

The English Language Communicative Needs of Third Year LMD Students at Biology Department at the Centre University of Naama

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Abstract

The current research work attempts to have an overview of the linguistic needs and thereby propose useful suggestions for biology students consisting of 20 participants. Further, the sample of the study consisted of 20 students, 7 are males and 13 are females who were enrolled in Naama Centre University in the department of biology during the second semester. More specifically, the recommendations are proposed to meet the students' needs since several obstacles were found to be problematic for any ESP course. For the sake of testing the hypothesis and achieving the aim of the study, mixed method research approach was used to collect data. A questionnaire was developed and addressed to the students to collect the quantitative

data in addition to a classroom observation and an interview with the teacher to obtain qualitative data. The results of the current study confirmed the investigated hypothesis and disclosed that biology students need the four linguistic skills with a special emphasis on reading and writing skills in addition to the acquisition of terms related to their discipline.

Keywords: English for Specific Purposes, English for Academic Purposes, Needs Analysis, English for Occupational Purposes

ملخص:

تمهد هذه الدراسة إلى التعرف على الاحتياجات اللغوية الخاصة بطلاب السنة الثالثة بقسم البيولوجيا بالمركز الجامعي صالحى احمد بالنعامة، وبالتالي طرح اقتراحات مفيدة وفعالة لطلاب الأحياء تضمنت عينة الدراسة (20) طالباً وطالبة (7) ذكور و (13) طالبة تم التحاقهن بالمركز الجامعي صالحى احمد في قسم الأحياء خلال الفصل الدراسي الثاني. وبشكل أكثر تحديداً، تم اقتراح بعض الحلول لتلبية احتياجات الطلاب حيث تم اكتشاف العديد من العقبات التي تؤثر على تصميم برنامج فعال مخصص لهذه الفئة من الطلبة. من أجل تحقيق هدف الدراسة، مناهج بحث متعددة استخدمت في جمع البيانات. تم إعداد استبيان موجه إلى الطلاب لجمع البيانات الكمية بالإضافة إلى مراقبة الفصول الدراسية ومقابلة مع أستاذ مادة اللغة الإنجليزية للحصول على بيانات نوعية. أكدت نتائج الدراسة الحالية الفرضية المحققة وكشفت أن الطلاب يحتاجون إلى المهارات اللغوية الأربع مع التركيز بشكل خاص على مهارات القراءة والكتابة بالإضافة إلى اكتساب المصطلحات المتعلقة بخوبهم.

الكلمات المفتاحية: لغة التخصص، الإنجليزية لأغراض أكاديمية، تحليل الاحتياجات، الإنجليزية للأغراض المهنية.



1. Introduction

In today's world of globalization, teaching English as a foreign language has become absolutely necessary in the Algerian educational context since the strength of English language is greater than many other languages. In fact, the paradigm shift from teacher centred approach to learner centred approach in addition to the revolution that occurred in linguistics have led to the birth of a new branch in English namely English for Specific Purposes (ESP henceforth). This new approach is specially designed for people who are learning English so that they will be able to use it and to use the terminology related to each field in specific academic or practical situation.

Further, meeting the needs of learners has become a vital requirement for real success. Since English has become a global language, English courses are basically designed in universities to meet the requirements of the current globalized world because they greatly need English language either academically or occupationally. In fact, Centre University of Naama offers ESP courses to its students in several faculties. The Department of Biology is one of the faculties that introduces English as a compulsory module.

As a matter of fact, ESP courses are given a little attention at the level of Algerian universities as they are always replaced by General English courses. Hence, needs analysis is absolutely necessary and may be beneficial to prepare students for the encounter with globally competitive world and to address the requirements needed for the development of ESP teaching and learning processes in all Algerian universities. Therefore, analysing students' needs and suggesting some recommendations is the main focus of the current study.

2. Literature Review

The literature review in this manuscript explores the reasons behind the emergence of ESP and the significance of needs analysis as a stepping stone for designing a language course that precisely and hopefully responds to and articulates learners' academic needs.

