ESP Needs Analysis at the Moroccan University: Renewable Energy Engineering Students at EST Fes as a Case Study

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Abstract

With English becoming the world's lingua franca and the proliferating scientific and technological advances, English language education has been gradually shifting from its classical applications such as EFL (English as a foreign language) or ESL (English as a second language) toward new paradigms like English for specific purposes (ESP). The most important and problematic question in ESP teaching and learning is whether the course is effective or not. ESP is student-task oriented, thus, measuring its effectiveness is strongly related to measuring learners' attitudes, needs, expectations, satisfaction, and achievement. For this purpose, this study attempted to investigate ESP needs analysis of Moroccan university students, case study of renewable energy engineering students at the Higher School of Technology (ESTF). The research was conducted using quantitative surveys during the first semester of the academic year 2018-2019. The data was gathered from 30 undergraduate renewable energy engineering students. The study findings confirmed that the participant students have highly favorable attitudes towards English language for both their personal and professional careers. However, the survey results indicated that these students have some difficulties with English language productive skills, namely speaking and writing, in addition to some other sub-skills. Therefore, this research suggests a reform at the level of ESP teaching and learning curricular, focusing on the incorporation of innovative approaches and methods that aims at enhancing students' language acquisition and competency.

Keywords: *Needs analysis; ESP; learning skills; difficulties; proficiency*

1. INTRODUCTION

The rapid growth of globalization and the increasing demands of the 21st century have affected different fields, including education. The major goal of the latter is to improve the individual's social and economic prospects. As a matter of fact, the millennial requirements have generated a great demand to drastically change the way teaching and learning is taking place both inside and outside instructional settings, which has consequently led to various innovative practices around the world.

One of the major education issues in the 21st century is related to language teaching and learning, English language in particular. With English becoming the global and most dominant language worldwide in addition to the political, economic, and cultural changes, English language education needed to be reconsidered. English language education has been gradually shifting from its classical applications such as EFL (English as a foreign language) or ESL (English as a second language) toward new paradigms like English for science and technology (EST), English for business and economics (EBE), and English for academic purposes (EAP).

As far as the Moroccan educational system is concerned, several new reforms have been launched in terms of English language education, approaching English as the international language of science, technology, business, and communication. These reforms focus on institutional, pedagogical, and practical issues, aiming at preparing students and future generations to meet the current academic and professional requirements. However, the most important and problematic question is whether the ESP course is effective or not. ESP is student-task oriented, thus, measuring its effectiveness is strongly related to measuring learners' attitudes, needs, expectations, satisfaction, and achievement. For this reason, this study was undertaken as an attempt to examine ESP needs analysis of Moroccan university students of the renewable energy engineering program at the Higher School of Technology (ESTF). The research was conducted using quantitative surveys which were distributed during the first semester of the academic year 2018-2019. This study was guided using four different questions:

- 1- What are the attitudes of students towards English language learning for their personal and professional life?
- 2- What English language skills do students consider as needed in the renewable energy engineering program?
- 3- What English language skills do students have difficulty with in the ESP course?
- 4- What English language sub-skills do students have difficulty with in the ESP course?

The literature given in this research sheds light of the major trends in ESP needs analysis in higher education. It provides a conceptual framework for the needs analysis process to guide this research and answer its questions. Besides, this paper discusses the methodological approach adopted and describes the findings of the quantitative surveys which aim at investigating English language needs, ESP in particular, of students belonging to the renewable energy engineering.

2. REVIEW OF THE LITERATURE

2.1 ESP Timeline of Evolution

ESP is one of the subsets of ELT (English language teaching) or ELE (English language education), and one of the areas of study in theoretical and applied linguistics. It is considered as “a phenomenon that grew out of a number of converging trends” (Hutchinson and Waters, 1987, p. 6), ESP as a field emerged in the mid-sixties following the Second World War and the series of massive mutations/transitions/changes that affected the scientific, technical, and economic sectors (Basturkmen, 2010, Garcia Mayo 2000). According to Hutchinson and Waters (1987), three main factors created the need for an international and professional language: 1) the oil crisis in the early 1970s, which lead to a substantial economic boom, 2) the revolution in linguistics, aiming at redefining the features of English language use to meet the real life expectations, and 3) the reform at the level of teaching methods and approaches, emphasizing the importance of learners. Besides, Johns and DudleyEvans (1991) asserted that the importance of English language learning was increasingly recognized to be used in international communication. At the end of the 70s and 80s, teaching and learning English was significantly tailored to address learners’ language needs. That is, learning English focused on defining how language can be used in real life situations (Kırkgöz & Dikilitaş, 2018).

