Among them, two have a doctorate in English language, and two others have a magister/master degree. Two of them are both subject specialists and language teachers (one has a magister degree in Biology and the other one is preparing for his doctorate in Geology). Additionally, the research findings reveal that 3 teachers out of 4 are part time teachers.

**Question 4 and 5: Experience in the Field and ESP Training**

The results show that 2 of the teachers have an experience of 2 to 3 years, one of them spent 9 years teaching ESP and the other one has a long time of experience, about 13 years. Concerning ESP training, all the respondents did not receive any pre-service training in teaching ESP, except for the ones who are subject specialists; they have already studied theoretical issues in the field of interest. All the teachers conducted needs analysis and they became trained through their experience in the field.

**Question 6: ESP Syllabus**

All the participants agree that no syllabus or material is available, i.e. they prepare their own syllabus according to the specialism.

**Question 7 and 8: Using Technology and Varying between Languages for the Easiness of ESP Teaching**

The data gathered reveals that 3 out of 4 teachers use technology in presenting English courses (data shows and video), but not frequently (less than 30%). Besides, 3 out of 4 teachers said that they do switch to French and Arabic from time to time in order to facilitate their students’ comprehension of the studied task.
**Question 9 Teaching Problems**

This question was formulated to see the major obstacles encountered when teaching ESP. The results show that nearly all the participants agree that both students and the administration have a negative attitude towards English course, i.e. Scientific English module has a low value as compared to the specialty modules. In addition awareness is only concerned with those students who attend English classes. Another problem cited by some teachers is that students are less interactive and this is because of vocabulary and the lack of the productive skills. Moreover, there is a lack of official syllabus and materials (authentic materials) and also the lack of time allocated to teaching ESP. Besides, one of the teachers claimed that all Biology students begin studying English late in their higher education level (since the 3rd year).

**Rubric 2 Information Concerning Learners**

**Question 1 Students’ Proficiency Level in English**

Two participants from the interviewed teachers evaluate their students’ proficiency level in English as being beginners and others as intermediate in the English language, i.e. their level varies between bad and average. Another teacher states that the majority of his students are beginners while another one classifies them as intermediate. But in general, it seems that they vary between beginners and intermediate.

**Question 2 and 3 Students’ Motivation and Awareness about the English Language.**

The results show that 3 out of 4 teachers agree that their students are motivated, they justified their response by their students’ regular attendance in classrooms and their accomplishments of their assignments and home works, whereas for the other teacher who denied his students’ motivation in classroom, the reason behind that is because of the negative attitude students hold towards their English course. Besides, the content does not fit the students’ needs.
As far as students’ awareness of the importance of English is concerned, all the respondents agree that their students are aware of the importance of English, two teachers rely that awareness to the fact that English will be needed for future carrier, while others consider that their students necessitate the English language for both further studies and future professions.

**Question 4 Using French and Arabic during English Classes**

From the data gathered, it is viewed that 3 teachers whose students do use both French and Arabic in order to clarify things they did not understand, while the remaining teacher confirms that his students use French (very often).

**Rubric 3 Teaching Situation**

**Question 1 and 2 Class Size and the Number of Students attending English Courses.**

This question was formulated to see whether the majority of students attend the English course as compared to the class size. This question results show different responses as presented in table 2.4

**Table 2.4. Class Size and Students’ Attendance.**

<table>
<thead>
<tr>
<th>Participants</th>
<th>Class Size</th>
<th>Students’ Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>40 to 50 (master)</td>
<td>25% to 40%</td>
</tr>
<tr>
<td>3</td>
<td>300 to 500 (licence)</td>
<td>50% to 70%</td>
</tr>
</tbody>
</table>

It is reported by 3 teachers that in a large class of 300 to 500 students (all 3rd year Biology students are grouped together), an average of 50% to 70% of students attend English course, while 2 others rated their students’ attendance as 25% to 40%
in a smaller group of 40 to 50 students (for master students). One can say that students’ attendance plays a paramount role in measuring students’ motivation.

