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## Investigating ESP Present-Day Thorny Shortcomings at Ibn Khaldoun University of Tiaret in Algeria

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**Abstract.** The study investigates present-day situation of ESP teaching/ learning in four selected faculties at Ibn-Khaldoun University namely science and technology, Electrical engineering, commercial sciences and Informatics and Mathematics. In these professional loci of pedagogical activity, most of the teachers who are in charge of ESP are EGP or ELT teachers. The ultimate objective of this investigation is to assess and/or measure the (in)effectiveness of the current system of teaching/learning English for specific purposes in the aforesaid faculties. To attain that, the four faculty deans and 8 teachers were interviewed, and 120 students were addressed a questionnaire. This would allow us to update and analyze a diversified set of data in terms of nurturing and structuring a rigorous educational engineering approach that results in a reasoned implementation. The results obtained revealed all stakeholders are fully aware of the importance of English language teaching, especially in the light of the current worldwide bets. The data also unveiled a set of thorny gaps characterizing the implementation of the subject such as less motivating syllabus content, teachers' lack of theoretical insightful knowledge as regard ESP founding tenets supporting its teaching, the total absence of periodic training, lack of appropriate means and students' indifference.

**Keywords.** ESP teaching methodology, constraints, needs analysis, register analysis, learner-centered approach

### 1. Introduction

During the last decade and on, English language teaching/learning has continuously evolved under the influence of the current worldwide policies which aim at promoting new skills to enable university graduates to work and communicate competently and internationally. Regarding these globalized imperatives, it is crystal clear that English teaching/learning with its cultural dimension is at the heart of tertiary educational queries and transformations. In this context of paradigm shift, this linguistic and cultural mastery has become an essential asset to ease student mobility and access to the global labour market. Abiding by such a new paradigm, the Algerian university, like other universities, is currently hit by the winds of necessary going through a series of necessary systemic metamorphoses, in order to the requirements of national and international citizenship and workplace.

To cope with these pressing demands, English language teaching/learning has been introduced in their canvasses, and its teaching effectiveness has been revisited, endowing students not only with morpho-syntactic and lexical or declarative knows mastery but with

field-skills and competencies to make them international proficient communicators as well. Indeed, the mastery of several foreign languages, mostly English, is becoming an essential transversal competence for smooth professional integration.

Being conscious of its importance, especially the shift from general to specialized paradigms in English language teaching (Terauchi, Noguchi, & Tajino, 2019), Algerian tertiary education stakeholders have integrated English language in all specialties, viz., medicine, biology, science and technology, informatics, electrical engineering, commercial sciences, judicial and political sciences, etc. and at different levels, i.e., BA, Master and Doctorate. Thereby, not only has the English language module become mandatory, for attendance is included in tutorial grading, but it can be determinant in the student's success or failure too, due to the accredited coefficient and credit emphasizing its enforceability.

It is worth highlighting that Algerian universities and institutes have witnessed an enormous and unprecedented increase of the number of enrolled students in different faculties, especially scientific, technical and economic ones whose relentless progress soon generated a persisting demand for ESP learning. Becoming an umbrella term, ESP covers a wide range of interests and approaches to student-centered learning. Yet, this growth of students' cohorts and educational infrastructures has not been simultaneously accompanied by an adequate development of the teaching specific-field contents, catering for each specialist's needs. Differently couched, the salient tenet of ESP is "tell me what you need English for and I will tell you which English you need." (Hutchinson, 1991, p. 8). Being the starting point, this principle denotes that ESP is an approach to language teaching that is oriented/dedicated to meet the student's needs, i.e., mainly directed on the basis of specific corpora for each field.

## **2. Theoretical part**

### **2.1. English Language Worldwide Hegemony**

Within the prevalence of English language use in all fields of nowadays information-driven society, new conceptions as regards curricula, methodology and implementation have been imposed. In fact, English has become an utmost medium of instruction (EMI) because it operates in multifarious ranges of institutional and professional fields of academic, economic and political kinds. In short, it is used for development and international communication in all countries all over the world. Thus, it is worthy to note that the rush behind learning this language for different purposes has exponentially mushroomed/proliferated among all categories of people, viz., scientists, students, businessmen, lawyers, etc. Each of which has a specific purpose to attain.

These demands and requirements have resulted in the proliferation of a new aspect of English language teaching/learning; viz., English for specific purposes (ESP), i. e., lingua franca of the modern world. In response to this persisting and peremptory request, governments throughout the world have undertaken aspirational instructive changes integrating English more profoundly into their educational curricula in order to endow/equip their learners with the language mastery of the mostworldwide used and sought-after language, viz., English. In accordance with the new English language approach, it is required that any ESP course should systematically obey a set of preconceived and identified objectives relying on needs analyses which in turn enable ESP teachers to scrupulously discern the learners' objectives behind learning English language.

Different from English for EAP, ESP curricula are to be meticulously elaborated and tailored to cater for precise requirements. In other words, once involved in an ESP environment where students need to learn English for specific purposes, teachers are required to define by

means of needs analysis the type of English course to be taught, the content to be selected, the forms to be presented, the teaching methodology to be implemented, and finally, the set of communicative functions and skills to be mastered by the students and assessed.

## **2.2. ESP: Genesis and Definitions**

It is in the sixties that ESP has grown to become one of the functional subsets of Applied Linguistics, in general, and of teaching English as a foreign language (TEFL), in particular (Hutchinson and Waters, 1987). It focuses on relating the teaching/learning process to learners' needs (Widdowson, 1981). With reference to ESP literature, the latter tends to foreground learners' needs and background the learning and knowledge needs of the teachers. In fact, an increased interest has been fostered as a result of the new status gained by English as a global language.