2.1. Definition and Historical Developments of ESP

English for Specific Purposes (ESP) appeared as a term in the 1960s since General English (GE) did not meet the specific needs of the learner. This new approach is specifically designed for people who are learning English to use it in specific practical situation. Actually, ESP is a new discipline that calls for a new learner centred approach to English language teaching. The term ESP describes language programs designed for individuals who are learning with an identifiable purpose and clearly specifiable needs. ESP is based on an investigation of the purposes of the learner and the set of communicative needs arising from these purposes¹. In other words, ESP is learning and learner oriented through the analysis of communication needs of the learner. Moreover, certain features are considered factors of criteria common to all ESP programs: 1-ESP is goal-directed: students are not learning English language as an end in itself, but because they need to use English, 2- ESP courses are based on the analysis of learners' needs, 3- ESP learners tend to be adults rather than children². It can be said that the definitive goal of teaching ESP is to enable the learners to communicate efficiently within the fields of their specialization. It is widely believed that specific courses of language teaching that are specifically designed for learners, who have specific communicative needs, are more effective than general courses that are usually designed for achieving general educational end³.

Tracing the historical background of ESP, three key reasons are believed to be common to the emergence of all ESP; ESP has been emerged as result of three reasons: the demands of a brave new world, a revolution in linguistics and a new focus on the learner⁴.

Concerning the demands of a brave new world, the end of World War Two in 1945 led to a period of scientific, technical and economic revolution around the world. Thus, English has

become the language of manuals, textbooks and journals in specialized international fields, and being the language of international technology and commerce, it was and still the crucial instrumental language that imposed itself to be learnt by different people at that time. In this light, it can be said that whereas English had previously decided its own destiny, it now became subject to the wishes, needs and demands of people other than language teachers⁵.

Secondly, the crises of oil in 1970s have established new relationship between the west and the oil rich countries; i.e, English language is the medium of this communication. Thus, English suddenly became a big business and commercial pressures began to exert an influence. Further, the revolution of linguistics is seen as a new idea that started to emerge in the study of language that have led to the emergence of ESP in opposite to traditional linguists who focus on the description of language features and the rules of English grammar.

Finally, focus on the learners is believed to be among the main reasons for the emergence and the growth of ESP which has been clearly discussed in several works. This last reason that has lead to the birth of ESP is more close to psychology than to linguistic. In other words, focusing on the learners strategies of learning and the linguistic instruments that a learner uses to acquire language rather than focusing on the methods of language learning. In fact, special purpose English teaching is determined by the requirements of the learner rather than by external factors.⁶

To conclude, despite the various definitions of ESP, there is much misinterpretation concerning the exact definition of ESP and no one could describe English for Specific Purposes in a couple of sentences because the term is extremely complicated so that it is not easy to produce a definition of ESP which is simple and water weight. Generally, ESP is an approach, which uses needs analysis as the basis for curriculum development. It is considered as an umbrella term that includes a number of sub-divisions and is often divided into two main sub-branches: English for Occupational Purposes (EOP) and English for Academic Purposes (EAP). For the sake of narrowing down the scope of our topic, we will focus mainly on EAP.

2.2. Branches of ESP

ESP is an approach which has been widely used over the last three decades. It is generally divided into two main topmost branches: EAP and EOP. Firstly, English for Academic Study which is called English for Academic Purposes (EAP) that refers to any English teaching that relates to academic study needs. It has been pointed out that in the area of EAP, English for Science and Technology (EST) has been identified as the focal area, but English for Medical Purposes (EMP) and English for Legal Purposes (ELP) have always gained their places⁷. Moreover, ESP is divided in the Tree of ELT into three branches. The branch of English for Science and Technology includes teaching/studying English in scientific domains such as Medicine and Engineering. English for Business and Economics is a branch of ESP that refers to teaching/studying English concerned with economy, trade, and business affairs. The last branch is English for Social Sciences (ESS); this latter is belonging to social sciences such as psychology and teaching. Each of these branches is divided into two branches: English for Academic Purposes (EAP) and English for Occupational Purposes. English for Secretaries is an example of EOP for the EBE branch, whereas English for Economics is an example for EAP for the EBA branch .EAP may include: 1-EST: English for academic science and technology, 2-EMP: English for Academic Medical Purposes, 3-ELP: English for Academic Legal Purposes, 4-English for Management, Finance, and Economics EMFE, which is a branch specified to teaching non –native speakers. On the other hand, EOP refers to courses except academic purposes ones .EOP includes English for Professional Purposes in administration, law, medicine, business and vocational courses⁸. Recently, ESP has been classified into different sub-branches according to its general and specific nature of the course⁹.

