

*ESP Teaching in the Department of Economics  
at the University of Mascara; A Diagnostic Study  
of the Problems and Suggested Remedial Strategies*

ندريس الإنجليزية لأغراض خاصة في قسم الاقتصاد بجامعة معسكر  
دراسة نشيضية للمشكلات والاستراتيجيات العلاجية المقترحة

Dr. Djamilia Benchennane, University of Mascara, Algeria.

date de soumission: 01/10/2018 date d'acceptation: 19/11/2018 date de publication: 10/12/2018

### Abstract

The aim of this research work is to investigate the status of English for Specific Purposes course in the department of Computer Science at Mascara University. This research work focuses on two research instruments for data collection which are: students' questionnaire and classroom observation. Both qualitative and quantitative methods for data analysis will be used in this research work to analyze these data. The results will shed light on the idea that teachers of English need training to improve their own levels and to learn modern methods of teaching. Therefore, an ESP course for Computer Science students is proposed, in the end, for implementation.

**Mots clés:** ESP Course, Computer Science, Course Design, ICTs.

### ملخص

الهدف من هذا البحث هو التحقق من حالة اللغة الإنجليزية لأغراض خاصة في قسم علوم الكمبيوتر في جامعة معسكر، يركز هذا العمل على أدوات بحث لجمع البيانات وهي: استبيان الطلاب وملاحظة القسم. سيتم استخدام كل من الأساليب النوعية والكمية لتحليل البيانات في هذا البحث لتحليل هذه البيانات. وستسلط النتائج الضوء على فكرة أن مدرسي اللغة الإنجليزية بحاجة إلى تدريب لتحسين مستواهم اللغوي وتعلم طرق التدريس الحديثة. لذلك، يتم اقتراح دورة اللغة الإنجليزية لأغراض خاصة لطلاب علوم الكمبيوتر.

**الكلمات المفاتيح:** دورة اللغة الإنجليزية لأغراض خاصة، علوم الحاسب، تصميم الدرس، تكنولوجيا المعلومات والاتصالات.



**Statement of the problem:**

The department of Economics employs teachers who have been trained in general English and are not specialists in the field, i.e., they are far from being subject specialists. They find themselves teaching in a field which is not theirs: “strangers in a home land area” and are not experienced in teaching English for specific purposes as well. Although, they do their best to teach the language, they sometimes find it difficult to master or even understand some particular concepts. The problem is that no pre-determined objectives are defined in the teaching of English for Specific Purposes and students’ needs are somehow not totally taken into account. As a result, the students fail in their attempt to acquire the basic knowledge of both the English language and the Computer Science in which they are specializing.

**1.1 Introduction:**

Foreign languages are of a great importance that is why Algeria urged to implement them in its educational system. At the Algerian universities the teaching of English is general at the English departments but specific at the other departments such as: chemistry, physics, biology, economics, sociology, medical sciences. The aim of this research work is to investigate the status of English for Specific Purposes course in the department of Computer Science at Mascara University. Thus, it has been noticed that its teaching was not satisfactory for various factors such as students’ needs are not totally taken into account. At the end some recommendations will be provided by designing a course design for those ESP learners where needs analysis may be the main criteria to give a remedy for their weaknesses.

**1.2 Literature review:**

a) Hutchinson and Waters (1987:58) see ESP as an approach rather than a product.

They mean that ESP does not involve a particular kind of language, teaching material or methodology.

They suggest that the foundation of ESP is finding why this learner needs to learn a foreign language , the answer relates to the learners , the language required and the learning context and establishes the primacy of need in ESP . Need is defined by the reasons for which the student is learning English which will vary from study purposes that are the starting points which determine the language to be taught.

**b)** Strevens (1988:1-2) definition of ESP makes a distinction between four characteristics (absolute characteristics) and two variable characteristics.

The absolute characteristics are that ESP consists of English language teaching which is:

- designed to meet specific needs of the learner related in content (in its themes and topics) to particular disciplines, occupations and activities centered on language appropriate to these activities: syntax, lexis, discourse, semantics and analysis of the discourse. in contrast with ‘ General English ‘ .

