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TEACHING ENGLISH FOR SPECIFIC PURPOSES (ESP) AT ENSTP- 1ST YEAR ENGINEERING STUDENTS-

Naima Amalou

University Algiers 1, Algiers BP 16000, Algiers, Algeria.

Soraya Hamane

University of Oran 2 Mohamed ben Ahmed, Oran BP 31000, Oran, Algeria.

Abstract:

English for Specific Purposes (ESP) is a distinct division or subset of English education for nonnative speakers. It primarily focuses on instructing university students or employed individuals, catering to their specific needs by emphasizing relevant vocabulary and skills. Algeria implemented English instruction using ESP at all educational levels, especially in universities. ESP, which is specifically designed to fulfil the needs of a given specialization of the students has become one of the widely used techniques to teach English for 1st year students at National School of Built and Ground Works Engineering (ENSTP), basing mainly on the needs analysis and materials evaluation. To ensure that, this Technical English course should meet needs assessment with engineering themes to better understand specific topics, and methodology to be included in the course to acquiring a more profound comprehension of various disciplines of ground works through communicative learning techniques in the class. ESP teachers' design courses usually adopt the approaches that can be distinguished by language-focused, skill-focused, and learningfocused approaches.

Key Words: ESP; ENSTP; learning centred; needs analysis; skills-centred.

1. Introduction:

Teaching English for Specific Purposes (ESP) at National School of Built and Ground Works Engineering (ENSTP) aims to meet the particular academic or professional needs to 1st year students in their current or future contexts. It focuses on teaching the technical language, genres, and skills required to effectively address these specific needs. To achieve this, ESP is designed to offer language assistance to students effectively addressing their particular academic or professional requirements. It also combines expertise in both the language and the subject matter that is tailored to a specific situation according to the students' requirements. Many definitions are given to define what ESP is; these definitions contribute to help teachers in designing correctly their courses.



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In this article, we have tried to share an efficient procedure for designing an ESP curriculum through our experience with 1st year engineering students for the sake of improving the teaching and learning environment and to better organise topics and lessons also provide a well-organized teaching. Taking into account the Challenges that face the teacher, as the ESP teacher should gain knowledge of the target language (a good command of the target language which is English), the academic discipline (what it is, subject of study, jargon, etc.) and the foreign language methodology (which approach to adopt and which methodology to apply).

2. **Theoretical Frameworks:**

2.1. ESP according to Hutchinson et al. Strevens and Norris

English for specific purposes (ESP) which is a branch of English as a second or foreign language focuses on instructing university students or individuals who are already employed in specific industries, catering to their particular vocabulary and skill requirements. The methodology, the content, the objectives, the resources, the teaching methods, and the evaluation procedures all originate from the specific target language uses based on a known set of specialized needs in language for specific purposes courses (Widdowson, 1983). English for built and ground works is a typical example of ESP in which the language instruction's content and focus are constrained to a particular environment or even to a certain selection of tasks and abilities.

According to Hutchinson and Waters (1987), ESP is described as anapproach rather than a product. This means that it is not limited to a specific type of language, teaching materials, or methodology. Instead, it is a flexible and adaptable approach that focuses on teaching English to learners for their specific purposes and needs.

Strevens distinguished between four absolute characteristics and two variable characteristics in his definition of ESP. The four absolute characteristics of ESP, as outlined by Strevens, are as follows:

ESP is an English language teaching approach that caters to the specific language needs and communicative purposes of learners. The content and materials used are carefully selected to align with these individual needs.

It is directly related to particular fields, disciplines, occupations, or activities, tailoring the language instruction to be relevant to contexts like English for Business, English for Medicine, English for Engineering, and .more.

The language taught in ESP courses is specialized, addressing thespecific language features necessary for the learners' intended professional or academic environments. This includes appropriate syntax, vocabulary, discourse, semantics, and other linguistic aspects relevant to their domains

The focus of ESP is on the language skills that hold significance for the learners' objectives. These skills may encompass speaking, listening, reading, writing, or a combination thereof, depending on the learners' goals.

Meanwhile, two variable characteristics of ESP are influenced by the target situation, where the learners will use English, and the unique learning objectives of each individual, which

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may vary from person to person. (Strevens 1988).

As per Norris (2006), the primary objectives of foreign language (FL) instruction in higher education in the United States can be categorized into three main components:

(a) acquiring language skills for general communication purposes, (b) introducing learners to diverse cultures and ideas, and (c) cultivating an appreciation for cultural and cognitive diversity. While these goals are commendable and likely to meet the needs of most university-level FL learners, they lack specificity regarding the practical application of the language beyond the classroom setting.