The literature confirms that the field of ESP has undergone some important changes during the last decades because of the technological and economic revolution as well as the new pedagogical trends that have affected the English language education. Hewings (2002), co-editor of the journal *English for Specific Purposes*, stated in one of his articles that ESP has witnessed a growing recognition as an academic discipline in U.S.A., U.K., China, Hong Kong, and South America. Several studies have been conducted, investigating different areas in ESP as one of the most prominent and dynamic research disciplines. John (2013) claimed that the growing importance of English in teaching and research as well as the emergence of international journals have reinforced the relevance and importance of ESP.

2.2 ESP Definitions

Knapp and Seidlhofer (2009) asserted that while discussing Languages for Specific Purposes (LSP), in the majority of cases we refer to English for Specific Purposes (ESP). ESP is “the area of inquiry and practice in the development of language programs for people who need a language to meet a predictable range of communicative needs” (Swales, 1992). It is a field of linguistics that attempts to meet the specific language needs of learners and develop their knowledge required in a certain professional or academic context. Besides, Basturkmen (2003) explained that ESP is relevant to the language use requirements that learners encounter in their specific work or study-related situation.

In its beginnings, the teaching of English for specific purposes was mainly targeting learners’ needs to communicate in the areas of technology and commerce (Benesch, 2001). Later, other fields have emerged, such as English for academic purposes (EAP), English for business purposes (EBP), English for occupational purposes (EOP), English for vocational purposes (EVP), English for medical purposes (EMP), English for legal purposes (ELP), and English for sociocultural purposes (ESCP) (Belcher 2009).

The ESP instruction is differentiated from any other English language education as it focuses on creating a content that aims to provide learners with specific skills to study, conduct research, enhance communicative needs, and exploit their professional proficiencies. Therefore, ESP instruction requires a rigorous research at the level of curriculum design, teaching methods, and material selection. Flowerdew and Peacock (2001) said that “a critical step in designing the ESP curriculum is accepting that the methodologies and approaches valid in any other area of ESL are not necessarily the most appropriate for ESP” (177). That is to say, ESP teaching is founded upon a flexible and creative framework that acknowledges the use of specific pedagogies and tools with their adaptation to each learning situation. ESP educators are sensitized to consider three key variables before designing an ESP course namely learners’ needs, goals, and outcomes (Dubley-Evans & St John, 1998; Hutchinson & Waters, 1987).

2.3 Needs Analysis

Needs analysis (NA), also known as needs assessment (Schmidt, 1981), as a term first introduced by Michael West in the 1920s to investigate two concepts: why learners need to learn a foreign language in a target situation, and how they can best learn it (Howard and Brown, 1997). Brown (1995) defined needs analysis as “the activities involved in gathering information that will serve as the basis for developing a curriculum that will meet the learning needs of a particular group of learners” (35). Therefore, NA is considered as one of the most important aspects that constitute the ESP teaching and learning process. Hutchinson and Waters (1987) confirmed that any language course design in general and ESP in particular should start with a needs analysis operation through which the teacher can obtain a comprehensive description of their students’ learning journey. In the same line of thought, Westerfield (2010) stated:

In the needs assessment process, the ESP practitioner does his/her best to find out information about the needs of the sponsor organization, the needs and wants of the learner, and the context in which the learning will take place. This will involve conducting a Target Situation Analysis (what does the learner need to be able to do with the language in the future), and a Present Situation Analysis (what can the learner do with the language now) (2).