Question 3. The Time Load

All the respondents affirm that the time allocated to teaching English (1 h per week) is not sufficient and it should be more considered. One of the teachers suggested that in order to develop students’ communicative skill in English, they should study English for at least 4 or 5 hours per week.

Question 4 and 5. The skills most important for the teacher to be fostered and most interesting for the student to be developed.

Table 2.5. Interesting Skills for the Teacher

<table>
<thead>
<tr>
<th>Skills teachers prefer to develop</th>
<th>Listening</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

The results show that the majority of teachers are inclined to develop the writing skills because it is the most needed for writing academically. One of the teachers states that when students write their academic article, they do not need to get in touch with the reviewer to assess their phonetic skills, i.e. it is all about their academic writing. Some teachers prefer the speaking skill in order to develop their communicative competence and only few of them favor listening and reading.

On the other hand, what skills students are interested about might be different from the ones the teachers prefer to develop on their students.
Table 2.6. Interesting Skills for Learners

<table>
<thead>
<tr>
<th>Skills students are interested about</th>
<th>Listening</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

Teachers under investigation argue that the majority of their students are more interested to develop the speaking skill so that to communicate fluently in English. Some of them are aware of writing accurate academic English, i.e. Biology students are interested only about the productive skills.

Question 4 Integrating ICTs in ESP Teaching.

The research findings show that 3 teachers out of 4 agreed with the fact that integrating technological materials may have a positive impact on learners’ motivation while the remaining respondent claimed that such impact can be done to a certain extent and integrating ICTs cannot be done randomly, rather, it is based on the teacher’s evaluation of his/her students level so that he/she can design the appropriate materials that best fit their level.

Question 5 Opinions about Stimulating Students’ Motivation.

This question was about how teachers would proceed to raise students’ motivation. The answers gathered are summarized as follows:

All the teachers were in favor of making students aware about the value of English for their further studies and future career at the very beginning of their English studies in order to handle those absences. In addition, the methodology of teaching should be interested and the content should meet the students’ needs (the grammar should be adapted according to the context and the terminologies and textbooks used should be updated according to the field of interest), and this can only be done through conducting needs analysis and identification. Moreover, the
time allocated to teaching ESP per week should be taken into consideration. Three teachers suggested that students should be divided into groups, since the larger the class is, the highest difficulty will be encountered when designing a syllabus as well as tests. One teacher argued that the English language module’s coefficient must be as important as any other specialty module and there must be collaboration between the language teacher and the subject specialist.

2.5 Discussion and Interpretation

The interpretation of the main results collected from the teacher’s interview and the learner’s questionnaire used for investigating Biology learners’ attitudes towards their ESP course, helps the researchers to verify whether the two hypotheses proposed at the beginning of this research are valid or not.

Regarding the first hypothesis which stipulates that Biology students have a negative attitude towards learning English taught in their department, the results of the learner’s questionnaire and the teacher’s interview conducted at the Biology department reveal that a great majority of ESP learners are aware of the importance of English for their academic achievement, further studies and future career (see question 3 in learner’s questionnaire). Besides, a considerable number of the students assert that their ESP courses do answer their target needs (see question 4 in learner’s questionnaire). Moreover, 93.33% of learners show a positive attitude towards studying English (see question 5 in learner’s questionnaire). In the same vein, the majority of ESP teachers acknowledge that their students are motivated and the proof for their motivation is their daily attendance in classroom (see question 2 in the teacher’s interview). Furthermore, all teachers assert that their ESP learners are aware of the importance of English for their studies and future professions. (see question 3 in the teacher’s interview). These results prove that students’ awareness and motivation are only concerned with those who regularly attend their ESP course, thus attendance is a key-indicator for their motivation and awareness, as a result this implicitly shows their positive attitude towards English course and the negative attitude is associated with those learners who rarely attend
their ESP lectures. Therefore, the findings of the questionnaire and the interview partly confirm the first hypothesis.