An alternative approach to understand Language for Specific Purposes (LSP) particularly English is by contrasting it with what it is not. ESP is often presented as the opposite of Language for General Purposes (LGP) or the less purposeful Language for no Obvious Purpose (LNOP). (Norris ,2006, p. 577).

We can conclude from the definitions given above that ESP is considered to be a specific discipline which is not limited to age group, or ability range. It should be understood as an 'approach' to teaching, an 'attitude of mind' as Dudley-Evans describes it. This aligns with Hutchinson et al.'s (1987:19) conclusion that "ESP is an approach to language teaching in which all decisions regarding content and method are based on the learner's reason for learning." Moreover, Strevens noted that ESP is considered unique because it stands in contrast to "General language," and has a clear purpose and value.

The objective and the research question were set as follows:

Because we are not Subject Matter Instructors, it is important to identify the aim

of teaching the 1st year students of ground works and built, the study isguided by the following research questions:

Why designing an ESP curriculum?

What are the Steps to follow in designing the curriculum?

What are the Challenges that face the teacher?

3. Research Methodology:

This research is based on an empirical study; the data are gathered from interviews trough diagnostic test led by 1st year students at National School of Built and Ground Works Engineering from the two departments: the Department of Basic Infrastructure (DIB) and the Department of Materials and Structures (DMS), the results of the diagnosis test are collected among 62 students of DIB and 66 of DMS. The age range of the interviewed students is between 20 and 21 years old. The total number of participants were 128 engineering students. This diagnosis test was performed at the beginning of the academic year September 2022. It revealed that the majority of the participants are between elementary and intermediate level, as it is shown in Table 1 below:

Table 1: Sample of the Study

Departments	Number of students	A2 Level	B1 Level	Observations
DIB	62	52	10	Spelling +Grammar mistakes
DMS	66	59	7	Grammar mistakes

The diagnosis test was on the following questions:

Why are you learning technical English? What do you expect from this module?

Also figure 1 below shows the needs of 1st year engineering students after the diagnosis test .

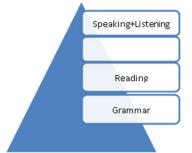


Figure 1: The needs of 1st year engineering students after the diagnosis test

The students' needs focused on speaking and listening, 90% of the students wanted to develop their communication skills, then they expressed their interests to improve their

academic skills in the field of ground works and built for instance: summarising, synthesizing and Paraphrasing, the skills necessary to write their thesis in English later. Consequently, we have applied in our teaching a model by James Dean Brown (1995) todesign an ESP course for 1st year engineering students at ENSTP.

It should be noted that the module of technical English taught to 1st year Students at ENSTP is for 1h30 per week i.e. 21h for each semester and the weekly hourly volume is 29h30 in addition to 413H00 semester hourly volume. The given themes are:

- Introduction to civil engineering and its different disciplines;

- Introduced to different constructions materials, its manufacturing process, types, properties, usages, advantages and;

- Acquiring knowledge about the used keywords terminologies and their translations in buildings, soil foundations, bridges and roads;

- Analysis of engineering issues.

To design a course in ground works and built for the 1st year engineering students at ENSTP is fundamentally distinct from creating other language courses and it is somewhat misguided. While there are certainly challenges and specific areas that require attention, developing ESP curriculum Chelonian Conservation and Biology

may be similar with other language courses. It should be systematic, well-founded, and begin with an understanding of the learners' needs. In this regard, James Dean Brown (1995) introduced a model for developing language teaching curricula. According to him, the methodology for curriculum development consists of six essential processes: (a) needs analysis;

(b) goals and objectives; (c) assessment; (d) material selection and development; (e) teaching; and (f) program evaluation. These steps interact with each other in the creation of the curriculum for Developing Courses in English for Specific Purposes, resulting in a flexible and systematic design that takes into account the constantly changing nature of curriculum development. In other words, while the typical starting point is conducting a needs analysis to determine objectives, upon which assessments, materials, and teaching practices are built, the model recognizes that this is not a strictly linear process. It acknowledges the potential need to gather additional information, establish new objectives, or make revisions and adjustments at any stage of curriculum development. (James Dean Brown1995: 20).