The above mentioned quote posits that needs analysis should be considered as the starting point in ESP course design through two major approaches, namely Target Situation Analysis (TSA) and Present Situation Analysis (PSA). The first model (TSA) was proposed by Munby (1978) and it is concerned with learners’ needs in the target situation, communicative needs in particular. The adoption of this approach focuses on the identification of the envisaged goals that learners can achieve at the end of a language course (cited in Jordan, 1997). On the other hand, present situation analysis (PSA) proposed by Richards and Chancerel (1980) aims at understanding students’ current stage of learning and proficiencies at the beginning of a language course (cited in Jordan, 1997). TSA is considered complementary to PSA as it attempts to establish an initial profile of learners’ strengths and weaknesses in language, their skills, abilities, and learning experiences (Dubley-Evans & St John, 1998).

Richerich (1983) claimed that needs analysis is based on a set of fundamental questions:

- **What and why:** answer three main variables: a) “necessities”, which are, according to Hutchinson and Waters (1987), “the type of need determined by the demands of the

target situation, that is, what the learner has to know in order to function effectively in the target situation” (55). In other words, it is of great importance to determine what the learner needs in order to meet the requirements presented in the target situation, be it professional or academic. b) Lack: considers the learner’s prior knowledge in order to identify the gap between what he/she already knows (proficiency) and the target situation’s needs (Burns and Richards, 2012). C) Wants: refers to “what the learners want or feel they need” (Hutchinson & Waters, 1987, p. 57).

- **When:** it stands for the time when the needs analysis process should be carried out. Chambers (1980) provided two possible time periods: 1) “off-line” analysis, which takes place in advance before the start of the course, and 2) “on-line” analysis, which happens during the course.
- **Who:** refers to the parties who undertake the needs analysis operation. Richterich (1983) identified three main elements: the teacher, the students, and the institution.
- **For whom:** is those who will benefit from the needs analysis process, namely the student.
- **How:** stands for the needs analysis methods. Long (2005) pointed out that NA can be conducted using both inductive and deductive procedures. The former consists of observations, case studies, and interviews, while the latter includes questionnaires and surveys. Educators and scholars considered other methods for needs analysis such as focus groups, diaries and journals (Brown, 2009), diagnostic tests, and final evaluations (Hoadley-Maidment, 1983)
- **How long:** the duration of the needs analysis process.

Eventually, the literature advocates that needs analysis is one of the important tenets of ESP instruction. Without having a clear understanding of their students’ backgrounds, skills, preferences, and learning goals, it is impossible for teacher to craft a successful syllabus. As previously stated, this research tried to shed light on the issue of ESP needs’ analysis in the Moroccan university; hence, the coming section describes the research methodology including the sampling selection, research design, and data collection instruments.

3. RESEARCH METHODOLOGY

This research aims to examine the English language needs for an ESP course designed for undergraduate students in a renewable energy engineering program at the Higher School of Technology (ESTF). For this purpose, this study reported the results of a quantitative survey conducted with 30 students during the first semester of the academic year 2018-2019. A questionnaire was carried out to investigate students’ attitudes towards the English course, identify their language strengths and weaknesses, and shed light on their language needs. The questionnaire was covered in two pages including closed-ended questions only. Students’ answers were coded and analyzed using the Microsoft Excel software.

4. RESULTS

This section presents the findings of the questionnaire conducted with the renewable energy engineering students, aimed at examining their language learning needs in an ESP course. The findings are organized into two main sections: students’ attitudes towards English

language learning, and the ESP course in particular, and their language skills and sub-skills proficiencies, difficulties, and needs. Respondents' responses were coded and analyzed using descriptive statistics and presented in the form of tables and graphs.

4.1 Students' Background Information

The first section of the questionnaire addressed students' demographics and background information. The opted findings helped the researcher establish a comprehensive understanding of the participant students' personal profile and determine their current state of their English language learning. As stated earlier, the population of this study comprises 30 undergraduate students divided into 54% of females and 46% males (table 1). As far as the age variable is concerned, as demonstrated in table 1, students aged between of 18 and 22 represented the dominant category with a percentage of 86%, and 14% were between 23 and 26.

Table 1. Distribution of Students' Demographics

Demographics	Percentage
Gender	
• Male	46%
• Female	54%
Age	
• 18 to 22	86%
• 23 to 26	14%
• 27 and above	0%

Q3: How often do you use English in your daily life (outside the classroom)?

