BASIS AND APPLICATION OF AN ESP COURSE
FOR DENTAL STUDENTS

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Abstract. *English for Specific Purposes (ESP) is a complex and challenging area of teaching English. That explains why designing an ESP course is a hard task for English teachers, especially for those with little or no experience. Most current ESP classes in higher education focus on the teaching of grammatical issues, while some other devote classroom time to translate scientific articles that students do not recognize as useful for their whole formation because those courses do not arise from broader educational objectives. An ESP class goes beyond that since many issues need to be considered when proposing a syllabus for a successful ESP course. The preset paper was meant to share the application of an ESP course for first-year dental students. The authors expect it to be useful for students and novel teachers facing a similar task. A brief concise literature review is presented to later share the experience of English teachers at the Faculty of Dentistry in the University of Los Andes. Teaching ESP is not just a challenge for the teacher, but also a chance to learn about language teaching, the language itself and new academic and scientific communities.*

Key words: *ESP, course design, Dental students.*

1. INTRODUCTION

The dental student is expected to be an integral professional able to be up-to-date in their professional practice. The Faculty of Dentistry of the University of Los Andes (FOULA) follows an integrated curriculum including Research as a line going along the whole career. That subject matter integrates different areas including English. In that sense, reading scientific articles in English is mandatory.

In this context, the English teacher faces a challenge when building a syllabus according to the main goals of the career, as well as the specific goals of the subject matter for each year according to the gist of English for Specific Purposes (ESP) in the aforementioned environment. The preset paper was meant to share the experience of developing an ESP course for first-year dental students. The authors expect it to be useful for students and novel teachers facing a similar task.

Designing a course is fundamentally a reasoned subsequent process of syllabus design, material design, classroom teaching, and evaluation for general or specific purposes, theoretical or practical purposes (Li & Huo, 2014). In the case of an ESP course, it could be quite demanding because ESP courses are made-to-measure.

2. BASIS OF ESP COURSES

English for Specific Purposes is considered to be an approach to language learning. Even when other approaches exist, ESP is an eclectic one pursuing the goal of satisfying specific needs (Barrantes, 2009). ESP has been also described as a learner-centered approach which sees learning as the active construction of meaning, and teaching as the act of guiding, scaffolding and facilitating learning (Mizel, 2009). In fact, the instruction will be considered effective when the learners' specific satisfaction and needs are met (Li & Huo, 2014). The concept of specificity covers the specialized vocabulary pertaining to the university disciplines first and to the profession later, together with the respective reading and writing conventions of the academic and scientific community on the field (Cianflone, 2010).

Due to the fact that ESP is a matter of approach to language teaching aiming to meet the needs of a special group of learners, it means that much work done by ESP teachers is addressed to designing appropriate courses for various groups of learners (Li & Huo, 2014). For that purpose, teachers must be aware of some theoretical rationales of ESP as well as some other theoretical issues related to language teaching and learning which will be discussed ahead.

Some authors have insisted on the differences between ESP and English for Academic Purposes (EAP). Kazem and Fatemeh (2014) indicate that the main difference is that in that EAP is learned for academic purposes (e.g., the ability to read and comprehend the current texts and articles related to the learners' major field of study) while ESP refers to the ability to use the target language for communicative purposes.

ESP process consists of five key stages the teacher must be aware of: (1) needs analysis, (2) course design, (3) teaching and learning, (4) assessment, and (5) evaluation (Górska-Poręcka, 2013). For each one of those stages the practitioner will play different roles and will need to fulfill some requirements in order to present and develop a successful ESP course.

In these sense, regarding teacher's requirements, it is considered that "nowhere in English language teaching is the teacher's impact on course design and course effectiveness greater than in ESP" (Górska-Poręcka, 2013. p. 28). That statement is related to the fact that ESP courses as learner-centered ones, are quite demanding not just in terms of language teaching methodology knowledge but some other features that teachers do not get quite prepared during their training at the university.