2.3. Needs Analysis

Needs analysis is a fundamental and complex process, which has to take into account in any ESP course. The role of needs analysis is indisputable as it has traditionally been a pillar of ESP course design. To define the specific sets of skills and communicative practices that a particular group of learners or employees need is extremely central to ESP. Thus, NA is the first step in the design of any course that aims to identify as closely as possible the needs of a particular group in specific field of study through the medium of English.

1.1.1 2.3.1. Background of Needs Analysis

To meet the needs of learners, needs analysis has become a vital requirement for real success. In response to these demands, NA has eventually become a mainstay in course design and teaching specifically in recent times. A brief overview of the origin of needs analysis is provided. In fact, the term was first introduced in 1920 as a medium for determining the needs of the general language learners, who studied English simply for the sake of knowing English¹⁰. As a result, it did not seem very relevant to ESP at that time and what is meant by NA has also gradually changed.

The term re-emerged during the 1970's through the intensive studies conducted by the Council of Europe Modern Languages Project. It primarily concentrates on analysis of the use of target language in specific situations. Its return is closely associated with the emergence of ESP in the 1970s. Furthermore, as a research field, the ESP movement in the 1970s espoused needs analysis as its guiding principle and the spirit of the period is described with the appearance of Communication Needs Processor¹¹ as a watershed and a coming of age for ESP. Thus, NA began along with the development of the communicative approach and has gone through multiple developments and stages in the 1970s and 1980s as it is demonstrated in the below table.

3. Methodology

The present study is a need analysis conducted to investigate the quantitative and qualitative English language needs of the students learning biology at Centre University of Naama. The main aim is to identify their overall English language needs. Now, it is a well established fact that needs analysis has a vital role in the process of designing specific courses especially when it is related to English for Specific Purposes, and its centrality has been acknowledged by several scholars and authors. Thus, the investigator attempted to base the study on a correspondent research question that inquires about the real needs of third year LMD biology students at Centre University of Naama who learn English as a complementary module; what do biology students need English for? To this extent, the researcher hypothesises that biology students do not only need English for acquiring the target terminology but rather require to possess general abilities in the four linguistic skills.

3.1. Participants

The participants in this study were 20 third-year LMD students from the Department of Biology and their teacher. The researcher has noticed that there are more female students compared to the males who attended the session. These students were chosen to be the population of this study in addition to the teacher who teaches them English module. The role of the teacher is to provide points of view concerning ESP course and to find out how ESP enhances the student's four skills and competences. The teacher holds a licence degree in English; this teacher was graduated from the department of foreign languages -English section- and she is not trained to teach ESP.

3.2. Data Collection Method

In order to successfully conduct the needs analysis, three instruments had been used for this study which included a questionnaire, an interview and a classroom observation. Both qualitative and quantitative data were collected for this study. The needs analysis instruments are intended to capture the students' needs and the teacher's perspective. Each instrument is elaborated as follows:

3.2.1. Questionnaire for Students

The questionnaire was administered to third year LMD students in the department of biology during the academic year 2017 at Naama Centre University. It was delivered to 20 students. The content of the questionnaire was designed and written in English and translated into Arabic; the participants' native language. The researcher tried to simplify the questions to avoid confusion and complexity so that students could easily answer the questions. Moreover, the questionnaire consists of several questions of different types: open, closed and mixed questions. For instance, question number three deals with students' point of view about the significance of English language. This question uses a cross-check question offering three choices: *less important, important, and very important*. Indeed the students showed interest to provide feedback to the research inquiries which would be helpful to enrich the research with useful ideas from a variety of perspectives.