This question addresses students' frequency of using English language outside the classroom. Among the 30 respondents, 60% claimed that they sometimes use it, 27% rarely use it, 7% never use it, and 6% frequently use it. These results might suggest that students mostly use English for academic purposes and that the classroom context is where they can have more opportunities to use the foreign language.

Figure 1. Students' frequency of using English language outside the classroom

Q4: Are you satisfied with your current English Level?

Moreover, the questionnaire tended to understand students degree of satisfaction regarding their English learning level. As shown in figure 2, more than half of the respondents (53%) do not feel satisfied with their English language level, and only 20% who confirmed their satisfaction. These findings, therefore, presented an initial profile description of the participant students in terms of their English language learning, ESP in particular, strengths and weaknesses, skills, lacks, and needs.

Figure 2. Students' Degree of Satisfaction regarding their English Level

4.2 Students Attitudes towards English Language Learning**Q5: To what extent do you think English is important to your personal and professional careers?**

In order to shed light on students' attitudes towards their learning of the English language the survey asked students about the extent to which they think English language is important. Figure 3 shows that the majority of respondents (83%) claimed that English as a foreign language is very important for their personal and professional careers, and 14 % thought it is important, while only 3% said it is somehow important.

Figure 3. Students' Attitudes towards the Importance of English Language Learning

Q5: What are your reasons for learning English?

As a follow-up question, respondents were asked to justify their choice and identify the reasons why they think learning English is important. As represented in figure 4, 77% of the students consider English as a requirement for their future professional career and 57% need it in their present academic life in order to understand new concepts and get enrolled in scientific research in their field. Another portion of respondents (33%) believed in the important role of English in communication, especially with native speakers. Only 20% confirmed that learning English is an obligation for them as it is a mandatory subject in the program.

Figure 4. Reasons for Learning English

Q6: How useful is the English language course with regard to your English language needs?

Furthermore, students were inquired to rate the content of the English language course they currently take in school in terms of its effectiveness. As demonstrated in figure 5, the majority (37%) considered the English class to be somehow effective, 30% believed it is effective, and 23% said it is very effective. Only 10% confirmed that what they receive in the English class is not effective at all.

Figure 5. Students' attitudes towards English language course usefulness

Q7: Do you think that the ESP course help you develop the linguistic ability to deal with the scientific and technical contents in English related to your field (renewable energy)?

In order to address these students specific English language needs in the renewable energy engineering area, the questionnaire asked them if they think the ESP course help them improve their linguistic ability to cope with the technical and scientific contents in English related to their field of study. Figure 6 highlights that out of 30, 16 students (53%) answered with yes, confirming their ability to understand the scientific contents in English related to renewable energy engineering, and 14 (47%) said that they do not have these linguistics abilities.

Figure 6. Students' linguistic ability to understand the scientific and technical contents in English related to their field of study (renewable energy)

Q8: Which of the following areas you wish the English courses to be more about?

This section of the survey was design to study students' preferences regarding the ESP course. As highlighted in figure 7, the majority of students prefer speaking and communication (60%) and reading and comprehension (50%). Another portion represented with 48% claimed its preference for vocabulary and technical terminology; however, only 23% suggested writing. Grammar, according to the findings, was the least chosen by students (18%).

Figure 7: Students English Class Preferences

Q9: To what extent do you evaluate your abilities in English language skills?

Students were asked to self-evaluate themselves in terms of their English language skills, namely writing, reading, listening and speaking, in addition to vocabulary and grammar. Figure 8 highlights that most of the students believe that their English language skills were at a moderate level: writing 54%, speaking 50%, listening 47%, 63% vocabulary, and 35% grammar.

Figure 8. Students' self-evaluation of language skills

Q10: To what extent do you have difficulty to use the following English sub-skills?