As mentioned before, ESP course design comprises some stages and each one places considerable demands on the ESP practitioner, who is required to play not one, obvious role of the language teacher, viewed, alternatively, as knowledge provider or learning facilitator, but five highly complex roles, corresponding to the key stages of the ESP process (Górska-Poręcka, 2013). The functions the ESP teacher should accomplish are the following:

1. Need Analysis. RESEARCHER: Assessing learners' need and analyzing the affective, cognitive and social factors. Analyst of the gathered data.
2. Design. COURSE PLANNER AND MATERIAL PROVIDER: Set the course parameters of content and methodology , involving syllabus design and material development.
3. Teaching and learning. INSTRUCTOR, FACILITATOR AND MEDIATOR: Acting both as the primary knower and the exemplary user of the target language and its specialist subset.

4. Assessment. EXPERT: It requires considerable knowledge of the discourse and practices of the target group, in which language teacher is but a knowledgeable outsider.
5. Evaluation. EVALUATOR: Constructively reflects on his or her own work at every stage.
(Practitioner's roles in ESP course stages based on Dudley-Evans & St John, 1998 and Górska-Poręcka, 2013).

Each ESP course is different because students' interests and needs vary. Teachers need to be aware of that and they need to check they fulfill some knowledge requirements highlighted in the literature. According to Górska-Poręcka (2013), the basic ones would be:

- Language knowledge base: Knowledge of the target language (TL) and the targeted specialist discourse. Linguistic research and language analysis expertise, including the procedural knowledge of linguistic, discourse, and genre analysis.
- The subject content knowledge base: Knowledge of the basic concepts and tenets of the discipline to which ESP is related. Familiarity with the discipline- or profession- specific discourse practices (typical speech acts and genres).
- Knowledge of pedagogy. Knowledge of educational skills and teaching techniques in order to improve learning. The understanding of education as a human activity and as a social phenomenon.

ESP teachers' efforts must concentrate on helping learners to function in academic, professional or workplace settings (Basturkmen, 2006). In this sense, teachers also need to know that their success will partially depend on a proper team work involving experts on the field in which the ESP course is being designed. Those experts will be key informants about relevant issues such as: linguistics genres of interest for the community, discourse features directly related to the discipline, knowledge interests and trends, among other; they could also help teachers to understand basic concepts and technical details they will need to talk about some topics during the course. The ESP teachers also can learn from their learners in the professional knowledge part. In summary, as Li and Huo (2014) claim, ESP teaching is a combination of language teachers and specialty experts' work which is a prerequisite to learning and specific professional goals based on the needs of learners.

3. APPLICATION

Most current ESP courses in higher education focuses on the teaching of grammatical issues while some other devote classroom time to translate scientific articles that students do not recognize as useful for their whole formation as future professionals. Sometimes, students do not notice the importance of English as a subject matter in the curriculum because is seems to be disconnected to their academic and professional interests. It would be possible to say that it is teacher's lack of interest, that it is a result of universities policies, or even teacher's lack of knowledge and experience; however, in Venezuela it has not been properly researched.

We think that it is a complex issue involving a mixture of variables that need to be deeply investigated due to its practical and pedagogical implications. Kaur (2007) claims that if the ESP instructors lack the basic knowledge and experience about how to design an effective course that will cover the specific language needs of their students, they are often faced with

various complexities and problems. That tends to explain why many instances of ESP course design are often ad-hoc and not entirely based on comprehensive needs analysis.