This has led to a rapid expansion of concern as regards its learning among different people all around the world, including Algeria. Such type of English language teaching/learning came into being and gradually developed into multifarious language approaches relying principally on the learners' needs to respond to the specific academic, professional or occupational objectives. ESP has taken a quite lengthy time to mature/to be fit for use so as to expect a clear idea about its meaning and implementation among its community. Initially, it has been defined to be simply devised for English teaching for any purpose than could be specified. (Anthony 1998, p. 9-10).

Afterwards, a much more precise definition was assigned to it as being used in academic studies or its teaching for vocational and professional purposes. (Ibid. p. 9-10). In this vein, Munby's definition of ESP (1978) in connection with its courses relying on the analysis of the students' language needs has been stated as follows:

Those where the syllabus and materials are determined in all essentials by the prior analysis of the communication needs of the learner, rather than by non-learner centered criteria such as the teacher's or institution's predetermined preference for general English or for treating English as part of general education. (p. 2)

Referring to the above definition, it is worth-noting that students' comprehensive needs analysis should take the supremacy over other concerns which are prioritized in other types of English language teaching such as syllabi, institutional objectives and competences to be attained. In other words, the role of needs analysis in ESP course remains undeniably pivotal.

In fact, the advent of this type of English has oriented teaching/learning objectives towards purely utilitarian purposes. In this regard, Mackay and Mountford (1978) have stated that "ESP is generally used to the teaching of English for clearly utilitarian purpose." (p. 2). Such utilitarian purpose requires a learner-centered approach via which the teaching/learning process is systematically directed by specific needs of specific learners.

For the sake of a successful learning occurrence, ESP teachers are required to proceed first by needs analysis to identify the learners' vital requirements and needs, and determine the skills they need to develop and bring about successfully. In fact, Hutchinson and Waters (1987) have considered learning needs as what the learner needs to do in order to learn; meanwhile Benesch (2001) has perceived that these needs are associated strictly with target situation demands. Differently couched, ESP teachers are compelled to unveil what students want in terms of effective and latent/expected needs that they are supposed to experience during the teaching/learning process. In this regard, Hutchinson and Waters (1987) have noted that "ESP

is an approach to language instruction in which all decisions regarding content and method are based on the learner's reason for learning." (p. 19)

In the same vein, Richards & Rodger (2001) saw:

ESP as a movement that seeks to serve the language needs of learners who need English in order to carry out specific roles (e.g. student, engineer, nurse) and who need to acquire content and real-world skills through the medium of it rather than master the language for its own sake. (p. 107)

Referring to the above quotations, ESP teachers are supposed to consider as objectively and accurately as possible why learners need English.(Kennedy and Bolitho, 1984).This objectivity is manifested by analysing those needs that have been identified as imperatives (necessities), deficiencies (lacks) and desires (wants) that can lead to a strategy with pre-set goals. For much precision as regards the concept 'needs', Hutchinson & Waters (1987)have made clearer distinction that needs consist of two things namely target needs and learning needs.

Target needs deal with what learners need to do in the target situation. Target needs include three useful terms that is necessities, lacks, and wants. Necessities are the type of need which is determined by the demands of the target situation. It means that what learners have to know is how to function effectively in the target situation. Lacks are gaps between the target proficiency and the existing proficiency of learners. Lacks can be organized only after teachers or course designers already know the needs of learners. Want concern with the awareness of needs that specify the ESP situation. Awareness is a kind of perception which may vary according to one's viewpoint. When learners have a clear idea of the necessities of the target situation, and they already have a particular view of their lacks, it does not automatically suit with the perceptions of other interested groups like teachers, course designers or sponsors. Therefore, ideal ants must reflect all the groups interested in implementing ESP. Learning needs refer to what knowledge and abilities learners will need in target situation. If the starting point in ESP is called "lacks" and the destination is necessities and wants, the way to go from the starting point to destination is called learning needs. (p. 7)

By reference to the above concepts framing, learners and their needs remain at the core of any syllabus design. Any decisions as regards syllabus contents; linguistic competencies, functions, notions, themes, situation and interlocutors are bound to rely on the learners' needs. Therefore, for a successful ESP learning/teaching, the ESP syllabus content should be cautiously justified in terms of relevance/pertinence and learners' motivational prospects.

Although ESP definitions appear to be manifold, they intersect in some common elements, viz., needs and expected purposes either academic or professional. Distinctly, as regards ESP, actual language operative usage for specific professional purposes takes precedence over other aspects of language learning, shaping ESP evolution into a comprehensive and universal entity. That being so, with such growing demand for ESP courses and diversity of usage to comply with those field-specific needs, multifarious approaches to teaching/learning ESP have emerged.

### **2.3. ESP Teaching Approaches/Needs Analysis Evolution/Modification**

ESP researchers (Hutchinson & Waters, 1987; Mumby, 1978) have highlighted various models of needs analysis each of which identifies ESP needs and teaching approaches from a different standpoint. Among these models of needs, we list the following, namely register

analysis, rhetorical/discourse analysis, target situation analysis, skills-centred approach and learning-centred approach.

### **2.3.1. Register Analysis Approach to ESP (approximately 1965-1974)**

At the early beginning, the register analysis (henceforth RA) was adopted by ESP researchers. The latter pointed out that language varies according to different people who use it, and according to various purposes which it is intended for. These, allegedly, fall into two types: the first one has to do with different users, i.e., dialects, and the second one has to do with different uses; i.e., registers. Thus, different registers can be categorized according to their language systems. The RA focuses mainly on the lexical and grammatical features of professional registers. Hutchinson and Waters (1987) have claimed that:

Operating on the basic principle that the English of, say, Electrical Engineering constituted a specific register different from that of, say, Biology or of General English, the aim of analysis was to identify the grammatical and lexical features of these registers. (p. 9)

In fact and according to the quote, the register analysis approach to ESP attributed priority to language forms on which the syllabus is founded, that is to say restricted to lexical items and grammatical structures that are clearly identifiable. For Halliday, McIntosh and Stevens (1964), have registered hints to “a variety of language distinguished according to use.” (p. 89). The term distanced itself from the hypothesis that the English language of a particular subject differs from others as regards lexico-grammar. It is acknowledged that any ESP course design focuses first and foremost at elaborating a syllabus content that would accord primacy to only linguistic forms that students would use in their field. This is the structuralist and formalist scholars’ viewpoints that gave a particular attention to linguistic features, viz., phonology, syntax and semantics at the detriment of sentences and utterances.