As far as the second hypothesis, which suggests that Biology ESP learners’ motivation can be stimulated through the use of ICTs. The data gathered through the research instruments reveal that almost all learners agree on the fact that new technologies of information and communication can raise their motivation towards studying English. (see question 10 in learner’s questionnaire). On the other hand, the majority of teachers are in favor of using ICTs in ESP teaching. (see question 4 in teacher’s interview). Furthermore, according to those teachers’ experiences, making students aware of the importance of English course at the very beginning of English studies and designing the appropriate syllabus after conducting needs analysis can better make students willing to attend their ESP course. (See question 5 in teacher’s interview). Thus, the second hypothesis put by the researchers is confirmed.

2.6 Recommendations and Suggestions

After discussing the main results obtained in the present study, the following chapter will deal with some suggestions and recommendations for a better understanding of the topic. This part aims at providing suggestions to how to raise and stimulate students’ motivation, since the relationship between attitude and motivation is so strong, in that one affect the other and one cannot exist without the other. This chapter consists of giving answers to the questions: How can ICTs be integrated to achieve success in ESP learning, and how can the teachers provide a motivational environment taking into account the methodology and the teaching materials.

2.6.1 ICT and ESP Teaching

One of the most difficult problem that ESP teachers encounter is how to capture students’ awareness and stimulate their motivation. In fact, the learning process will be more effective when the materials are motivating and relevant. Audio visual materials are now integrated in educational programs, they can make
the learning process more vivid and dynamic. ESP classes must be equipped with audio visual materials such as videos, data shows, computers, projectors…etc, thus, the teacher should include the appropriate material to use when planning their lessons. In addition, ESP teachers and learners have an access to a variety of materials; texts, articles, newspapers, magazines…etc. (Bouklikha, 2011) Thus, in addition to the formal lectures provided by the teacher, the teacher can guide his students to accessible materials that can help them to find the appropriate materials, in this way, the students will be more autonomous about their leaning as a result, they come to classroom with background which motivates them and raise their awareness towards the course studied. In addition to the printed materials provided in classroom, there are some online websites which permit the learners to share their ideas with other learners from different parts of the world with whom they share the same field of interest, thus this gives them the opportunity to access to different online materials, take responsibility in the interaction and develop independent learning skills. (e.g. Online interviews, Video clips, Video conferences, advertising…etc).

Video conferencing is a communication technological means used for lectures, it can be either two ways of communication, or more, linked together with sound and video. According to Laurillard (2000), video conferencing is “One-to-many medium, making it a sensible way to provide access for many sites to a remote academic expert.” Another definition by the British Educational Communications and Technology Agency (BECTA,2003), video conferencing allows people from different locations to see and talk to each other, exchange files and share computer applications. Thus the term is applied to a wide range of situations devoted to a small or large size of audiences chatting over the internet using Skype, Yahoo or MSN. Other benefits students may have from video conferencing technology includes librarians who can use video conferencing to develop strategies and enhance the quality of their service and delivery. Moreover, video conferencing allows students to meet no matter how far they are from each other, therefore, some lectures may not be available in the living location, but they
may be available in another which students can rich only through video conferencing. (Bensafa, 2015).

In addition, a regular attendance in classroom can be a tiresome process by both learners and teachers, thus, video conferencing offers a chance for non-traditional students to attend lectures with their teachers from their home. Video conferencing can appeal to a variety of students’ learning styles, including; video, audio clips, graphics, animations, breakout discussions…etc, students have the benefit also to meet experts, to share their point of views and perspectives, they can also attend conferences on a wide range of topics which they may not have an opportunity to participate or engage in. In a word, the use of technology can increase students’ motivation towards language studies by helping them to choose among the range of sources, topic, and activities the most appropriate for them. Technology also contribute to the authenticity of the learning process, it paves the way for getting an access to authentic resources in ESP learning context.