When we faced the challenge of teaching English at the FOULA, we realized that a traditional ESP course as described in the previous paragraph would not work, especially when we realized that English does not appear as a course itself in the curriculum but is implicit as an area to support a subject matter with general and specific goals already established. English then, would contribute to the achievement of a goal which was common for the four areas coexisting within the "Introduction to research" course: helping students to write a scientific paper to be submitted to a scientific journal, namely a systematic review according to Cochrane guidelines

It was clear for the teachers that there was the need to review and propose the contents under certain parameters:
- They should be useful for students as scientific researchers,
- They needed to be relevant for the type of research they were performing,
- They were expected to help students to write the paper they were aiming to (systematic review), hence, related to their research interests,
- Contents should be directly related to their academic and professional interest according to the year they were taking, and
- Activities should take just necessary time and mostly be completed in the classroom because of the overwhelming schedule of a dental student.

Then, needs analysis was performed in order to be able to select contents and to propose materials.

3.1. Need analysis

A needs analysis is an ongoing process. It is not a set of rigid rules 'written in stone'. This means that needs detected before the course might change during the course and the teacher has to take note of those changes (Barrantes 2009). In this vein, at the FOULA, we used to evaluate the process during and after the academic year and incorporate the observed additional needs. Some authors distinguish between the terms "needs analysis" and "needs assessment", often used interchangeably, claiming that assessment involves obtaining data, whereas analysis involves assigning value to those data (Graves, 1996).

Barantes (2009) explains that students' needs can be classified as follows:
- **Necessities**: what the learner should be able to do effectively in the target situation. It deals with the language a learner is required to master in order to function effectively in a certain situation.
- **Lacks**: the gap between target proficiency and present performance.
- **Wants**: what the learners want or feel they need and other factors such as institutional demands must also be taken into account.

Sysoyev (2000) alerts teachers on asking students about their needs. Sysoyev insists on the idea that even though very important, students' data should not be overused. A course based on needs analysis does not mean that teachers should teach only what their students want because there are certain things, such as curriculum, institutional guidelines, and standardization, that cannot and may not be ignored.

In our experience initial needs analysis led to the following findings:
- **Necessities**: Students needed to develop reading skills to be able to deal with scientific papers in the field of dentistry.
- **Lacks**: They need to review some grammatical features found in the dentistry scientific discourse.
- **Wants**: Students expressed that they wanted to master more grammatical structures and specific vocabulary in order to feel more comfortable with texts. The subject matters objective demands from the course to focus on the knowledge of a specific text genre and discourse (systematic review).

Each year some features of the previous course are maintained, but some other are changed based on their relevance for the students in order to reach the "Introduction to the research goal".

3.2. Teachers' preparation

It has been said in the literature that ESP teacher cognition with its knowledge bases and processes is what makes course design as well as the teaching of ESP possible. To fulfill basic teachers' preparation as indicated by Górska-Poręcka (2013) and some other scholars, required to design the course according to the results of the needs analysis, we needed to start knowing about the other teachers' syllabuses and students' professional interests (subject content knowledge base). It included studying basic dentistry (e.g., vocabulary, most common diseases, dental materials, instruments); knowing the linguistic community codes (Language knowledge base); getting familiar with medical databases, Internet searchers and online libraries; searching for similar experiences around the world (which are not many); meeting with teachers of other areas in order to constantly check the consistency and usefulness of the contents to be practiced and materials to be used. Finally, we researched about the appropriate materials, strategies and activities to include for the development of the course (knowledge of pedagogy).

3.3. Textbooks and materials

We were designing a very specific course for which we would never find a book in the market; hence, we needed to create our own teaching material and we did as suggested by Frydenberg (1982). For a course where there is no textbook available (or there cannot be any, specifications since the content area book(s) may vary from one year to the next), the instructor must necessarily produce all the exercises.

In relation to materials selection and preparation, ESP teachers need to be able to organize and develop the materials according to the course goals, curriculum, and students' needs. The main objective of the ESP course was to help student to develop reading skills to handle scientific texts for research purposes, for this, other objectives were also set (e.g., recognitions of types of abstracts, mastery of some grammatical structures frequently used in dentistry scientific articles). Frydenberg (1982) states that an ESP course to develop reading skills is characterized by the use of authentic, non-simplified, directly relevant texts in their field of specialization, and the focus on the students' immediate reading needs. Those materials are expected to be authentic and complete because, as Langham (2006) claims, using abstracts alone is not a suitable way for developing students' reading skills in an ESP reading program.