As a follow up question, students to evaluate some sub-skills, deemed necessary in ESP, in terms of their level of difficulty. Table 2 demonstrates that students rated the majority of the sub-skills as seriously difficult to difficult. Specifically, respondents claimed that they have difficulties with some productive sub-skills, such as giving speech in English (47%), speaking to native speakers (53%), pronunciation (47%), and writing technical texts and reports (50%). Moreover, 54% of the respondents said that they have trouble with understanding technical and scientific terminology (54%) and making correct grammar structure (47%).

Table 2. Students' self-evaluation of language sub-skills

Sub-Skills	Seriously difficult	Difficult	Neutral	Easy
Understanding spoken instruction	7%	30%	40%	23%
Listening to presentation and discussion in conferences, seminars...	4%	40%	47%	10%
Listening to Media contents in English	7%	17%	43%	33%
Giving a speech in English in front of an audience	23%	47%	27%	3%
Speaking to native speakers	13%	53%	27%	7%
Pronunciation	7%	47%	43%	3%
Reading technical texts, reports, surveys...	10%	30%	37%	23%
Writing technical texts like letters, CV, email, report...	26%	50%	17%	7%
Taking notes	10%	24%	36%	30%
Understanding general vocabulary	7%	37%	43%	13%
Understanding technical and scientific terminology	10%	54%	36%	0%
Making correct grammar structure: tenses, articles...	3%	47%	30%	20%

5. DISCUSSION OF FINDINGS

This study examined ESP needs analysis of a group of students from the renewable energy engineering program at the Higher School of Technology of Fes (ESTF). The ultimate purpose of this research, in fact, was to approach ESP teaching and learning within the Moroccan university from students' perspective. As Ouakrime (2017) asserted, investigating students' community is one of the essential factors in promoting the state of ESP in the Moroccan ELT context. He further explained that students are those who can best voice their own opinions and views about the learning operation; that is, talk about their proficiencies, preferences, needs, wants, and constraints.

The numerical data presented earlier in this paper affirmed that students have positive attitudes towards English language learning in general and ESP in particular. Through their answers, participants showed a significant level of motivation and interest in learning English in order to develop their linguistics skills as professionals and communicators. These students

showed a great awareness about the importance of English as a global language, as the language of science, technology, economy, and communication. They confirmed that they are in dire need of this foreign language in order to succeed in their academic life as scientific researchers and in their future professional career as successful employees. In this context, Mackay and Mountford (1978) argued that ESP learners are often mature and highly conscious that learning ESP is for “clearly utilitarian purpose”, which can be academic, scientific, or occupational (cited in Dudley-Evans and St John, 1998). Besides, the questionnaire data suggest that the ESP classroom is the only setting where the majority of students practice the foreign language. This finding might give some recommendations to the ESP teachers to provide more opportunities to these students in order to use English in more useful and meaningful ways. In a similar study by to analyze university students’ ESP needs in Tunisia, Hemissi (1981) found that students rarely use English outside the classroom, while teachers focus more on the reading skill at the expense of the other skills.

From another perspective, participants acknowledged the effectiveness of the ESP course in satisfying their needs as students in the renewable energy engineering program. They stated that the ESP class they currently take helps them develop their linguistic skills to understand the technical and scientific contents related to their field of study. Furthermore and since most if not all research consider learners’ needs and interests as the basis for improving their learning and academic achievement, this study attempted to examine students’ preferences regarding the ESP course. In accordance with the survey results, students expressed their interest in speaking activities, reading, and vocabulary, at the expense of writing, listening, and grammar. For the sake of discussion, Rus (2015) claimed that “the specifics of a future engineering career inevitably imply consistent and complex use of speaking skills, including speaking in a foreign language” (p. 114). Moreover, Kakepoto (2012) while defining the oral skills for engineering, he used the terms “soft skills”, “generic skills”, and “employability skills”. In other terms, engineering students tend to be more interested in activities that aim to enhance their speaking skills and oral proficiency in order to develop their career profile as professional experts and proficient communicators.