3.2.2. Interview for the Teacher

Through conversation, the interviewer would collect data from individual and at the same time the interviewee will be able to discuss the main view, perception and interpretation in regards to a given situation. Actually, teacher's interview was organised for the purpose of analysing the overall situation in the Department of Biology. It consists of 5 questions that were asked to collect more qualitative information and to give an opportunity for the teacher to express her ideas freely. The questions of the interview included open and close-ended questions based on the theoretical framework of the needs analysis of the study. As a matter of fact, before collecting the data, the interviewer described and explained the purpose of the study to the teacher.

3.2.3. Classroom Observation

To collect more reliable data, the researcher had used classroom observation as the last tool since it is viewed as "...the only way to get direct information on the classroom behavior of teachers and learners" (Weir and Roberts, 1993). Observation was tailored by the observer with the aim of paving the way to take notes about the attitudes of ESP teacher in terms of presenting the lesson, activities and the reaction of students. Such instrument allows the researcher to look at real environment of biological students.

4. Data Analysis and Discussion

The methods of data analysis would be quantitative and qualitative in this research in order to figure out the main needs of the students, then to focus on the main needs of communicative skills of English. Consequently, data gathered from the questionnaire had been categorised and calculated into statistical values. Data have been presented in percentage through the use of frequency counts and then have been converted into percentages.

4.1. Questionnaire

The questionnaire was given to 20 students. They, after finishing the questionnaire, submitted them back to the researcher. The participants have answered only the Arabic version of the questionnaire. Based on the responses of the questionnaire, the researcher could comprehend the students' English learning backgrounds and the importance of English language

communicative skills in their field in addition to their needs of the acquisition of biological terminology related to their domain. Through the analysis of the answers of the questionnaire, the researcher might figure out and eventually formulate the suitable and dynamic interview to best serve the research.

As far as the first part of the questionnaire is concerned, students were asked about the importance of English language in their field.

It is worth mentioning that (50%) of the respondents consider English very important to them; whereas, (40%) see that English is important. However, only two students feel that English is less important to their career. Only (10%) state that English language is less important. It can be concluded that students are aware of the significance of this globalized language.

The second part of the questionnaire aimed at knowing the language learning needs of the students. The purpose of this section is to find out those skills which are very important for them in carrying out most of their academic tasks. Therefore, the students were asked to order the skills. The results of this part had shown that (25%) of the respondents need English to write abstracts and articles related to their field. The researcher deduced that two samples have a similar percentage; (35%) of which one need English to read biology texts and the other (35%) need it to translate terminologies. However, only (5%) need this international language to speak it fluently. It is noticeable that from the total number of the questionnaire's respondents no one suggests to listen to videos about biology.

To sum up, the results have revealed that there is a growing increase for the need of English especially reading and writing skills. It is noticeable that all participants are not satisfied with their English level as they are inadequate and need improvement. Obviously, reading and writing are more important than listening and speaking skills for biological students. Thus, it is essential for the course planners to set up the appropriate English courses that support the students' English needs.

So far as the difficulties are concerned, the last part of the questionnaire aimed at knowing the language learning difficulties. The purpose of this section is to find out those skills which are very difficult for students in carrying out most of their academic tasks. The results of the questionnaire shown in table 4 indicate that for the samples writing and speaking skills are very difficult while listening and translation are less difficult for them. However, (70%) of the respondents indicate that they do not face any difficulties in listening skill.

4.2. Analysis of Teacher's Interview

To gather data from the teacher, the researcher used an interview as the second instrument. The teacher had been interviewed and asked about her perceptions in teaching. The researcher tried to analyse and interpret qualitatively the obtained data. The interviews' notes were rewritten immediately after the interview. The findings which emerged out of interview had been summarized according to the questions being asked. In fact, the interview revealed that the teacher holds a licence degree in English; she was graduated from the department of foreign languages, English section. The participant stated that she is a novice teacher and has no idea about ESP so that she does not have any specific program to follow while preparing the course and her lessons are general lessons. Further, she pointed out that there is no need for collaboration with specialized teachers. She confirmed that there are some difficulties in the teaching process such as: the students' low level which is due to the fact that they cannot understand English language without translation into Arabic or French.