4. Findings:

The steps that are involved to design an ESP course for 1st year students at ENSTP can be set as follows:

4.1. Needs analysis: The ESP course for the 1st year engineers of ground works and built begins with the understanding that the curriculum and the course itself are driven by first the program set by the Ministry of Higher Education and Scientific research i.e. Institutional Program, then student requirements following the diagnostic test. Acquiring such data is ensuring its accuracy and relevance to the program's needs. Brown defines needs analysis as a systematic process of gathering and examining both subjective and objective data that are necessary to identify and justify curriculum goals aligned with the language acquisition needs of students in a specific institutional context that influences the learning and teaching environment. (1995, p. 36). According to this definition, gathering information about the requirements of a particular program or course should involve multiple perspectives and sources. This may include all the staff, including students, teachers and administrators. In present times, we are much more conscious of the importance of needs analysis to identify skills or knowledge gaps, to figure out what type of teaching should be provided and to design content that would hopefully better meet students' expectations.

4.2. Syllabus: According to O'Brien et al. (2008) a well-planned syllabus should encompass various components, including clearly defined learning goals, objectives, techniques, content, norms, expectations, learning tasks, resources, and assessment. Creating an ESP syllabus particularly for the students of ground works and built involves balancing the perspectives of students' needs through learning needs analysis. Different needs have given rise to various syllabus types, as discussed by Martins (2017), Brown (2016), Pandya (2017) emphasizes that contemporary vocational education and training (VET) syllabus design focuses on fostering students' development of specific competences through active engagement with the subject matter.

As a result, both the learning process and the outcomes are expected to be integrated into vocational curricula. Therefore, it is recommended to blend elements from notional-functional and content-situational curricula to create a competency-based syllabus. (Harper, 2010 et al.).

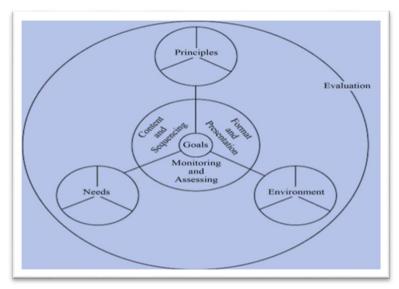
4.3. Material: According to Tomlinson's perspective (Tomlinson, B. 2012), materials development has evolved beyond just a practical concern involving production, evaluation, and adaptation. It has become an academic field of study, with researchers delving into the principles and procedures of material design, writing, implementation, evaluation, and analysis. In his view, these theoretical and practical processes should interact synergistically to create effective language-learning resources to ENSTP 1st year students. The significance of materials in any classroom, cannot be overstated, they serve as a source of language, learning aids, and references, while also motivating and stimulating students. Dudley-Evans and St. John emphasize that welldesigned ESP materials should provide optimal exposure to real language, which may sometimes be the primary source of language in these specialized classrooms. Moreover, these materials should be reliable, consistent, and challenging, engaging learners' cognitive processes and presenting new ideas and information, while considering learners' prior experiences and knowledge. Thus, the curriculum should contain substantial and valuable content to enhance students' understanding of their subject area. It doesn't necessarily require sophisticated materials; instead, it should be well-balanced, incorporating general English language components, essential words, expressions, and specific vocabulary related to ENSTP engineering students. The used materials in teaching ESP to 1st year students are course books, authentic materials, videos...ect.(inspired from Developing LSP / ESP Materials for Legal Professionals, 2013).

4.4. Evaluation: The last step of ESP course is assessment or evaluation. How will you know if the students have achieved the expected objectives of the course? How can you assess your own performance? While evaluation commonly involves measuring students' performance gains on a test to gauge improvement, it's equally important to assess the success of the ESP course itself and the quality of instruction provided. The main objective is to determine the extent to which students have achieved the course goals. To assess students' success, one approach is to have them carry out a real-world task or a simulation of such a task and then evaluate their performance. However, this can be challenging to the majority of teachers as they are not subject matter instructors (SMI) as their expertise and insight can provide valuable feedback for accurate assessment. The evaluation must take into account the objectives that were established for the course at the outset; as a result, two evaluations are made: Formative evaluation and Summative evaluation.

Lastly, it is essential to assess your effectiveness as the course instructor. One approach to partially answer this question is by analyzing the test results. If a significant number of students achieved substantial improvements in their language performance and successfully completed the course, some credit can be attributed to the instructor's teaching. However, a qualitative survey seeking students' feedback on the course can also offer valuable insights into the instructor's effectiveness. For instance, students might express their appreciation for the progress they made but indicate that they found the teaching method uninspiring and the homework workload overwhelming. (inspired from Introducing English for Specific Purposes, Laurence Anthony)

Finally, the best and most practical method to build an ESP course is to start with what the students need and to prepare them to the real world after they graduate in accordance with the institutional curricula.