Criticized for being sentence-based and form-focused, and merely descriptive and not illustrative, and on the pedagogical aspect, register analysis the comparative studies in ESP, focusing on registers that were fairly congruent, revealed no variance among their users. These studies findings were significant because they disclosed the inadequacy of the register analysis approach by itself. It became clear that grammatical, phonological and lexical features were insufficient indicators of what students would really be capable of saying and writing. Therefore, the register analysis approach was abandoned for the rhetorical or discourse analysis.

### **2.3.2. Rhetorical or Discourse Analysis Approach to ESP (Approximately 1974-1980)**

As regards the discourse approach, the focus shifted from the sentence level to speech recognition with natural language understanding to produce language-understanding systems. That is to say, the emphasis is put on the way spoken sentences merge creating meaning and on discourse communicative values, surpassing the lexical and structural characteristics and level of the discourse. Hutchinson and Walters (1987) have seen “register analysis had focused on sentence, grammar, but now attention shifted to understanding how sentences were combined in discourse to produce meaning.” (p. 11).

Coherent sentences are the basic building chunks of discourse. Schiffrin (1994) asserted that “Consistent with the definition of discourse as language above the sentence, many contemporary structural analyses of discourse view the sentence as the unit of which discourse is comprised.” (p. 25). Indeed, appropriately coherent sentences in a natural enunciation play a pivotal role in discourse formation. That is to say, meaning cannot be gleaned outside a context

that sentences cohesiveness and coherence ensure its consistency (Cook, 1989). To sum up, the gist of the discourse analysis relies on language forms, functions and linguistic features.

In view of some shortcomings, such as communicative events and members sharing communicative purposes that Swales (1990) has defined as genre, led to a new approach namely genre analysis (GA). This paradigm shift from discourse to genre analysis includes specific aspects such as cultural and situational which have not been taken into account hitherto.

### **2.3.3. Target-Situation Analysis Approach to ESP -Approximately 1980-1987)**

Target Situation Analysis (TSA) was first introduced by Chambers (1980), who has defined it as “communication in the target situation.”(p. 29). The main objective behind any ESP course is to enable students to perform suitably in target communicative situations. Relying on Mumby’s (1978) communication needs processor (CNP), Chambers (1980) has attempted to determine what students need to be able to do in English as a result of the course. Then, the TSA can be defined as a planned process to discern and identify the perceived language needs and students’ expected objectives by the end of the courses. These predetermined learning outcomes are attained by means of well-selected activities. In this vein, Hutchinson and Waters (1987) have defined TSA as “to take the existing knowledge and set it on a more scientific basis, by establishing procedures for relating language analysis more closely to learners' reasons for learning.” (p. 12). Within the frame of the TSA, the target situation identification is first prioritized over the linguistic features of the specific situation as regards syllabus designing. In the same line, Hutchinson and Waters have pointed out that “ESP course design process should precede by first identifying the target situation and then rigorous analysis of the linguistic features of that situation.” (p.12)

The TSA approach has been qualified as ‘coming of age’ for ESP, viz., all that had been done prior to TSA was regarded as being very much done in a fragmented way; non-comprehensive method. Within the TSA approach, analyses were systematically and methodologically arranged; the target needs and level of performance are identified by determining the final outcome of the target situation. According to Dudley-Evan and St. John (1998), TSA “includes objective perceive and product-oriented needs.” (p. 124).

Above all this, the concept of needs analysis that TSA relied its approach on was criticized for its plain definition. Thus, in order to make up for this deficiency, a three-dimensional set of needs is to be taken into consideration to glean enough information about the student and his learning environment. The combination of 1) learner’s learning needs analysis (lacks), 2) the strategy needs analysis (how they wish to learn) (Allwright, 1982) and 3) means needs analysis (educational environment) (Swales, 1989) could provide an insightful, adequate and complete definition of needs analysis as regards ESP courses within the TSA framework.

### **2.3.4. Skills and Strategies-centred Approach**

As an extension of the research to develop the ESP course for the sake of meeting the requirements and enabling students to communicate properly using the language, skills, functions and structures, etc., the skills-cantered approach came to palliate the previous approaches shortcomings, orienting focus to skills. A brief overview of the previous needs analysis attempts show that both RA and DA focus was principally put on the surface forms of language. Besides, TSA approach has not actually changed much in regards to the student’s needs that are chiefly analyzed from surface linguistic characteristics viewpoints. Hence, the SCA proponents viewed necessary to direct the focus to thinking process that governs language

use. In this vein, Hutchinson and Waters (1987) have argued that “The principal idea behind the skills–centered approach is that underlying all language use there are common reasoning and interpreting processes, which, regardless of the surface form, enable us to extract meaning from discourse.” (p. 13)

The core idea that can be drawn from the quote of the ESP pioneers above is that there are common logic and interpreting processes which enable us to extract the meaning from the discourse regardless of the surface forms. For the sake of skills and strategies development, the SC approach relies mainly on two receptive skills, viz., reading and listening. It involves designing well-thought activities requiring students’ processing the texts as they would do in real world, using authentic situation required skills and strategies, allowing understanding (literal), decoding (inferential) and constructing meaning (critical thinking) from the text through a process. By the end of the course, students should have developed other skills such as building new specialized vocabulary, interacting within teams, reading specialized materials which tend to make students better processors of information.