2.6.2 Teacher’s Technological Skills Training

Due to the extensive use of technological tools by students in order to have access to a variety of documents and information, and the need to incorporate technology in educational Curricula, the teacher training is one of the corner stone to achieve this end. According to the U.S. Congress, Office of Technology and assessment (1995), the lack of teacher training is one of the greatest roadblocks to integrate technology into a school’s curriculum. Thus, most school districts spend less than 15% of their technology budgets on teacher training and development. According to Glenn (1997), in order that the teacher be professionally developed in educational technology, he must have a substantial time to learn. Any school should provide the teacher with extra training time so that to learn effectively how to use computer for instructional objectives. Shelton & Jones suggest that teachers require a considerable training outside the school in order not to be constrained by the school day demands. Moreover, personal varying needs should be taken into consideration, that is, before the training takes place, the teachers should identify their current interests and needs so that the training will turn around what they need.
exactly to know in technology. As Glenn (1997) claimed: “Staff training programs designed for the technological development of teachers are effective when programming offers flexibility and is not based on “one size fits all” philosophy”. This means that the teacher’s teaching strategies and methods differ from one to another, and not all teachers opt for a single static technique because their students have varying styles as well as different needs and targets. In addition, the process of learning computer-related professional development must be consistent and systematic, for any teacher, to be updated to new technologies and teaching strategies, he should receive an adequate training rather than short-term development. (Glenn, 1997). Furthermore, any training received by the teacher should fit the educational objectives. The technological training must have an instructional focus that first gives the teacher an insight about their curriculum and then help them to handle technology in educational setting. (Persky, 1990). The teacher’s technological skills training often focus on specific computer applications, such as, word processing, however, this is just a small portion from the whole domain and it gives teachers little opportunity to transfer their learning into their classrooms. Finally, it is the role of the administrators to take supportive actions by: making flexible programs so that teachers can practice what they have learned, encouraging peer coaching, teachers have to visit each other’s classrooms to observe technology use and scheduling frequent meeting with teachers to evaluate their technological materials’ use. (Glenn, 1997)

2.6.3 Authentic Teaching Materials

According to Graves (1999:27) “Teaching materials are tools that can be figuratively cut up into component pieces and then rearranged to suit the needs, abilities, and interests of the students in the course.” This means that selecting the most convenient materials is an important step in organizing the course, materials should answer the learners’ needs and wants. Lack of the appropriate material may lead to a lack of motivation and awareness, as a result students will develop a negative view towards the module as a whole, therefore it is all about the technique and the material used which can make from the content a valuable task to be
accomplished. As Fiorito (2007) claimed: “Students will acquire English as they work with materials which they find interesting and relevant and which they can use in their professional work or further studies.” ESP texts are different from general English texts in the sense that ESP texts should reflect the students’ needs. Morrow and Shocker (1987: 249) stated that:

...in this case the focus is not on process or model in term of student use of pre-identified areas of language, but rather it is on the content of the text itself. The rationale for the choice of text has to do not with uses to which it can be put, but with the subject matter involved.

Therefore, the choice of the content has to do with the subject matter, because after all, it is the content which matters for students and not the skills and the forms of language and the more appropriate the materials are to the field of study, the more motivated students will be. As a matter of fact, the selection of materials is based on the concept of “authenticity”. Authentic texts are defined as real-life texts that are used in their original contexts, i.e. They contain real language which is designed for native speakers. (Bouklikha, 2011). In this regard, Wilkins (1976) considers authentic materials as resources which are directed to native-speaking audience. In the same line of thought, Nunan (1989: 54) asserts that: “a rule of thumb for authentic here is any material which has not been specifically produced for the purposes of language teaching”. Authentic texts are not written for pedagogic purposes, they are designed for native speakers’ fields of interest.