The variable characteristics are that ESP:

- may be restricted as to the learning skills to be learned (for e.g. reading only)
- may not be taught according to any pre-ordained methodology.

**c)** Robinson (1991) also accepts the primacy of needs analysis in defining ESP. Her description is based on two key defining criteria and a number of characteristics that are generally found to be true of ESP.

Her key criteria are that ESP is ‘normally goal-directed’, and that ESP courses develop from a needs analysis, which aims to specify as closely as possible what exactly it is that students have to do through the medium of English. Her characteristics are that ESP courses are generally constrained by a limited time period, in which their objectives have to be achieved , and are taught to adults in homogeneous classes in terms of the work or

specialist studies that the students are involved in.

Robinson (1991:79) finds that “ESP courses and the institutions around the world which offer them, are so varied that there can be no single model for the ESP teacher”.

**d)** Dubley-Evans and St John (1998:5) while defining ESP, stress on two aspects of ESP methodology: all ESP teaching should reflect the methodology of the disciplines and professions it serves; and more specific, in ESP teaching the nature of the interaction between the teacher and learner may be very different from that in a general English class this is what they meant by ‘specific ESP teaching has its own methodology’. They also believe that language should be included as a defining feature of ESP.

While the specified needs arising from needs analysis relate to activities that students need to carry out (rather than language), a key assumption of ESP is that these activities depend on associated language that students need to be able to manipulate to carry out the activity.

ESP teaching is seen as a separate activity within ELT (English Language Teaching). For some of its teaching ESP has its own methodology, and is opened to various disciplines in addition to applied linguistics. ESP is concerned with needs analysis, text analysis and preparing learners to communicate effectively. It is said that ESP lacks an underlying theory, however, it is believed that a theory of ESP could be outlined based on either the specific nature of the texts that learners require knowledge of, or on the bases of the needs-related nature of the teaching. What makes ESP interesting is that it concentrates on relating course design to learners’ specific needs rather than on theoretical matters. ESP is known as a learner-centered approach. It meets the needs of adult learners who need to learn a foreign language for use in their specific field and for foreign language professionals who wish to learn to design ESP courses in an area of specializa-

tion such as English for business, for health service purposes, for Academic Purposes. From this point, and as ESP is goal directed, the students are not learning the English language for its own sake, but because they need to use English in order to succeed in their academic field or work.

English for specific purposes requires more than the study of the general English. It is designed for learners who have already acquired the basic elements of the English language for specific ends in their speciality. Consequently, ESP allows learners to develop their communicative competence (Widdowson, in Robinson, 1980). So, the acquisition of the linguistic system as a whole is not their objective ; a selection in this system will be done to reach definite objectives ( Coffey, 1984 ).

It must be noted that an analysis of learners' needs (Robinson 1980) is the first step to be undertaken before ESP teaching . This will allow the practitioner to make a suitable programme to answer their expectations . In an ESP course, the central element is not the teacher but the learner, so it is learner-centered ( Richterich and Chancerel, 1980 :5) . ESP can be taught either at a schooling system, as English for Academic Purposes (EAP) or at a professional field, as English for Occupational purposes (EOP).

From these two principal branches, derive English for Science and Technology (EST). In other words, EST can also take part both at a professional field and academic system simply because EST is an important aspect in ESP programmes (Kennedy and Bolitho , 1984). In general the learners in the scientific and technical departments in the Algerian universities are concerned by EST being situated within the academic system EAP. Generally speaking, the situation of the teaching and learning in such departments is nearly similar.

### **1.3 Background of the Study:**

This study is theoretically grounded in the area of ESP tea-

ching. The tools used in this research are description and questionnaire analysis.

### **1.3.1 Methodology:**

#### **1.3.1.1 Participants:**

The original sample selected to participate in this study was 44 students from a population of 120 first year Economics Master students from the University of Mascara. The students belonged to two classes and were enrolled in the option of ESP studies. Because of institutional constraints, it was not possible to assign students randomly to different groups, thus making it necessary to work with two intact groups.