### **2.3.5. Learning-centred Approach (1987)**

Different from the SCA, the LCA tends to focus on language learning instead of language use. In other words, it gives priority to those educational bases, viz., methodology and learning processes rather than linguistic basis. According to Hutchinson and Waters (1987), all the approaches mentioned so far, were fundamentally defective in that they were all grounded on descriptions of language use, whether it is for RA and its form description or SCA and its underlying processes. Both concentrated on describing what students do with language. Hutchinson and Waters (1987) had a different concern:

Our concern in ESP is not with language use —although this would help to define the course objectives. Our concern is with language learning. We cannot simply assume that describing and exemplifying what people do with language will enable someone to learn it [...]. A truly valid approach to ESP must be based on an understanding of the processes of language learning.(p. 14)

The above quote redirected the focus from language use to language learning. Language learning denotes the active process through which students communicate their thoughts, experiences to establish relationship with others, and endeavour to make sense and order of their world. The teachers’ role as regards the language learning is of a paramount responsibility. They are, indeed, supposed to help students develop and apply processes for comprehending, composing, and responding in a variety of situations within the classroom and beyond. Doing so, students’ critical and creative thinking and learning nurture thanks to reflection, speculation, creation, analysis and synthesis. In fact, effective language learning enables students to develop their metacognition, i.e., reflecting upon and controlling over their own thinking and learning processes.

In fact, the LCA highlighted the students’ needs and interests’ significance and their effective consideration so as to enhance their inducement, thus succeeding swift and high quality learning processes. It is worthy to point out that the finality is not only the reached competence, but the pathway taken by the students to reach this competence.

In recent years, a new vision has extended the ESP scope of research, namely the Content Language Integrated Learning (CLIL). The latter consists of a program in which students learn a subject and a second language simultaneously. Differently couched, it is a form of instruction which combines content teaching and language teaching. It is well-known as a ‘dually-focused approach’ that gives equal attention to language and content. (Mehisto, Marsh,

&Frigols, 2008). Thus, the CLIL, whither the curricular content is taught through the medium of a foreign language, can be described as an educational approach serving primary, secondary and tertiary students.

### 3. *The Rise of ESP in Algerian Tertiary Education*

Over the last decades, ESP has, in fact, gained much concern as an important subject matter discussed and debated nearly in all world countries, where it plays an important role in tertiary education. With regard to the Algerian context, where priority has been allotted to the French language-booty of colonialism- for various purposes, viz., educational, professional and administrative, there is a new tendency towards English language learning on part of the teachers and the students-specialists of other disciplines. This is what was noticed during the last few years at Ibn khaldoun University. They both have personal incentives and reasons behind English language learning. The former, i.e., teachers, attempt to take advantage from bulk data for research purposes to reach a larger audience around the world, besides the acquisition of oral communication proficiency, facilitating their participation in international conferences, colloquiums and thus contributing to the effulgence and the awards lists of the Algerian institutions. Similarly, the latter, i.e., students, strive to learn the English language, seeking to gain a certain English proficiency level needed for both oral communication and written production.

However, teachers in charge of ESP courses are in perplexity as regards the type of language to teach, i.e., whether they are supposed to teach English for commercial sciences, technology ...etc., or vice-versa to teach commercial sciences, technology, etc., in English. In most cases, Algerian ESP teachers are not specialists in students' professional fields, except for few of them who graduated from Doctoral School of languages for Specific purposes (EDOLAS) [1].

Thus, the struggle of most of them is more than too cumbersome, as long as they have to master the field-specific discourse and the subject matter. In addition, they are assigned a range of tasks such as syllabi designing, teaching materials selecting and outcomes evaluating, requiring additional methodological and organizational skills and competencies which, in fact, they stand in need of. In this regard, Basturkmen (2010) viewed that teachers may find themselves dealing with content relating to an occupation or subject of study that they themselves have little or no prior knowledge of. Indeed, they may realize that they have much less knowledge and experience in this subject than their students. So, how prepared are Algerian ESP teachers to teach an often challenging new task?

For the sake of clarification, Algerian ESP teachers, appointed in different faculties, are called upon to respond to the students' communicative and linguistic needs, enabling them to grasp the field-specific discourse. In so doing, the students' satisfied needs enable them to empower their communicative skills and to solve practical communicative problems. More precisely, it is a beforehand preparation for the future workplace communicative activities such as writing and presenting reports, conducting interviews and negotiating work issues. In other words, the ESP course should encompass the type of English that Algerian ESP students need to learn; the one that trains and prepares them for success first in academic and professional contexts later on.

To do so, ESP teachers are required to identify ESP students' needs and their analysis, a regular and perpetual tailored teaching material development, its suitable implementation and,

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[1] Creation of the Doctoral School of ESP for Magister and Doctoral trainings in ESP

of course, pertinent assessment procedure. One of the ESP teachers' liabilities is teaching material development either from scratch or adapting the already existing learning and authentic materials. Being an ongoing process, ESP teachers are supposed to conduct evaluative reviews so as to adjust materials overtime in accordance with implementation outcomes, current trends in the field, or research findings. In this vein, Stoller and al. (2006) believed that such practice is desirable because "documents that undergo this evaluative review and revision process are likely to serve student and faculty audiences more effectively than documents that do not." (p. 175). It goes without saying that ESP courses ongoing correction is a must to comply with each and every learning situation, for the latter is singular.

In fact, language learning should not be regarded as such without its practical impact on its learners. In this vein, Basturkmen (2006) pointed out that "language is learnt not for its own sake or for the sake of gaining a general education, but to smooth the path to entry or greater linguistic efficiency in academic, professional or workplace environments." (p. 18). The linchpin around which the aim of ESP courses revolves is to render those students –specialists of other disciplines- professionally specialised thanks to English.

#### **4. Empirical Part**

To conduct this survey and for the sake of generating enough insightful and valid data, we opted for a mixed-method approach, viz., quantitative and qualitative instruments. Out of conviction, the use of these different instruments would enable us to conduct a more holistic and valuable survey.