The following scheme is a model followed to design a program on ground works andbuilt.



(Retrieved from Integrating Curriculum Design Theory into ESP Course Construction)

5. Approaches to ESP course design to 1st year engineering ENSTP students

Three main approaches to course design can be identified: language-centred, skills-centred, and learning centred.

5.1. Language-Centred

In any research that focuses on corpora, ensuring the representativeness of the corpus is an important aspect and it involves considering various factors. One aspect of representativeness is determining if the corpus accurately reflects the type of texts that English for Specific Purposes (ESP) students would typically encounter in their studies. This serves as a key criterion for evaluating the corpus representativeness. For instance, Gardner and Davies (2016) present a different perspective from Durrant (2016) study on the Academic Vocabulary List (AVL) in university student writing, which is based on the British Academic Written English (BAWE) corpus. Durrant's study suggests that the writing of undergraduate students at universities adequately represents writing across different disciplines, even with the presence of other text types that serve similar purposes. It is important to note that examining student writing is a valid area of research; however, broader generalizations require larger and more representative language samples. While analyses based on corpora of professional academic writers are valuable, Paquot (2010) argues for the significance of learner corpora, which provide a distinct perspective on academic language by focusing on keywords in student writing. However, the spoken corpus consists of recordings from both on-site and classroom settings. Due to practical considerations, such as the noisy environment on building sites and the large spaces involved, recording multiple microphones for comprehensive coverage would be challenging. As a result, the corpus primarily focuses on capturing teacher talk, given the constraints of the situation, instead of attempting to record the language use of the entire class, which could include up to 120 students (Paltridge et al. 2017, p.11).

In corpus-based vocabulary research, considerable importance has been placed on the credibility of word lists. Usually, researchers assess this credibility by testing the predictive capability of the lists when applied to a new corpus. This involves measuring the percentage of words in the new corpus that are covered by the words in the list. However, before establishing the credibility (validity) of these word lists, it is essential to ensure their reliability. Surprisingly, evaluations of reliability have been largely overlooked in corpus-based vocabulary studies. Reliability, in this context, refers to the extent to which we would identify the same set of words, ranked in the same order of importance, when analyzing another corpus that represents the same domain of discourse. (Miller and Biber, 2015, p. 33) retrieved from Approaches to identifying vocabulary p.11

Finally, taking into account the argument put forth by Bennett (2010), we can say that corpus analysis can only offer evidence of what is possible, rather than evidence of what is impossible. In other words, corpora provide information about what language is commonly used and observed, but they cannot definitively determine what language patterns or structures are impossible or prohibited..

5.2. Skills-centred,

During the 1980s, the skills-centred approach emerged as a response to register analysis. Allwright & Allwright (1977) defined the core principle of this approach as "learning how to learn." Its primary objective is to empower students with essential tools and learning techniques that foster independence and self-directed learning. Hutchinson & Waters propose that language instruction based on a skills-centred approach places greater emphasis on practical application and discourse rather than focusing solely on sentence-level structures. They argue that underlying all language usage are fundamental reasoning and interpreting processes that enable us to derive meaning from discourse, regardless of the specific surface forms used (Hutchinson & Waters, (1987).

To effectively communicate in an engineering context particularly the field of ground works and built, students need to possess fundamental skills in grammar, pronunciation, listening, speaking, and technical writing. This course section aims to strengthen students' comprehension and proficiency in English structure and grammar, with special emphasis on PSI (pronunciation, stress, and intonation). Students are actively encouraged to engage in classroom discussions and formal debates on a wide range of topics related to everyday life. These activities are designed to foster the development and improvement of their spokenlanguage abilities. Additionally, students are instructed in both formal and informal phrases and communication strategies to enhance their technical writing skills. Retrieved from Integrating Curriculum Design Theory into ESP Course Construction.

5.3. Learning- centred

According to Brown (2016), learning needs analysis refers to the systematic gathering and analysis of both subjective and objective information required to establish and justify a curriculum that effectively addresses the language learning needs of students within a specific institutional context influencing the teaching and learning environment (2016, p.36). ESP learning needs analysis is considered essential for identifying target learning needs during program admission and supporting syllabus design. It is also recommended to be conducted regularly to compare learners' progress in terms of knowledge, skills, and learning attitudes against their starting point (achievements) as well as against the desired competences (competency gap to be filled). Assessment of students should be conducted through tasks that clearly define real-world usage scenarios, as defined by stakeholders involved in employability.)