The two groups were: (1) the control group, which received no explicit instruction on ESP but had instructor-led lessons from the textbooks; (2) the classroom setting with explicit instruction on ESP from the instructor. There were 24 students in the control group, 20 students in the experimental/Teacher Instruction group, both the pre-test(s) and post-test(s) were randomly assigned to the intact classes. The study was conducted in the second semester of first year Master students of Economics at the University of Mascara.

### **1.4 Materials:**

The data collection tool used in this study is a Two-group (Pre-test Post-test) Experimental Design.

The Two Group Design is, by far, the simplest and most common of the pre-test-post-test designs, and it is a useful way of ensuring that an experiment has a strong level of internal validity. Both groups are pre-tested, and both are post-tested; the ultimate difference being that one group was administered the treatment.

Indeed, this design evaluates the efficiency of the sampling process and also determines whether the group given the treatment showed a significant difference.

A true random sampling was not possible and intact groups were used. Therefore a pre-test – post-test group design was adopted in this study. Two - group experimental design has practical advantages over the true and quasi experimental designs because it deals with intact groups and, thus, does not disrupt the existing research setting. This decreases the reactive effects of the experimental procedure and, therefore, improves the external validity of the design. Thus, conducting an experiment without the participants being aware of it is possible with intact groups, but not with random assignment of subjects to groups. The participants were not allowed to interact with one another while completing the task.

A pre-test/post-test design was utilized as the preferred method by which to evaluate the learners' awareness of ESP (comprehension and production).

In this design, we are most interested in determining whether the two groups are different after the explicit ESP instruction. Typically, we measure the groups at one or more levels. The data in this study was collected by an ESP act judgment assessment that was presented in the form of tests.

### **1.5 Procedures:**

#### **1.5.1 Stage I: Tests Construction:**

A pre-test and post-test were given before and after the treatment to measure the participants' ESP proficiency at the level of ESP act awareness (ESP act comprehension + ESP act performance).

##### **1.5.1.1 ESP Act Awareness Test:**

Because ESP is a part of communication, any communicative language assessment should include the test of speech act awareness which is the amalgamation of two tests (ESP act comprehension test + ESP act production test).

**\* ESP Act Comprehension Test:**

The Test of ESP acts comprehension is an effective instrument designed to assess student's comprehension of the intended meaning of different utterances and to provide information on crucial dimensions of ESP: physical setting, audience, topic, purpose...etc

The Test of ESP act comprehension allowed us to assess the effectiveness, and appropriateness, of a student's ESP comprehension. It also provided important information about social skills. It was administered in approximately 45 minutes.

**\* Discourse Completion Test (DCT):**

The test used in order to assess the student's speech act realization (production) is a Discourse Completion Task (DCT), using a DCT was nearly unavoidable, as it would have been all but impossible to collect 'natural' data as a result of observer fieldwork with a reasonable number of participants interacting with all of the different types of interlocutors and communicative situations that were proposed.. Golato notes that DCTs are "widely used in the field of intercultural communication, and second language acquisition, mainly because their simplicity of use and high degree of control over variables lead to easy replicability" (2003: 93).

**1.5.2 Stage II: Treatment (Instructional Materials):**

The two intact classes were randomly assigned to two experimental groups: an implicit group (IG) and an explicit group (EG). Both groups were given 10 treatments, each of which lasted between 30 and 40 minutes of the class of ESP. The instructional materials included two parts; one was for the instructor, and the other was for the participants.

The two groups received instructions in different ways. In the EG, instruction of request and apology were realized through six phases i.e. three phases for each speech act. In the first phase,



the input exposure phase, students were provided with models of English requests and apologies. These are explained explicitly by the teacher (instructor). In the second phase, the strategy recognition phase, students were provided with a brochure, and were asked to identify the formulas and strategies of making requests and apologies. Then, they were given a list of request and apology strategies and formula (metapragmatic rules for both speech acts strategies were taught). Students ranked the given pragmalinguistic formulas in the order of directness, discussed the factors that affect the choice of these formulas and strategies such as power, social distance, imposition, settings, and talked about the differences and similarities in the way that the social factors affect the choice of formulas and strategies. It was expected that this knowledge would help learners make connections between ESP language functions and their social distribution through lectures, handouts, group or pair work and explanatory feedback. The third phase, the production practice phase, included role-played activities which engaged students in different social roles and speech events where they could practice and gain familiarity with the pragmalinguistic and the sociopragmatic aspects of request and apology. During the practice task, errors were pointed out if there were any, and feedback was provided. In addition to the explicit instruction, a number of activities which are useful for pragmatic development were developed. Such activities aimed at raising students' pragmatic and speech act awareness that offers opportunities for communicative practice. Awareness raising activities are activities designed to develop recognition of how language forms are used appropriately in context. Students were also involved in role-play activities.