##### **4.1. Research Method and Instruments**

For the sake of triangulation and thereby glean diversified and more actionable insights in connection with the issue under investigation, viz., Investigating ESP Present-day Thorny Shortcomings/Gaps from Students', Managers' & Teachers' Perspectives, we addressed three sample populations to collect well-informed feedback, helping to provide active recommendations.

##### **4.2. Population**

The participants in the present study are ESP Master 1Students (N= 120), teachers in charge of ESP teaching unit (N=8), and faculty managers-deans (N=4) at Ibn Khaldoun University of Tiaret. The sample size was selected on the basis of a convenience sampling system that enables students and teachers to take part in such study. The targeted members are all Master 1 students who have been studying ESP for three years; during BA graduation course. This assumes that they are likely to be more aware of their needs and the prospects behind ESP learning.

ESP teachers and deans are also screened by the survey relying on the fact that they are well-positioned to provide useful data about students' English language needs and the pretended skills to be attained. They could provide assertive and perceptive response for the sake of well-informed course designers to set clear-cut goals and specific objectives for any suggested course.

##### **4.3. Research Instruments**

###### **4.3.1. Questionnaire**

The questionnaire is used to glean responses on the issue under investigation from 120 non-English-majored Master 1Students. It consists of eleven (11) question-items, including

demographic variables, intents behind English learning and prospects and suggestions. Before the main survey was conducted, the question-items were subjected to piloting phase. In fact, this helped test, refine and re-order the survey content.

#### 4.3.2. Interviews

The second data collection method applied in this survey to answer the research question is a semi-structured interview directed to four deans and eight teachers. This choice stems from the fact that it allows the interviewer to delve deeply into personal issues, thus having an impressive great deal of flexibility. It also allows the interviewee a certain degree of power and control throughout the interview (Nunan, 1991). The researcher relied on this method as it gives data that are open-ended, more accurate and genuine as answers without blocking the interviewees or leading them to answer in a certain way.

### 5. Results

#### 5.1. Students' Questionnaire Findings

##### Section One: Respondents' Personal Data

Table 1. Informants' age ranges

Faculties	≥ 20	21-22	23-24	25-26	≤ 27
Science & Technology	00	04	06	10	00
Electrical Engineering	00	03	22	05	00
Commercial Sciences	00	02	23	05	00
Informatics & Maths	00	03	26	11	00
<b>Total</b>	00	12	77	31	00
<b>%</b>	00%	10%	64.16%	25.83%	00%

The numerical data in table 2, related to age brackets, reveal that few (10% n= 12) of the surveyed students are aged between 21 and 22. Third of the whole sample, i.e., 31 representing 25.83% have an age varying between 25 and 26. The rest of the sample, i.e., 77 (64.16%), is 23-24 years old.

It is believed that age factor, among others, may play a significant effect on students' academic motivation and performance. In fact, many variables play an important role to students' academic performance. For the surveyed sample, the age factor is there and can be considered as being an asset, yet, students' motivation should be developed along the teaching/learning process.

Table 2. Informants' sample distribution according to gender

Faculties	F	%	M	%
Science & Technology	06/20	30	14/20	70
Electrical Engineering	10/30	33.33	20/30	66.66
Commercial Sciences	09/30	30	21/30	70
Informatics & Maths	16/40	40	24/40	60
<b>Total</b>	41/120	-----	79/120	-----
<b>%</b>	34.16	-----	65.83	-----

The statistical data as regards the targeted sample distribution according to gender demonstrate that males outnumber females, i.e., 79 (65.83%) are males but only 41 (34.16%)

are females. As regards science and technology and commercial sciences, males are heavily dominating these specialties by 70% for each. Besides, the two other ones, viz., electrical engineering and informatics and math are invaded by males, id est, 66.66% and 60% respectively.

Despite, it is commonly reported that nowadays worldwide tertiary education is heavily feminized; for the surveyed sample, males exceed females. It is also acknowledged that females are significantly outnumbered by males in scientific and technological fields, resulting in a large gender gap. However, female students have the bias towards humanities. It has been proven that males outperform females on most measures of visuo-spatial abilities, which have been implicated as contributing to sex differences on standardized exams in mathematics and science.

An evolutionary account of sex differences in mathematics and science supports the conclusion that, although sex differences in math and science performance have not directly evolved, they could be indirectly related to differences in interests and specific brain and cognitive systems. All in all, the perceived gap in educational experience and performance of male versus female subjects among students cannot be explained only by their abilities (individual differences), but also to some extent by cultural transmission of gender stereotypes (Li 1999; Nguyen and Ryan 2008; Robnett 2016; Spencer & al., 1999; Tiedemann 2000; Watson & al., 2017).

Table 3. Informants' distribution according to specialties

<b>Faculties</b>	<b>Students</b>
<b>Science &amp; Technology</b>	20
<b>Electrical Engineering</b>	30
<b>Commercial Sciences</b>	30
<b>Informatics &amp; Math</b>	40
<b>Total</b>	120

The data above demonstrate the target sample affiliation. Given the reduced number of master's students in science and technology, only a group of twenty (20) students has taken part in the survey. For Electrical Engineering and commercial sciences a group of thirty (30) students is selected for each specialty. Among Informatics & Math master students, a group of forty (40) is targeted by the investigation.

It can be noted that apart from informatics and math, the number of students is very limited in Master 1 in the other three specialties. It is worldwide acknowledged that though being important in our society today, sciences, technology, engineering and mathematics (STEM) seem to be deserted by nowadays generations.

### ***Section Two: Respondents' Intents behind English Language Learning***

Table 4: Informants' attitude towards English language learning

<b>Yes</b>	<b>No</b>
<b>120</b>	<b>00</b>

The responses to the close-ended question n°4 show that all surveyed students confirm the great significance of the English language for their studies.