This is on the one hand; on the other hand and in order to achieve one of the main purposes of this study, the conducted questionnaire asked about students’ skills strengths and weaknesses. As highlighted in the prior section, the findings revealed that most of the students had average levels of English language skills. As for the English learning sub-skills, the results showed that the majority of respondents have serious difficulties with the productive ones such as giving speech in front of an audience, speaking to native speakers, pronunciation, and writing technical reports. More than that, students confirmed that they most of the time do not understand technical vocabulary and terminology. For the sake of discussion, these difficulties might be caused by the limited opportunities of practice outside the classroom and interaction with authentic materials. Similarly, Mharaj (2017), while examining ESP needs analysis of computer engineering students at EST Berrechid, pointed out that speaking and writing are the two productive skills that most students find problems with. He, therefore, suggested that the ESP teaching and learning operation should emphasize activities that aim at increasing students writing accuracy and speaking fluency, such as encouraging students to deliver in-class

presentations, write their own reports, participate in workshops and public speaking event, among other.

6. CONCLUSIONS AND RECOMMENDATIONS

The current study aimed at portraying the ESP instruction in the department of Renewable Energy Engineering at the Higher School of Technology of Fes, focusing on students' needs analysis in the foreign language. The survey administered in this inquiry confirmed that the participant students have favorable attitudes and high degrees of motivation to learn English, deemed necessary in their future vocational career. However, these students perceived that they had difficulties with some learning skills, productive ones in particular.

Based on this study results, a number of recommendations are tailored. The first recommendation concerns the ESP program. It is very important to reconsider the ESP course content and go beyond the traditional and standardized curricula that do not more serve students' needs and do not help them meet the current requirements. As mentioned earlier in this paper, the changes happening nowadays and affecting all aspects of life have made of English the global and dominant language of communication. Therefore, stakeholders especially those working on higher education policies should work on developing appropriate ESP curricula in terms of content, pedagogies of teaching and learning, and materials. Besides, ESP teachers should be more aware of the new trends in needs analysis theory and practice and its prominence in the field of language education in general. NA enables the teacher to find different areas of language deemed compulsory to provide effective and meaningful/appropriate learning opportunities. The ESP course is not meant to help the student pass the exam but to empower and prepare them for the future vocational life. Teacher should work on creating a learning environment that enhances their students' opportunities for competency through the use of a variety of approaches and methods that engage students in authentic situations and improve their language proficiency and acquisition. Such ESP activities include classroom interactions and debates, simulations, problem-solving and decision-making, oral presentations and public speaking, field visits with interviews in the target language, writing of professional reports, among other activities. Thus, teachers need to be regularly informed with the instructional novelties by inviting them to take part in training sessions, workshops, and conferences. Additionally, the university should support the ESP teacher in terms of materials and facilities like information and communication technology (ICT).

Despite the interesting findings and conclusion resulted in this research, it has some shortcomings. The first limitation consists of the data collection instrument. As stated before, this study was quantitative using a questionnaire only. Future research should build on qualitative studies such as interviews, focus groups, and classroom observations. Besides, the sample size was limited (30 students), which might raise the issue about representativeness and generalizability of findings. Moreover, this inquiry focused mainly on investigating NA analysis using students' attitudes; other projects should approach teachers' perceptions.

REFERENCES

- Basturkmen, H (2003). "Specificity and ESP Course Design". *RELC Journal*, 34(1), 48-63.
Basturkmen, H (2010). *Developing Course in English for Specific Purposes*. Houndmills, Basingstoke, Hampshire: Palgrave MacMillan.