#### **1.6 Data Analysis Procedures:**

To make a scientific interpretation, the data are analyzed through descriptive and inferential statistics. Both types of statistics are used to describe the basic features of the data. They

provide simple summaries about the sample and the measures. With simple graphics analysis, the two form the basis of virtually every quantitative analysis of data. The significance value is set at 0.05 at all statistical tests in the present study. The data of the study are collected from two sources. One is the subjects' score on pragmatic and speech acts tests; means, standard deviations, t-test and Person correlation analysis of each group are compared to see whether there is any significant difference between the scores obtained before and after the experiment.

#### **1.7 Classroom observation and Course description:**

While observing the courses, teachers seemed not to collaborate with each other: some of the teachers are providing learners with literary texts which have nothing to do with ESP; other teachers are either dealing with technical texts or assigning projects i.e. asking the students to prepare research papers to present them in class. If students are asked to explain what their work consists of, they generally fail to do so because they are simply reading what they have collected and even class – discussion is poor, no motivation, very few questions are asked by their fellow friends; consequently there is no strong debate that can make of the class a vital one. Another point is that those teachers are focusing only on one skill 'the reading one', neglecting the other three skills (speaking, listening and writing).

In the department of Economics at the University of Mascara, the teachers and learners work in the same conditions and face the same problems as follows:

-The lack of training for EST teachers who have received a training of general English and find themselves incapable to give an EST course as they have not been trained for this type of teaching. They find themselves teaching a specific domain which they ignore its contents (such as economy, management, ... and so on).

-The inexistence of English during some years at university engenders a real problem in practising the language. This negative experience is often lived by the EST teachers. In some departments, English teaching is held at the end of the term or in the middle in others. This will make learners forget English since they lack practice.

- The heterogeneousness of learners' levels that is not all learners have got the same level.

-The timing schedule allocated to the EST module (1 hour 1/2 per week) is not enough.

Consequently, it would be impossible to acquire a complete EST teaching. Due to the absence of EST module during some years of university, the teacher finds himself obliged to provide various sessions of general English consolidation to refresh memories.

Unfortunately, this is not the aim of EST. The teacher finds himself face to face with false beginners. The linguistic problems such as interference are inevitable for learners whose first language is Arabic or French. Likewise, the EST teacher must not neglect this interference and he has to try to find a remedy to avoid it.

The inexistence of programme and lack of material pose a problem of organization to such a teacher who feels as a stranger in an unknown area "Exodus"(in Hutchinson and Waters, 198).

In other words, the so-called teacher of EST is far from being a professional . All this series of problems shows that the teacher cannot undertake his task properly. In order to reach an adequate and efficient EST teaching, some suggestions have been proposed:

- The different problems of EST teaching, having been taken into consideration, will allow to remedy to obtain positive results.

- Concerning the training of EST teacher, there must be collaboration between this teacher and the specialist teacher to design a specific programme and produce appropriate teaching materials.

Hadj Moussa, (1992), affirmed that “ Teachers of language must call upon teachers of science to determine the kind of material that their students must read”.

English for Specific Purposes (ESP) is known as a learner-centered approach. It meets the needs of adult learners who need to learn a foreign language to use it in their specific fields such as science, technology, medicine, etc.

ESP courses are based on a needs analysis, which aims to specify what it is that students have to do through the medium of English, what their aim is and what they plan to study.

What they need to do with a particular text and how they can be helped to do it.

Algeria meets difficulties in teaching ESP: Ali Tatar (1995), attempts to make the language teacher and subject teacher aware of the difficulty of this English.