Being asked if she used to conduct needs analysis before designing the lectures, the teacher would never had conducted needs analysis. She added that reading and writing skills are the most important skills for the biology students in which she gives them texts to read and

activities to answer to enhance the latter skills. However, she totally neglects listening and speaking skills due to the lack of materials in the administration such as data show, computers, pictures and videos that may help the students to understand better the courses, his is on one hand; on the other hand, the materials would help the teacher to motivate the students and to explain any course effectively. The teacher always uses the handout to present the lesson and if it is necessary she uses the board.

At the end, the teacher was so helpful to provide the researcher some suggestions in which the researcher could reveal some interesting facts about the ESP position at the Biology Department. First, she stated that the administration should provide syllabus to English teachers that can guide them to prepare their lectures. Secondly, she added that the students should practice the four skills not only in the classroom but also outside the classroom as a result of the lack of time allocated to English module. Last but not least, there is a great lack of English books in the library. Furthermore, she pointed out that the administration should organize seminars and students' attendance is obligatory to become aware about the significance of English language in their future career either academically or occupationally.

4.3. Analysis of Classroom Observation

In order to provide more useful information about the teaching-learning situation and on what is really occurring in the ESP classroom, classroom observation has been chosen as the last tool to collect authentic data about the situation of English language in Biology Department. To fulfil the task, the observer had used note-taking as a means to accomplish the observation. As it was mentioned previously, classroom observation was conducted in the second semester for three sessions. The observation was related to three elements: classroom environment, interaction, and activities.

The investigator had known that the total number of the third year students is 30 students. During the observation, the researcher noticed that the total number of students who were attending in each session was almost the same, only 20 or 17 students. Concerning participation, students showed no interest in the session; the majority of students were silent during the three sessions. It was also recognised that the teacher used just the board as a material and multimedia devices were not used. The observation permitted the researcher to get some information about the teaching process and the presentation of the lessons in addition to the different activities the teacher has provided during the sessions to develop the students' abilities in English language. Obviously, the researcher had observed that the teacher began the lecture by giving a text with questions to the students and asking them to read silently for five minutes to do the tasks. Afterwards, the teacher picked out one student to read the text loudly. After reading the text, they began to answer the questions, what was observed is that there was a total absence of organization as students started to answer randomly without raising their hands. Concerning the method that was adopted, teacher-centered seemed to be the dominant method since students are not knowledgeable enough in English. Additionally, it was noticed that the teacher talked more than the students. Then, dictation was used by the teacher to enable the students to correct the questions of the text in their sheets; however, most students show no interest.

Furthermore, it was noted that there was a great focus on grammar rules and reading biological texts related to their field. In fact, the texts were too short. In regard to terminology and vocabulary acquisition, the teacher asked the students to select the most difficult terms from the texts. During the course, the teacher did not involve listening as a result of the absence of materials. However, the teacher gave the students the opportunity to speak freely and express their ideas during the course when they correct the questions but most of the students did not care, did not speak and did not answer teacher's questions as well. Accordingly, there was not much interaction or in other words no direct contact with the target language (using English language) since they do not use it at all in their real discipline except few students who can use

English language. In addition, they face difficulties in terms of pronunciation which prevent them to speak.

Equally important, in all the teaching lectures, both teacher and students used Arabic language as the principal language when dealing with difficult situations and terminologies related to their actual needs. French language was a little bit used by the teacher. All in all, it can be said that the three languages were used during the three sessions though Arabic appeared to be used much more often than English and French languages. Surprisingly, the investigator observed another element which was not included in the elements of classroom observation; it was about pronunciation. The teacher asked the students to pronounce some words with silent letters.

As the classroom observation revealed, the majority of students were passive whereas few were active and not motivated at all. Unfortunately, the teacher did not try to motivate and encourage the students to be involved in the learning process. Instead, she did all work because the students were extremely passive. As far as reading is concerned, the teacher focused more on reading comprehension so that students were obliged to be involved in the reading process. Concerning writing skill, it was totally ignored and neglected by the teacher. As a matter of fact, the observer observed that translation is absolutely used in the classroom since the teacher used Arabic language and most students do not understand the content of the lessons and terms related to their field. Further, students did neither participate nor ask questions.