- Belcher , D. (2009). “What ESP is and can be: An introduction”. In D. Belcher (ed.), *English for Specific Purposes in Theory and Practice* (p.1-20) . Ann Arbor, MI : University of Michigan Press
- Benesch , S. (2001) *Critical English for Academic Purposes: Theory, Politics, and Practice*. Mahwah, NJ : Lawrence Erlbaum .
- Brown, J. D. (1995). *The Elements of Language Curriculum: A Systematic Approach to Program Development*. New York: Heinle and Heinle.
- Brown , J. D. (2009) “Foreign and second language needs analysis” . In M. Long and C. Doughty (Eds.), *The Handbook of Language Teaching* . (p. 269- 293) . Oxford : Wiley – Blackwell.
- Burns, A. and Richards, J. C. (Eds.). (2012). *The Cambridge Guide to Pedagogy and Practice in Second Language Teaching*. Cambridge: Cambridge University Press.
- Chambers, F. (1980). “A re-evaluation of needs analysis in ESP”. *ESP Journal*, I (1), 25-33.
- Dudley-Evans, T. and St. John, M. J. (1998). *Developments of in English for Specific Purposes: A Multi-disciplinary Approach*. Cambridge: Cambridge University Press.
- Flowerdew, J, & Peacock, M. (2001). *Research Perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press
- Garcia Mayo, M. D. P. (2000). *English for Specific Purposes: Discourse Analysis and Course Design*. Bilbao: Universidad Del Pais Vasco.
- Hemissi, H.(1981). "Some Aspects of English for Specific Purposes in Tunisian Education". In Swales, John & Hassan, M. (eds.). *English for Specific Purposes in the Arab World*. Birmingham: Language Studies Unit Publications.
- Hewings, M. (2002). “A history of ESP through ‘English for specific purposes’”. *ESP-World*, I(3). Retrieved December 21, 2018 from [http:// www.esp-world.info/Articles_3/issue_3.html](http://www.esp-world.info/Articles_3/issue_3.html)
- Hoadley-Maidment, E. (1983). “Methodology for the identification of language learning needs of immigrant learners of English through mother-tongue interviews”. In Richterich (ed.), 39-51.
- Howard, R. & Brown, G. (Eds.) (1997). *Teacher Education for Languages for Specific Purposes*. Clevedon: Multilingual Masters Ltd.
- Hutchinson, T & Waters, A. (1987). *English for Specific Purposes*. Cambridge: Cambridge University Press.
- Johns, A., & Dudley-Evans, T. (1991). “English for specific purposes: International in scope, specific in purpose”. *TESOL Quarterly*, 25(2), 297- 314.
- Johns, A. (2013). “The history of English for specific purposes research” .In B. Paltridge & S. Starfield (Eds.), *The handbook of English for specific purposes* (pp. 5-30). Oxford: WileyBlackwell.
- Jordan, R. R. (1997). *English for Academic Purposes: A guide and resource book for teachers*. Cambridge: Cambridge University Press.
- Takepoto, I. (2005). Perspectives on Oral Communication Skills for Engineers in Engineering Profession in Pakistan. Retrieved from <http://www.ijalel.org/pdf/129.pdf> on January 5, 2019.

- Knapp, K. & Seidlhofer, B. (Eds.) (2009). *Handbook of Foreign Language Communication and Learning*. Berlin: Library of Congress Cataloging in Publication Data.
- Kırkgöz, Y. & Dikilitaş, K. (Eds.) (2018). *Key Issues in English for Specific Purposes in Higher Education*. Switzerland: Springer.
- Long, M. (2005). "Methodological issues in learner needs analysis". In M. Long (ed.), *Second Language Needs Analysis*. (p. 19 – 76). Cambridge : Cambridge University Press.
- Mharaj, M. (2017). "ESP Needs Analysis of Moroccan University Students: Case study of computer engineering students at EST" in *The Editors. English for Specific Purposes: A Reader*. Egypt: Dar AL Maha for Printing.
- Ouakrim, M. (2017). "ESP in Morocco: A revisited demystification for the 21st century". In *The Editors. English for Specific Purposes: A Reader*. Egypt: Dar AL Maha for Printing.
- Richterich, R. (ed.) (1983). *Case studies in identifying language needs*. Oxford: Pergamon/Council of Europe.
- Rus, D. (2015). "The Acquisition of oral communication skills in an ESP class in NA. *Discourse as a form of Multiculturalism in Literature and Communication*. ARHIPELAG XXI PRESS, TÎRGU MUREŞ.
- Shmit, M. (1981). "Needs Assessment in English for Specific Purposes: The Case Study" in *Selinker, Tarone, and Hanzeli* (29) 199-210.
- Swales, J. "Language for specific purposes," *International Encyclopedia of Linguistics*, Vol. 2, W. Bright, Ed. Oxford: Oxford U. P., 1992, p. 300.
- Westerfield, K. "An overview of needs assessment in English for specific purposes," *Best Practices in ESP E-Teacher Course*, Oregon: University of Oregon, 2010, pp. 1-6.