The advantage of authentic materials in ESP learning is that they encourage students for further reading and give students a sense of coping within the living situation, when the content is interesting, students will be willing and eager to widen their horizon as much as possible. According to Nuttall (1996: 172): “Authentic texts can be motivating because they are proof that the language is used for real-life purposes by real people”. This gives students the assertion that the language being studied is real and not only a tool to be studied in classroom. Authentic materials give Biology learners the opportunity to interact with the real
language and content, so the use of authentic materials helps the teacher to raise his students’ motivation. However, the teacher should vary on his sources, i.e. authenticity is insufficient if it is not accompanied by variety of topics to be read and analyzed. In addition, any reading task should be accompanied by a writing activity or assignment so that learners will use their critical thinking and they will reflect on what have been studied. Furthermore, authentic presentations through the use of pictures, diagrams, and links can give students more enthusiasm and make them self-confident talkers. (Graia, Bouklikha, 2011). As assumed by Brown & Yule (1983: 82): “You can listen to hours and hours of conversation without finding anything that interests you from the point of view of what the speakers are talking about or what they are saying about it. After all, their conversation was not intended for the overhearer. It was intended for them as participants”. Thus authenticity is crucial for any ESP teacher to design a suitable syllabus, for this reason Harding (2007:10) yields some guidelines for ESP teachers when using authentic materials:

- Think about what is needed.
- Have a clear image about the students’ subject area.
- From a needs analysis, infer the students’ language needs in relation to the subject.
- Use contexts, texts and situations from the students’ field of interest.
- Reflect on the authentic materials that students use in their specialism so that to develop authentic input (tasks, texts…etc).
- Variety of the tasks, relevance and fun are the only ways that stimulate students’ motivation.
- Try to bring a real world into the classroom and make the environment more lively and original.

In a word, Biology students need authenticity, attentively selected and well presented, in fact authentic materials bridge between the students’ general knowledge of language and their professional language needs, exposing students to
a real life situation in their field of interest will make them willing to attend their courses and motivated to carry on their task.

2.6.4 Language Teacher and Subject Specialist Collaboration

No matter how much the language teacher knows about his students’ needs through conducting needs analysis tests, it is still be a crucial idea to cooperate with a subject specialist, as a result he would not only collect information about the content of a syllabus, but also the materials, techniques and strategies used that can better suit the context. To succeed in this task, a set of elements need to be included. These elements are cited by Williams (quoted in Jordan1997:121) in the following way:

- Willingness to collaborate on the part of both sets of staff
- Clear demarcation as to where their respective responsibilities lie
- Awareness of each other’s conceptual apparatus and teaching approach
- The joint effort being viewed by the student as complementary teaching situation.

In the same vein, Richards et al (2005) claims that for a achieving a successful collaborative teaching, the following should be taking into account:

- Time
- Patience
- Honest reflection
- Re-evaluation
- Response by faculty and administrators.

Therefore, language teacher and subject specialist collaboration is a necessary process for making the ESP learning atmosphere more original, active and interesting. Additionally, it is the role of the policy makers in the institution of Biology to promote learning English and resort to efficient methods suggested by
ESP teachers, such as giving more importance to English by increasing its coefficient, providing equipped environments and suitable materials, establishing English clubs and study days and encourage teachers to take in charge of them.

2.7 Conclusion

This chapter tried to give an insight to the context under investigation: the faculty of natural sciences, life sciences, earth sciences and the universe. Additionally, some lights were shed on the teaching and learning situation of ESP in the department of Biology. Then, an analytical study of the current research topic was provided. From the analysis of the two instruments of research, the researchers can arrive to the conclusion that Biology students have a positive attitude towards their English courses taking into account their motivation and awareness towards the task as well as their attendance which is a clear indicator for their positive view towards English language. In other words, those are demotivated and unaware about their English courses do not bother to attend their English classes at all. Additionally, the students’ motivation can be more raised and stimulated through the use of technological materials and the internet search which make students always updated to newly published materials in their field of interest and it leads to the speed and the facilitation of language learning, as a result, the teacher becomes a guide on a side whose role is to guide his students to a variety of websites for further widening their horizon. For this reason, the following title was devoted to the provision of some suggestions and remedial practices that would improve ESP teaching in general, and raising learners’ motivation towards ESP learning in particular. Those recommendations had been, largely, based on the data gathered through this work as far as learners’ attitude towards ESP courses is concerned.
GENERAL CONCLUSION
GENERAL CONCLUSION