5. Suggestions and Recommendations

Based on the results, it could be possible to propose some hopefully beneficial recommendations and a number of suggestions to cope with the needs of the students. It is believed that there are three essential pillars in the ESP process, which are the administration, the teachers and the learners. To have a successful and effective ESP course, each one from these three elements should play its role appropriately. Therefore, according to the results, the researcher suggests that the starting point of repairs should begin from the administration because it is considered as the essential support for both teachers and learners.

The analysis of the population's answers enable the researcher to notice that it is necessary for the administration to work hand in hand with teachers and learners in order to enhance the ESP process through organizing conferences in which discussions will be in French and English languages.

5.1. The Role of the Administration

Through the observation and the teacher's interview answers, the investigator recommends that the teacher should follow a syllabus that should be a common one provided by the Ministry of Higher Education for all biological students in Algerian universities or at least by the administration of the university that should be taught by permanent English teachers to guarantee the quality of teaching. With the introduction of the new technologies, the administration must be well equipped with the necessary materials that will be available for teachers in any time such as computers, data show and language laboratories instead of textbooks, board, and pictures that were used in the past.

Further, the use of authentic and pedagogical materials in the classroom can highly motivate the students and facilitate the learning process. In fact, the combination of the old and the new teaching aids and materials in the classroom can be an effective way of helping the learner as it will create and take the learner into a kind of real social life inside the classroom to achieve the communicative development.

The researcher proposed that the administration should raise the coefficient of English module from 01 to 02 or 03 to increase the students' interest in English language. There is no

doubt that the ESP specialist teachers have a great effect on the achievement of EFL novice teachers, that is why the researcher proposed that any ESP teacher must collaborate with this latter for the awareness of the suitable steps of preparing an ESP course; otherwise, the administration should put into practise this suggestion. Novice teachers should be given the opportunity to be under the supervision of ESP experienced teachers. This opportunity is a chance to spread and share ideas, exchanging opinions about their lectures and raising discussion about how they can solve their students' problems and difficulties during the sessions.

5.2. The Role of the Teacher

The ESP teacher is one among the pillars at the Biology Department and we cannot take his/her crucial role into granted. In this vein, the teacher always works as a guider, as facilitator of learning in which he/she tries all his/her best to transform the ideas of the lecture to the students with the support of examples and explanations until he /she reaches the goals and the objectives of the course. Basically, it is of great importance to carry out a Needs Analysis approach that would take the needs of the students into consideration before designing any course and before the selection of any teaching materials that would fit learners' needs. Thus, experienced teachers who have already discovered their students' needs and weaknesses are required to enable the learner to be familiar with English language and using it appropriately.

5.3. The Role of the Learner

The researcher proposes that the four skills must be all developed by the learners themselves without depending only on the teacher efforts. They must know how to learn inside and outside the classroom in order to address their needs. In other words, the learner is responsible of his /her learning. They should take part in the different activities selected by their teacher and take advantage of the pedagogical aids used in the course.

6. Conclusion

English has acquired a unique status among the other languages of the world in that it has been acknowledged as a global language. Today, everyone needs to have a good command of English and the importance of teaching English in several faculties in the Algerian universities particularly in biology department is undeniable. Thus, teaching and learning English for Specific Purposes has become an instrumental must to cope with this technological and industrial revolution in versatile provinces both in the academic and occupational world. Yet, determining the target specialised knowledge that learners need is a major issue in ESP course design. To this effect, the researcher investigated the target and learning needs of third year LMD biology students as a case study to inquire about the correspondent needs of the learner that should be taken into consideration in course design for the sake of meeting with the learners' expectations. Evidently, the results have revealed that all the respondents are extremely aware of the vital importance of English language in their daily educational life. Further, writing and reading skills are found to be the most frequently used, the most needed and the most problematic English skills in Biology department. The researcher has tackled a number of recommendations to cope with the needs of the third year LMD Biology students and proposes hopeful beneficial suggestions for the ESP teacher and for the administration. All in all, the investigator conducted the work for the sake of investigating the English language communicative needs of third year LMD students at biology department. This brings to the surface that the results might not respond to first and second year LMD students' needs studying at the Center University of Naama. This fact calls for an urgent need to open the doors for future researchers in this area of investigation.

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