The ESP students unanimously acknowledged the importance of English proficiency because it affects their academic and future professional objectives. In today's globalized world where English is the most widely used as a medium of communication and instruction in all higher educational institutions, a high level of proficiency is of paramount importance for students'

future professional development. The challenges of the present-day globalized worldwide society requires not only students who are experts in their respective areas but also who can communicate with others in English. Thus, significant changes have been imposed on academic curricula contents of world universities with the intent to train students for the world market requirements.

Table 5: Informants' intents behind English language learning

Intents	Rank	F	%	M	%	%
<b>C) Draw benefits from the huge amount of scientific researches</b>	01	39	100	40	97.56	98.75
<b>E) Access to establish contact with people from all over world on the Net</b>	02	39	100	35	85.36	92.50
<b>A) Open up better job opportunities</b>	03	25	64.10	41	100	82.50
<b>B) Pursue further studies easily</b>	04	30	76.92	35	85.36	81.25
<b>D) Can travel everywhere</b>	05	15	38.46	40	97.56	68.75

Drawing on the gleaned data (cf. table 5) from question-item 5, one can notice that nearly all surveyed students (98.75% - 100% for females and 97.56% for males) attest that they intend to draw benefits from the huge amount of scientific researches. Besides, 92.50% (100% for females & 85.36% for males) consider English language learning as a pass allowing them establish contact with people all over the world. Job opportunities and further studies gained nearly the same percentages, viz., 82.50 (64.10 for females & 100% for males) for the former and 81.25% (76.96% for females & 97.56% for males). Travelling as intent behind English language learning gained 68.75% (38.46% for females & 97.56% for males).

It is worth highlighting that the number of scientific papers written in English has largely outweighed the number of papers written in researchers' native language. Thus, having a 'good' proficiency of English is incredibly important for ESP students to draw benefit and acquire information from these scholarly documents. In fact, English proficiency allows them to have an easy access to the world's electronic retrieval system where huge amounts of academic data are stored. Besides, being used as lingua franca by people from all around the world, English can help students travel to and communicate with all people from different countries. For further studies, thousands of school, institutes and colleges around the world offer programs in English, and even grant scholarships. Thus, the mastery of English enables them to get an opportunity to find an appropriate school and course that matches their needs.

Table 6. Informants' assessment of their proficiency in English

Options	F	%	M	%	Total
<b>Excellent</b>	00	00	00	00	00
<b>Very good</b>	00	00	03	07.31	03.75
<b>Good</b>	00	00	05	12.19	06.25
<b>Average</b>	36	66.66	48	72.72	70.00
<b>Weak</b>	18	33.33	10	15.15	23.33

Question-item 6 is asked to enquire about the targeted students' extent of proficiency at English. The students' self-assessment reveals that more than two-thirds of the sample, i.e.,

70% (66.66% for females & 72.72% for males) considers their proficiency level as being average. Twenty-eight students (18 females & 10 males) judge their level at English weak. Only three males (03.75%) estimate that they are very good at English, and five males (12.19%) assess their English level as being good.

Students' self-assessment is worth considering. In fact, students' involvement in such a process helps them develop specific learning skills that could be useful for future professional competence. Besides, it may assist them to become more aware of and feel more responsible for their own learning. Factually, this process helps students develop metacognitive skills that contribute to a range of important competences.

Table 7. Informants' skills degree of difficulty

Skills	Rank	F	%	M	%	Total %
<b>Writing</b>	1	38	97.43	39	95.12	96.25
<b>Speaking</b>	2	36	92.30	32	78.04	85.00
<b>Reading</b>	3	31	79.48	27	65.85	72.50
<b>Listening</b>	4	30	76.92	25	60.97	71.25

With reference to the collected answers (cf. Table 7), it is worthy to notice that the productive skills are too difficult for ESP students, where 96.25% (97.43% for females & 96.25% for males) of them confirm that writing skill remains far too difficult and 85% (92.30% for females & 78.04% for males) acknowledge that speaking skill is arduous. As regards the other two receptive skills, they are not in a better situation. In fact, 71.25% (76.92% for females & 60.97% for males) admit that the listening skill is strenuous. Similarly, 72.50% express concern about the reading skill difficulty.

Generally speaking productive skills, viz., speaking and writing appear to be more challenging not only for the ESP students but for all EFL/ESL learners as well. These two skills have many differences from the viewpoint of form and features, but they are regarded to have the same goal which is self-expression. The attainment of such self-expression-communicative oral and written competences and their improvement is a journey, not a destination.

Table 8. Informants' opinions about time allotment to English session

Options	Number	%
<b>Sufficient</b>	30	25.00
<b>Reasonable</b>	15	12.50
<b>Insufficient</b>	75	62.50

The question-item 8, enquiring about the time-on classroom period assigned to English session, aims to collect the ESP students' opinions as regards the time factor sufficiency or insufficiency. The results above reveal that 62.50% (n=75) attest that the time duration allocated to English session is insufficient. In contrast, 25% (n=30) stipulate that it is sufficient. While only 12.50% (n=15) assert that the time duration is reasonable.

It is acknowledged that time-on classroom period is one of the key factors of the learning process. Yet, time allocation estimation is generally related to the level of proficiency to be attained. Thus, students' needs analysis and their intents behind English language learning are determinant indicators easing both the extent of proficiency to be achieved and the time duration to be allotted to the English language sessions. (cf. levels of proficiency Cleveland & al. 1960, pp. 250-1)

Table 9. Informants' syllabi contents evaluation

Options	S c & Tech	Elect. Eng.	Commercial Sc.	Inf. & Math
<b>Very interesting</b>	00	00	00	00
<b>Moderately Interesting</b>	05 (25%)	08 (26.66%)	06 (20%)	10 (25%)
<b>Uninteresting</b>	15 (75%)	22 (73.33%)	24 (80%)	30 (75%)

For the sake of collecting informants' appreciations about the syllabi contents and their compliance with students' needs, the above data show that the informants unanimously (100%) assert that the syllabi contents are not very interesting. Yet, more than 25% and less than 27% in the four faculties believe that the syllabi contents are moderately interesting, whereas more than 75% and equal to 80% consider these contents utterly uninteresting.