According to Martins (2017), Dudley-Evans & St. John (1998), Anthony (1997), Hutchinson and Waters (1987), and other researchers, learning needs encompass both objective and subjective elements. These elements include preferred learning styles, task types, required resources, interaction patterns, and the choice of learning mode (face-to-face, blended, or distance learning). Furthermore, the measurement of learning objectives on a regular basis is also considered an integral part of learning needs analysis.

Conducting learning requirements analysis in a meticulous manner is regarded as a scientific research endeavor and thus warrants a more detailed explanation. The goal of learning needs analysis is to bridge the gap between the competencies learners already possess at the beginning of their learning journey and the expected knowledge and skills to be acquired and applied in practice over time. To achieve this, learning needs analysis should be guided by consistent data collection and analysis methods, including careful considerations of sampling criteria. It is essential to keep these factors in mind, considering the limitations and focus of the current study. The Council of Europe (2017) and Van Avermaet & Gysen (2006) also recognize the importance of addressing these needs analysis considerations and incorporating them into the syllabus design, along with the previously mentioned authors.

As previously mentioned, any LSP course is influenced by the absolute and variable features of ESP discussed by Dudley-Evans & St. John (1998). Furthermore, the learner- centered approach of LSP directs its focus towards the language's suitability for specific application contexts in terms of grammar, vocabulary, register, study skills, discourse, and genre. The primary objective of LSP is to meet the specific requirements of the learners, which makes it competency-oriented and encompasses the categories of communicative competence, as discussed earlier. LSP may also be connected to particular disciplines, which is a variable characteristic that necessitates a different teaching strategy compared to languages taught without a clear goal.

Hutchinson & Waters (1987) introduce the process dimension, which is a vital element in LSP, thereby establishing it as a learner-centered approach based on learning needs analysis. This has significant implications for the techniques and content considered when designing a syllabus and aligns more closely with the type of LSP syllabus being discussed in this context.

In a broader context of language and learning, Bárcena et al. (2014) explore the potential of LSP curricula to be transdisciplinary, collaborative, innovative, and flexible, particularly when

harnessed by information technology. They highlight the opportunities that digital technology presents as a gateway to specialized disciplinary knowledge and relevant communities of discourse. The authors emphasize learner-initiated and managed digital tools that facilitate engagement and activities within LSP, providing examples of such possibilities.

6. Discussion

Before engaging in an Esp course, standing as close to students' needs as possible is a must!

-To improve the teaching and learning environment: Enhancing the teaching and learning atmosphere necessitates a comprehensive approach that tackles different facets of the educational system.

-To meet the 1st year engineering needs in the target Language: It is crucial to establish customized language support initiatives. These efforts should concentrate on improving language skills and understanding, enabling students to proficiently grasp and communicate technical concepts. Several approaches to accomplish this goal include specialized courses that focus on technical vocabulary, terminology, involve students to participate providing them with opportunities in order to actively utilize the target language in authentic engineering contexts. Finally, provide them with technical reading materials to improve their reading comprehension.

- Group discussions and group projects that promote verbal communication in the target language, allowing students to express engineering concepts confidently.

Consistently evaluate students' language proficiency and offer constructive feedback to monitor their development and pinpoint areas that require improvement.

Also, the study involved conducting an interview to students of both departments (DIB and DMS) at the ENSP after the 1st and 2nd semesters to ascertain whether the technical English course and the methods employed have any impact on acquiring language skills.

The interview also included questions about the learners' expectations from the provided ESP course. We then proceeded to inquire about the difficulties, if any, they faced in understanding the lessons and the extent to which their pedagogical goals were achieved during the course, followed by questions about the challenges encountered during the teaching of technical English and their opinion on the effectiveness of exercises in enhancing proficiency in the target language.

The interview consists of both closed-ended and open-ended questions. In the case of closed-ended questions, multiple-choice answers are provided, allowing respondents to select one or more options. Regarding the open-ended questions, respondents have the freedom to express themselves and provide justifications. In our article, we adopted a descriptive approach for analyzing the results, as it is the most suitable method for such field studies.