Language attitude is, in fact, such an important factor that may affect learners’ level of achievement in learning English in general and ESP in particular. Thus the current study has focused on the concept of attitude with an ESP context and provided also some workable suggestions that may have a positive impact on learners’ attitudes towards English. ESP practitioners can also benefit a lot from this investigation so that to improve the ESP teaching and learning atmosphere. Therefore, the objective of this research is to explore the ESP learners’ attitude towards studying English and trying to find suitable solutions for improving the situation. Two research questions summarize the main issues of the present research which are:

1) What attitude do Biology students hold towards their ESP courses?
2) How can Biology students’ motivation towards learning English be stimulated?

The work was divided into two chapters, the first chapter was devoted to defining the main concepts and highlighting the main elements related to them, it begins with the position of the English language in the world, then it shifted to shed light on language attitude and finally it ends with an overview of the concept of ESP. The second chapter started with a description of the context where the research was conducted. Then it describes the research methodology of the study, after that the data gathered was analyzed and interpreted. The chapter was concluded with some useful recommendations on the basis of the findings obtained.

The research questions asked at the beginning of the research have been answered and important findings were achieved. Regarding the first hypothesis which assumed that Biology students have a negative attitude towards their ESP courses, it was found that the majority of Biology students at Tlemcen university are motivated to learn English and are aware of its importance in their field of study. They acknowledge about the status of this language and its relevance to their domain of research. This was also confirmed by the majority of ESP teachers when interviewing them. Thus, this hypothesis is partly confirmed. Moving to the second hypothesis
which stated that the application of ICTs might be helpful for ESP practionners to stimulate their ESP learners’ motivation and have a positive impact on their attitudes towards ESP, it was confirmed from the results obtained from both research instruments that the use of new technologies of information and communication may improve the ESP teaching situation.

It is worth at this level indicating that the researchers have progressively faced two types of limitations, notably the participants and the instruments. Participants who have taken part in this study are First year Biology Master students and ESP teachers, the difficulty lies in collecting the required sample since the majority of students are absent all the time in addition to the difficulty of finding experienced ESP teachers. This fact may lead to a negative impact on processing and collecting the data. Moreover, the following case study is an attempt to explore the students’ attitude towards their ESP courses which called for both qualitative and quantitative methods, thus using a students’ questionnaire and a teacher’s interview for different data sources may not be considered as enough for such work, as classroom observation is still be needed for investigating the behavioral attitude of students, but because of the restriction of time and the disability to find participants, such method has not been conducted, as a result this fact may have some effects on the data gathered from the questionnaire and the interview which may not lead to a triangulation of the results. However, it is crucial mentioning that a classroom observation would be a fundamental instrument to be conducted for further expanding the current research.
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APPENDICES
Appendix 1

Students’ Questionnaire

You are kindly invited to answer the following questionnaire which aims at “investigating Biology students’ attitudes towards English course taught in their department”.

Age:…….. Level of education:……..

Part 1

1- What is your proficiency level in English?
   Beginner □ Intermediate □ Advanced □

2- Do you appreciate your English courses?
   Yes □ No □
   Please justify……………………………………………………………………

3- According to you, learning English is necessary because:

<table>
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<tr>
<th>Statements</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Strongly agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- It will help me to communicate easily with people who speak English.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- I would like to know more about the English culture.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3- It will make me a more intellectual person.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4- I will be always updated to what is happening in the world.</td>
<td></td>
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</table>
5- As an educated person, I am supposed to use that language.

6- So that I will be able to understand English movies, songs… etc

7- Success in any field requires the English language.

8- It helps me for further studies to have access to any materials published on the net in English.

9- I will be at ease when I operate in international conferences.

10- I will need it for my future career.

11- It has become a necessity to get a job.