She suggests an adequate teaching where different steps should be taken into account in order to alleviate or eradicate the problems that the language teacher and the learner meet.

At the university of Mascara, all the criteria above is absent: the students of Economics are far from learning ESP. They are taught by teachers of General English who are not subject-specialist.

Other problems have been noticed in the department of Economics, among these problems,

- a) The teaching staff of the language are not trained for a specific and technical English.
- b) Inappropriate time tabling of English teaching.

- c) The students' levels are heterogeneous.
- d) Insufficient timing schedule for the English module.
- e) Linguistic problems (interference).
- f) The inexistence of English programme and materials.

### **1.8 Findings:**

The general teaching effects in the present study were reflected by the comparison of the mean scores between the pre-test and the post-test and the distribution frequency of improvement among the students after instruction. The comparison of the mean scores is used to find out if there is a significant difference between the two tests, Furthermore, the distribution of improvement can find out to what extent the students improved after instruction. To find out the general teaching effects, the scores of pre-test and post-test within the two groups were compared respectively. Therefore, an independent t-test was used as a statistical method to obtain the results for the research questions and to test the hypotheses.

As far as the result of the t-test is concerned, they showed that there is no significant difference between the two groups before the treatment. Thus, we may conclude that the two groups were homogeneous in terms of pragmatic comprehension of the speech acts under study.

### **1.9 Recommendations:**

-If the EST teaching is held all the year long, this may avoid timing problem in organizing the English course on one hand , and the problem of heterogeneousness of the learners' levels on the other.

That is, when the society facilitates the task for teachers, by providing them with all the necessary needs such as equipped labs, computers, visual aids, material, the teachers will be at ease and perform their task properly. Thus, the learners who are

willing to learn, once being encouraged and motivated by their teachers, will do their best to learn. As a result, a maximum rate of learning could be obtained.

For learners in Economics field, lexical familiarization in Economics text is of a great value.

It has been argued that teachers should not teach specialist vocabulary but use strategies for puzzling out the meaning of a newly-introduced specialist term. This can be done through the strategy of vocabulary recognition of the writer's familiarization devices. Of course, a major difficulty is specialist vocabulary but with the advent of the functional approach to language teaching, and with emphasis given to texture (the essential characteristics of a text), vocabulary has received less emphasis in teaching / learning reading comprehension.

Harvey (1983) states that: "The study of vocabulary has been given a minor focus of classroom activities, perhaps partly due to more modern communicative approach methodologies."

Swales (1982) expresses the same thoughts, when he chastises ESP practitioners and textbook writers for their neglect of vocabulary-teaching.

Higgins (1967) states firmly that '.... It is not the job of the English teacher to teach technical vocabulary.'

Robinson (1980) supports this view and recommends that course book writers do no need to concentrate on specialist vocabulary, as students will absorb their main course studies.

Consequently, teachers are to teach learners lexical familiarization and guessing from context.

-On one hand, teachers should team up with each other trying to work together in order to exchange information, ideas and on the other hand, they try to focus on two aspects:

- The communication skill courses that focus more on preparing students for the communication tasks that they will have to carry out in work situations or at university such as communicating technical and business information effectively (oral, audio visual and graphics).

-The use of authentic texts for reading, listening, and writing including technical and business information and adapting materials such as a written business proposal for a boardroom presentations, writing memos and letters, chairing meetings and interviews.

#### **Designing a course design:**

Thus, taking into account the above views, we have proposed a course design, hoping to give a helping hand to the Department of Economics. This teaching course design was designed taking into consideration students' needs; therefore, needs analysis is the basis of any success.

Needs analysis conducted before the course will go most of the time to solve the problems of Course design. So, it has been suggested to negotiate the contents with learners through a questionnaire. Among the list of their needs:

-They wanted figures, graphs, numbers; financial / business vocabulary, writing reports and letters.

To overcome this obstacle, a course that could serve both teachers and learners would be that one including the basic features of structure, vocabulary and pronunciation useful for communication skills and business activities, consolidation exercises and back up material.

Its objectives are to assist teachers to adapt authentic ESP materials in a chosen professional area and to critically evaluate materials including technology-based ones; to assist learners and prepare a syllabus, lesson and assessment plan based upon their needs assessments.