ESP learning material choice should be subjected to students' needs analysis, and the methodology of its implementation should be different from that of EGP. Students' feedback and a closer look into ESP syllabi contents should be welcomed. In the respect of adequacy, Tomlinson (2011) provides some basic principles of good learning materials such as novelty, variety, attractive presentation, appealing contents and confidence developing. Besides, he added other principles such as relevancy and usefulness, self-investment, readiness for acquisition, authentic use, opportunity for use, etc. To sum up, the development of ESP teaching material should start with needs analysis, course content determining, syllabus plan writing, materials development and task devising, course and materials evaluating.

It is worthy to point out the distinctive roles between EGP and ESP teachers. The formers feel secure because they are the exclusive providers of knowledge that students do not possess, thus they (students) become mere recipients. In the case of the latter, students master the knowledge of their subjects that are very often totally unknown to the teacher. Thus, ESP teachers are required to adopt a new teacher-students relationship paving the way to the role of mediator, and of another more skilled one who endeavors to render the English language accessible to the students.

Table 10. Informants' English comprehension and production

	Yes	No
<b>Comprehension</b>	110 (91.66%)	10 (8.33%)
<b>Production</b>	00	120 (100%)

Enquiring about students' receptive skill (comprehension) and productive one (writing) mastery, the collected data reveal that 91.66% (n=110) of the surveyed students attest that they understand English texts, whereas 8.33% (n=10) report that they are unable to do so. For the productive skill, all of the students (120) recognize that they are incapable of writing English by their own.

It is widely acknowledged that the productive skill (writing) remains too hard and challenging task for non-native learners. It requires a long process, besides it is a personal and individual activity. This productive skill requires a process that consists of several steps (prewriting, drafting, revision, editing and publishing) to be meticulously followed which might appear boring to students. In this vein, Hyland (2019) stated that learning to write in FL or SL is not a simple matter. In fact, being a specific skill, EFL learners need to master linguistic aspects and attitudes, especially the willingness/readiness to practise endlessly the process of writing.

### ***Section Three: Suggestions and Prospects***

It is worthy to point out that only few informants suggested some hints. They all insist on the selection of appropriate teaching materials catering for their specific field, and the use of NICTs. Traditional ways of teaching, according to them, are no longer beneficial.

## **5.2. Interviews**

### **5.2.1. ESP teachers**

The main purpose behind this interview is to provide the ESP teachers with the opportunity to voice out their concerns, to reveal the difficulties encountered and to express suggestions if any.

**Question-item 1:** *What university degree do you hold?*

Most of the targeted ESP teachers (75% n=6) are BA degree holders who have an important professional experience. The rest, i.e., 2 (25%) are MA degree possessors.

**Question-item 2:** *How long have you been teaching ESP?*

As regards their experience as ESP teachers, three (3) assert that they have been teaching ESP for 8 years, whereas the others, i.e., 5 have an experience ranging from 3 to 5 years.

**Question-item 3:** *What is your professional status?*

All of the surveyed teachers who are in charge of ESP course are contract teachers. It is obvious that field-specialized teachers are unavailable.

**Question-item 4:** *Do you have a stable professional status?*

Apart from the MA degree holders, all BA owners are secondary school teachers. They teach English at the university as extra hours.

**Question-item 5:** *Have you ever followed any training course on ESP teaching methodology?*

They unanimously confirm that they have never benefited of training sessions on ESP courses.

**Question-item 6:** *Is EGP different from ESP?*

All of the teachers acknowledge that English for general purposes differs from ESP.

**Question-item 7:** *What differentiates them?*

Only two teachers could provide a clear answer to this question. T1 one says that ESP focuses on students' needs and intents behind learning English, which are considered as supreme value. That is to say ESP is learner-centered approach.

T2 makes the difference from the viewpoint intents behind learning. For him ESP is a learner-centered approach via which learners learn the language to acquire some specific corpus of language and skills, whereas EGP is a language-centered approach, focusing on language learning covering all language skills for the purpose of success in examinations.

**Question-item 8:** *What does ESP syllabus content selection require first?*

All of the interviewees believe that knowing learners and their needs is the first step preceding any selection of ESP-based learning materials/teaching specific-field contents.

**Question-item 9:** *What actually precludes your ESP class performance?*

T1 states that ESP course designing is one of the hurdles, because it is an on-going process that requires regular updating to be able to respond to daily requirements. This is, in fact, onerous, efforts demanding and time consuming.

T2 considers students' demotivation as a serious handicap.

T3 believes that the learners' level disparity is a substantial impediment that needs to be taken into consideration.

T4 elucidates that some ESP students lack the mastery of the English micro skills that are the underlying support for any effective improvement. The development of these skills requires time, efforts and motivation on part of the students.

T5&T6 think that needs identification and analysis require a certain know-how-to-do so as to be precise and concise.

T7 sees that one-hour and a half per week is not enough to improve and attain the predetermined objectives. If we want a hands-on experience, time allotment should be reviewed to allow exposure to and practice of the target language.

T8 relates that the knowledge of the micro and macro skills of English is not enough to reach the expected objectives. He added that training is needed.

**Question-item 10:** *For a successful ESP course, what would you suggest?*

All surveyed teachers constitute themselves as training applicants, for they consider ESP courses as a daunting task regarding both teaching material design and methodological implementation. Besides, they mostly insist on the hourly volume insufficiency to make the targeted specific linguistic corpus and communicative skills workable.

#### **5.2.1.1. Interview Results**

From the above answers, it can be deduced that theoretically the surveyed few teachers are well-versed in the ESP issue, yet deficiencies remain at the level of the practical aspects. All of the teachers in charge of the ESP teaching unit are part-time contract EGP teachers who have never been trained on ESP course features and requirements. Thus, their training seems to be a key factor for ESP teaching/ learning satisfaction. In short, ESP teachers' training course should undoubtedly rely on a thorough needs analysis.