4- Do English courses attended at the university correspond to your target needs?
   Yes ☐   No ☐   To some extent ☐

5- Are you motivated to learn English?
Part 2

1- In what language skills do you find difficulties?
   - ☐ To interact with native speakers
   - ☐ To write in English
   - ☐ To comprehend English speak
   - ☐ To read English texts

2- Do you find difficulties:
   - At the phonological level
     - ☐ To understand the sound system of the English language
   - At the syntactic level
     - ☐ To understand how sentences are grammatically structured
   - At the lexical level
     - ☐ To understand word meaning
     - ☐ To know the meaning of some sentences
     - ☐ To know what the text is talking about in general

3- The time allocated to English course per week is:
   - ☐ Sufficient
   - ☐ Insufficient
     - If insufficient, how many hours would you suggest per week?
       ...........................................................................................................

4- Do you think that the number of years of English instruction in your field is sufficient?
   - ☐ Yes
   - ☐ No
     - If no, what do you suggest?..............................................................................................

5- Do you think that using ICTs can be helpful to increase your motivation towards studying English?
6-Apart from University ESP courses, what other means you think can be used to meet your needs and cater for your lack in English?

Thank you*
Appendix 2

Questionnaire
Destiné pour Les étudiants

Nous sommes des étudiants qui préparons un Master dans le département d'anglais. Dans le cadre de notre investigation, nous vous invitons à répondre à ce questionnaire qui vise à «explorer les positions des étudiants de biologie vis-à-vis des cours d’anglais enseignées dans leur département."

Âge: ……………… Niveau d'études: ………………………………………

Partie 1

1. Quel est votre niveau de compétence en anglais?
   - Débutant ☐  Intermédiaire ☐  Avancé ☐

2. Aimez-vous vos cours d'anglais?
   - Oui ☐  Non ☐
   Justifier
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………
   ……………………………………………………………………………………………

3. Selon vous apprendre l'anglais est nécessaire parce que

<table>
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<tr>
<th>Il m'aidera à communiquer facilement avec les gens qui parlent anglais.</th>
<th>Pas du tout d'accord</th>
<th>Pas d'accord</th>
<th>D'accord</th>
<th>Tout à fait d'accord</th>
</tr>
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<td></td>
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</tr>
</tbody>
</table>
Je voudrais en savoir plus sur la culture anglaise.

Il fera de moi une personne plus intellectuelle.

Je serai toujours au courant de ce qui se passe dans le monde.

Comme je suis une personne instruite, je suis censé utiliser cette langue.

Afin que je puisse comprendre les films en anglais, les chansons ... etc.

Le succès dans n'importe quel domaine nécessite la maîtrise de la langue anglaise.

cela me permet de poursuivre mes études et d'avoir accès à tous les documents publiés sur l'internet en anglais.

Je serai à l'aise quand je travaillerai dans des conférences internationales.

J'en aurai besoin pour ma future carrière.

C’est devenu une nécessité pour l’obtention d’un emploi.

4. Les cours d'anglais suivis à l'université correspondent-ils à vos besoins ciblés?
   Oui ☐  Non ☐  Dans une certaine mesure ☐

5. Êtes-vous motivé pour apprendre l'anglais?
   ☐  ☐
Partie 2

1. Dans quelles compétences linguistiques trouvez-vous des difficultés?
   - L’interaction avec des anglophones
   - L’écriture en anglais
   - La compréhension de l'anglais
   - La lecture des textes en anglais

2. Trouvez-vous des difficultés:
   - Au niveau phonologique?
     ✓ Pour comprendre le système de son de la langue anglaise
   - Au niveau syntaxique?
     ✓ Pour comprendre comment les phrases sont grammaticalement structurées
   - Au niveau lexical?
     ✓ Pour comprendre le sens des mots
     ✓ Pour savoir de quoi parle le texte en général
     ✓ Pour connaître le sens de certaines phrases

3. Le temps alloué au cours d'anglais par semaine est:
   Suffisant    insuffisant

Si insuffisant, combien d'heures vous proposeriez-vous par semaine?
………………………..heures

4. Pensez-vous que le nombre d'années d'enseignement de l'anglais dans votre domaine est suffisant?
   Oui    Non

Si non, que suggérez-vous?
5. Pensez-vous que l'utilisation des TIC (Technologies de l'information et de la communication) peut être utile pour accroître votre motivation à étudier l'anglais?
   Oui ☐   Non ☐

6. En outre les cours ESP de l'Université, quels autres moyens pensez-vous qu’ils peuvent être utilisé pour répondre à vos besoins et manque en anglais?