This course needs to be reviewed and updated regularly. Since learners are most attracted by the use of multimedia, this will not only increase learners' motivation but will make them learners centered since they are going to learn in a self-directed way. Using ICT's (Multimedia) in the classroom provides students with a useful interactive means of self-study and self-evaluation. Planning and successfully implementing self-directed learning with technology is likely to produce motivation. ICT's, teachers use computer technology by allowing learners:

-To use computers, in addition to video and cassettes and cds including films, dialogues ...

-Topics including management, finance, Business skills including presentations, negotiations, meetings, socializing, telephoning, writing reports.

- Tasks that are motivating and activities learners need to do using the language to achieve lexis including idioms, expressions, vocabulary. Functions including agreeing / disagreeing, giving explanations, asking for opinions.

-Authentic texts in both written and spoken forms.

-Grammar with word order, if clauses, verb tenses; for example: to describe graphs, students need the past simple or the present perfect.

-Intercultural skills, i.e. awareness of different cultures.

At this stage, teachers need to assess students since assessment is essential for the development and success of the course.

The points below, are some examples taken from the syllabus I have designed recently and which contains more activities and suggestions and which we could summarize as follows.

All in all, the teacher can vary his teaching, at ESP level:

- In "Speaking" students discuss graphs, business letters and respond to them.



- In the “Writing” process, students interpret graphs and explain them. They write business letters such as “ordering a credit for a firm or filling application forms / CVs.
- In “Listening” the teacher provides students with tapes to listen to business men dealing with each other.
- In “Reading” learners read about business in certain firms, how a firm is composed and how it is run.

All the points above are followed by consolidation activities to make learners practice and explore more the business field. Through practice, they would also improve their grammar, vocabulary.

We have then suggested a course design that integrates teacher-directed content-based instruction and student-centered task-based instruction. The aim is to create a more authentic learning setting applying various interactive techniques in the four learning skills focusing on students’ needs after negotiation with them.

Thus, the design of an appropriate teaching course that has been proposed tried to take into consideration the need to find the means to develop a taxonomy of language teaching techniques so that experience and research could combine various techniques for given objectives , types of learners, and specified learning situations. To conclude, we would say that there is no ‘best’ method of teaching languages and to overcome all problems. There must be a local interest on syllabus design to provide appropriate teaching programmes.

#### **1.10 Conclusion:**

This research work was intended to investigate how English for Specific Purposes in the department of Computer Science at Mascara University is taught. It has been noticed that its teaching was not totally at the expected level since teachers who have been hired are not specialized in the field; therefore, students’ needs are

not totally taken into account. Through a questionnaire administered to learners and a classroom observation a course was designed for those ESP learners where needs analysis was included.

As for the suggested recommendations the teacher must understand learners' needs through cooperation between the language teacher and the students. The teacher must organize the class in such a way that there will be not only some new information, but a pleasant and amusing occupation also.

To sum up, by working hand in hand, subject-specialists and ESP teachers may improve the learning situation mainly by doing their best to create relaxing learning atmospheres. This can be done through collaboration. The language teachers are strongly invited to adopt/ adapt a set of strategies and apply techniques to help their learners improve their English language proficiency level. By doing so, motivation may arise and success is likely to be achieved.

#### **Bibliographical references:**

- Dudley- Evans, T. and St John, M.J. (1998). Development in English for Specific Purposes, C.U.P
- Higgins,J.(1967). Hard Facts: notes on teaching English to science students. English Teaching Journal,21(1), 55-60
- Hutchinson, T. and Waters, A. (1987). English for Specific Purposes: A Learning Centred Approach, C.U.P
- Kennedy, C, H & Bolitho, R (1984). English for Specific Purposes. London: Mc Millan Press, Ltd.
- Richterich and Chancerel, (1980), Needs of an ESP context : ' Needs Analysis , Curriculum and Unit Design', O.U.P
- Robinson, P. (1991). ESP Today: A Practitioner's Guide. New York: Prentice Hall.
- Stevens, P.1980.Teaching English as an international language: from practice to principle.Oxford: Pergamon Press.