The questions were as follows:

1. What are your expectations during the course?

Departments	Number	Writtencompre	Oral	Speaking	Reading	Out of
	Students	hension	comprehension			obligation
DIB	62	11	8	21	3	19
DMS	66	21	11	20	4	10

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Among 128studentsfrom the two cited departments (DIB-DMS) 32 answered regarding their expectations from learning ESP (English for civil engineering) the ability to understandthe written texts, 19 oral comprehension, and 41students specified speaking fluently, along with the ability to comprehend spoken language; 7 students expressed their interests for reading technical texts and the remaining students did not provide clear answers to the questions; they have just attended because they are obliged to. From the learners' responses, we can deduce that they anticipated that by the end of their technical English module, they might not be able to read and comprehend texts or communicate with ease.

Departments	Number Student s	Yes	No	Somtimes
DIB	62	13	38	11
DMS	66	6	46	14

2. Did you find any difficulty in grasping the lessons?

For this question regarding the level of difficulty or ease in grasping the information related to technical English lessons, among students (DIB-DMS), 84 responded with "no" and 19 responded with "yes." Their suggestions all centered around using simpler language and employing translation during oral explanations, written exercises, and the translation of terms. while the remaining learners preferred utilizing translation during oral explanations and the translation of technical terms to enhance their comprehension of the lessons.

Therefore, we observed that the difficulty in comprehending the technical English lessons didn't not necessarily stem from the elementary or intermediate levels, but rather from the teaching strategies employed by the teacher. Additionally, individuals who face difficulties in understanding prefer resorting to translation, whether during explanations or while engaging in exercises.

Departments	Number Students	Yes	Not completely
DIB	62	49	13
DMS	66	60	6

2. Did you achieve your pedagogical objectives after the course?

The majority of responses were "yes". This could potentially be attributed to the teaching approach chosen by the instructor.

Chelonian Conservation and Biology https://www.acgpublishing.com/ By conducting this interview, our objective was to delve into the role of ESP course in enhancing language skills, as well as gain insights into the pedagogical aspects of ESP teaching methodologies. The analysis of the collected data has provided valuable insights that contribute to a better understanding of ESP strategies and effective teaching approaches. It also aimed at assessing the extent to which ENSTP engineering students have acquired proficiency in Technical English. The study as mentioned before follows an empirical and quantitative- qualitative methodology, relying on the field experimentation approach.

7. Conclusion

This paper offers insights into the challenges faced by ELT teachers at ENSTP who take on the role of ESP curriculum developers. It highlights recurring themes and their contributions to advancing our comprehension of ESP (English for Specific Purposes). This article particularly emphasizes how ESP poses distinctive challenges and perspectives are considered to be more attuned to cultural and contextual sensitivity than other language instruction approaches. Since students in ESP typically lack expertise in the language, the curriculum development process must take into account various approaches to balance linguistic, cultural, and content-area instruction. The central argument put forth is that all language serves a purpose (Widdowson, 1983), but these purposes can significantly differ based on the specific needs of the local program.

In this paper, we have explored the definitions and assertions related to ESP and delved into various proposals from different viewpoints. Additionally, we have identified significant steps and approaches concerning ESP course design. It's important for us, as teachers and curriculum designers of ESP to pause and reflect on the implications of this knowledge for our roles. The hope is that the information presented here can contribute valuable knowledge to the field and aid in the improvement of ESP teaching practices for 1st year students at National School of Built and Ground Works Engineering (ENSTP).

References

Anthony, L. (1997). English for Specific Purposes: What does it mean? Why is it different. On-CUE Journal, 5(3), 9-10. https://www.laurenceanthony.net/abstracts/ESParticle.html

Anthony, L. (2018). Introducing English for specific purposes. Routledge. Coxhead, A. (2018). Vocabulary and English for Specific Purposes. Routledge

Dudley-Evans, T., & St John, M. J. (1998). Developments in English for specific purposes: A multi-disciplinary approach. Cambridge university press.

Lin, J., Wang, A., & Zhang, C. (2014). Integrating curriculum design theory into ESP course construction: Aviation English for Aircraft Engineering. Open Journal of Modern Linguistics, 2014.

O'Brien, J. G., Millis, B., & Cohen, M. (2008) (2nd ed). The course syllabus. A learning centered approach. San Francisco: Jossey Bass.

Pandya, H. A. (2017). Syllabus Design – An Overview. International Journal in Commerce, IT & Social Sciences, 04(07), ISSN 2394 – 5702. Retrieved from https://www.academia.edu/38689159/Syllabus Design An Overview

Tomlinson, B. (2012). Materials development for language learning and teaching. Language teaching, 45(2), 143-179.

Trace, J., Hudson, T., & Brown, J. D. (2015). Developing courses in languages for specific purposes.

Widdowson, H. G. (1983). Learning purpose and language use. Oxford University Press 1983.