Mes sincères remerciements
Appendix 3

Teacher’s structured interview

Dear teacher, the following interview is addressed to gather information about Biology students’ attitudes towards ESP.

1-The teacher’s profile:

1-Sex: Male………… Female………..

2-Qualification: License……. Magister( Master) …….. Doctorate…..

3-Are you?:

* Full time teacher

*Part time teacher

4-How long have you been teaching English for specific purposes?

……………..years

5-Did you have any training in ESP?

*What type of training?

6-Does your department provide you with any syllabus?

Yes……….. No…………

*If no, did you design your own syllabus?

7-Did you use new technology in presenting your lectures?

8-Do you use French/Arabic in your ESP teaching?

9-What are the different problems encountered when teaching ESP?
2- **Information concerning learners:**

1- How large are your classes?

…………………………………………………………………………………………
…………………………………………………………………………………………

2- How many students approximately attend your lectures?

* Between 10 & 20
* Between 20 & 30
* More than 30

3- How can you evaluate your students’ level in English?

Weak……..                              Average………….                             Bad…………..

4- Do all your students participate?

Yes…………..               No…………..               To some extent…………..

5- Are your students motivated to learn English?

Yes…………..               No…………..

* If no, is the lack of motivation related to:
  - Their attitude towards English.
  - The method applied in language teaching.
  - The content does not fit their needs.
  - The course content is not interested and boring. (you can mention others)

6- Are your students aware of the importance of integrating English in their curriculum?

Yes…………..               No…………..

7- Do your students use French or Arabic during their English class?

…………………………………………………………………………………………
…………………………………………………………………………………………

3- **Stimulating students’ motivation:**
1-Do you think that the weekly time devoted to English teaching is sufficient?
    Yes……………  No……………

*If no, what do you suggest?

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

2-As far as the language skills are concerned, what is the importance devoted to each skill during your ESP course?

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

3-Do you think that students are more interested in one skill rather than the other?, which one? Yes ...... No……….

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

4-Do you think that integrating ICTs in ESP classes can have a positive impact on learner’s motivation?
    Yes.........  No……………

5-Relying on your experience, how motivation can be raised?

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

Thank you for your collaboration
الموقف من اللغة، البيولوجيا، دروس اللغة الإنجليزية لأغراض معينة. دوافع، تكنولوجيا المعلومات، والاتصالات

Resumé

L'attitude envers la langue est l'un des principaux facteurs qui différencient l'accomplissement et l'échec dans l'apprentissage des langues. Cette étude a été menée afin d'identifier l'attitude des étudiants de Biologie de première année Master à l'égard de leur cours d'ESP. Les données recueillies à partir du questionnaire des étudiants et de l'entrevue avec l'enseignant révèlent que la majorité des étudiants sont motivés à apprendre l'Anglais. En conséquence, l'application des TICE avec la formation en compétences technologiques des enseignants sont les principales solutions proposées qui peuvent avoir un impact positif sur l'attitude des étudiants.

Mots Clés

L’attitude envers la langue, Biologie, Cours d’ESP, Motivation, TICE

Abstract

Language attitude is one of the major factors that differentiate between accomplishment and failure in language learning. The study was conducted in order to identify first year Master biology students' attitude towards their ESP course. The data gathered from the students' questionnaire and the teacher's interview reveal that the majority of students are motivated to learn English. Accordingly, the application of ICTs with the teachers' technological skills' training are the main proposed solutions that may have a positive impact on students' attitude.

Key Words

Language attitude, Biology, ESP course, Motivation, ICTs