#### **5.2.2. Deans' Interview**

Similarly, the managers were involved for the sake of more clarification on the current state of ESP teaching/learning in their respective faculties.

1. *How many teachers are in charge of the ESP teaching unit?*

Owing to the reduced weekly hourly volume, the four faculties have two teachers each. Similar to all transversal teaching units, ESP course is allotted one-hour and half per a week, that is to say forty-two hours a year.

2. *Are they field specialized?*

They all acknowledge that these teachers are not specialized in ESP. The subject is mostly unfamiliar to these teachers. They should possess certain skills to succeed in teaching ESP courses and satisfy the changing needs of these courses.

3. *Have ESP teachers ever followed periodic training sessions?*

They unanimously deny any training sessions for these teachers.

4. *What is their status?*

These teachers are contract teachers. Owing to the dearth of field-specific skilled teachers, these auxiliary teachers are recruited to help our faculties with their knows. In fact, it is a survival solution waiting for the best.

5. *What are the intents behind English language learning?*

They all attest that virtually the intents behind ESP teaching/learning unit are to respond to students' specific needs and equip them with competencies/skills enabling them to operate appropriately in different situations. Differently couched, it is supposed to endow them with a certain English proficiency allowing them to use the language whenever needed.

6. *Do you think the objectives are attained?*

The deans unanimously think that the pretended objectives are not yet reached. For them, if there is no students' written and/or spoken English production, the objectives remain highly unlikely, at least in the time-being.

7. *What precludes/prevents these objectives attainment?*

All interviewees (deans) report that many challenges and problems are encountered. The first and most significant issue is the scarcity/dearth of specialized ESP teachers who should not only be proficient in Standard English, but also knowledgeable in technical field. Besides, teachers should have a thorough understanding of the students' needs, difficulties, learning objectives and preferred learning styles. Therefore, they are obliged to resort to EGP teachers because no alternative is available. According to them, the latter actually do their best to meet the issue requirements. They added that the lack of means, especially the NICTs that are supposed to provide the ESP class with authentic documents, hardens the situation. They also mentioned that in some cases the students' lack of readiness and predisposition as regards the importance of the language hardens the teachers' tasks, i.e., students' attitude towards ESP course should change to the positive one.

8. *For the sake of better all-round ESP course learning, what would you suggest?*

All deans confirm that the most prominent flaw/dysfunction as regards ESP course effectiveness is the lack of field-specialized teachers in charge of such teaching unit. Thus, for them teacher training is an urgent necessity so as to be able to make needs analysis, syllabus design, material writing from scratch or adapt the available one and evaluation, i.e., to obtain ESP features and requirements.

#### **5.2.2.1. Deans' Interview Results**

The deans' opinions analysis shows that they unanimously confirm that in the absence of field-specialists, they are obliged to recruit part-time EGP teachers. They (deans) are well aware of the intricateness of the task for these teachers. They believe that the latter are in need of training sessions relating to the founding principles of ESP features and requirements, and to hone their existing competencies to serve the target language in an ESP perspective. Such teachers' professional development opportunities for ESP teachers are totally ignored in the Algerian context. In fact, an adequate training course can make all the difference for teachers' performance.

#### **6. Data Analysis and Interplay**

The gleaned data from different quantitative and qualitative instruments reveal that ESP teaching unit lacks much attention and collaboration on the part of teachers, institution, and students, each within the limits of his capacities and responsibility. First, the institution is supposed to provide these teachers with a training program, equipping them with necessary skills to identify students' needs, design appropriate teaching contents or adapt the available ones.

Second, teachers in charge of ESP, being experienced in teaching FL/SL English, are supposed to exploit their professional background in teaching the language, finding convenient ways to adapt to ESP teaching issues. Besides, they need to search for content specialists for help in dealing with ESP issues. In the absence of training programs, they should implement self-training model; published papers on ESP can be a source of inspiration for them. Their success relies on selecting motivating texts that trigger students' inducement and motivation.

In so doing, ESP teachers can generate a more productive atmosphere that eventually leads to better comprehensive all-round learning.

Third, students are supposed to come to ESP class with a specific focus for learning, subject matter knowledge and well-developed learning strategies. They should be well-disposed to focus on meaning in the subject-matter field. In fact, they are expected to make a real contribution to language learning process. To wrap it up, students' beliefs and attitudes should change to the positive towards English language learning.

## 7. Conclusion

The current study has revealed that ESP course at the level of Ibn-Khaldun University needs much more support and attentiveness, aiming at reviewing its organization and implementation efficiency for a successful prospective change. Comparatively to EGP, ESP teachers are required to accomplish multifarious daunting tasks that create serious challenges. From students' needs analysis to adapting the existing material or creating new one from scratch, ESP teachers encounter serious problems, especially when they are devoid of any initial and continuous training. In fact, training and retraining remain an absolute right for the sake of rendering them well groomed in the field so as to meet students' needs. The shift from EGP to ESP status, the case of all surveyed teachers, requires additional skills which render the task harder and more complex for them. It seems that in the midst of the excessive focus on students' needs, their intents behind English language learning, tasks to be selected and methodology to be implemented, the pivotal agent in the teaching and learning process-the teacher and his training- has been neglected. A comprehensive and successful ESP course requires a training course where ESP teachers concerns, needs and deficiencies are earnestly considered. For the sake of arranging a full-fledged quality ESP course, the involvement of professional experts in the study field remains of utmost significance. Besides, I personally contend that a stable professional teaching identity is equally important for ESP teachers. Without addressing these aforementioned shortcomings, the ESP teaching in the Algerian tertiary context will remain ineffective and inconsistent. All in all, ESP teacher problems should be reconsidered from a holistic approach, otherwise all prompt compartmentalized/ fragmented solutions such as e-learning, hybrid-learning, and professional development remain too insufficient to comply with the numerous depicted imperfections.

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