We selected scientific papers including general dentistry information instead of using just abstracts or texts created or modified by the teachers. Those articles were downloaded from the databases and online libraries the students are expected to use during the research paper development. The texts readability was measured through an online readability calculator. The advantages of using articles related to what they are actually doing for the research article are that a professor from the related clinical area may be available and willing to help the teacher in understanding the material, and that it motivates the students by having immediate positive effects on their work in the content course, as highlighted by Frydenberg (1982).

All the articles are compiled into a student handout which is designed at the beginning of every academic period. That handout contains all the materials and activities the students would need during the course. The material is presented divided into class sessions, so that the students can clearly notice what was previously studied, the assignments (when apply) and what they are expected to do in the next class.

3.4. Contents

Contents were expected to be directly related to what students were doing and studying in the other areas. For instance, if in the computer course students were being taught about databases that just allow for reading abstracts they were expected to have studied in the English class to identify different types of abstracts and to obtain general information from them. In this sense, the content would include: types of abstracts according to different classification criteria (descriptive, informative, structured, semi-structured and non-structured); reading strategies (skimming and scanning) and text markers mostly used in systematic review abstracts, to name a few.

To develop the contents, the students worked with scientific articles, but even when the content of the articles was supposed to be interesting and motivating for the students, it was not the focus. It was clear for teachers and students that, as stated by Frydenberg (1982), despite the use of a regular course book (or articles as in our case), the aim of the ESP course is not to teach the content of the article, but to teach high-transfer skills that are only incidentally being developed through texts that are the same as or similar to those used on their content courses.

3.5. The activities

Frydenberg (1982) explained that most of our instruction in a reading skills course is aimed at the application level of learning. 'Application' means learning to master skills in order to handle new material and situations: the instructor is not teaching the students to analyze one particular paragraph and get the most out of it, but how to approach any paragraph of this kind and get as much out of it as possible. In our ESP course, activities were planned as dynamic as possible in order to keep students motivated. It is very important because dental students have a demanding schedule with many subjects and tend to be tired in class.

Among the activities we mixed for the classes are:
- Reading texts in groups,
- Finding specific information related to the content,
- Group work for problem solving,
- Workshops, and
- Teacher's explanations of grammatical contents (when needed).

3.6. The evaluations

The objective evaluation of ESP courses is very complex. Lesiak-Bielawska (2014) explains that "It not only requires assessing learners' knowledge and skills at the end of the course…, but also evaluation of the acquired skills in the light of the post-course vocational and academic experiences of the learners." (p. 24) In other words, for an ESP course we need to evaluate the students and the course itself. Our ESP course includes summative and formative evaluation for the students. Additionally, we include a third kind of evaluation as proposed by Lesiak-Bielawska (2014). That evaluation is for the course itself and its purpose is to assess its long-term impact as proposed by Lesiak-Bielawska, but also to evaluate the usefulness of the course for the main objective the students are expected to reach during the "Introduction to research course". As mentioned before, that evaluation is achieved during the course by monitoring students' performance in other areas and at the end of the course.

4. CONCLUSION

Over the past forty years the demand of ESP courses in higher education has increased and therefore the demand of qualified practitioners. The former students of Foreign Languages (FL) as novel practitioners have now to adapt themselves in a new teaching environment that they have never experienced before and certainly they will "have to struggle to master language and subject matter beyond the bounds of his previous experience" (Hutchinson and Waters, 1987). In the context of teaching ESP, the main difficulty is the lack of background in training programs and accurate documentation making compulsory to teachers to undertake self-training and self-reflection to succeed in ESP classrooms.

Besides mastering one or more foreign languages, students of Foreign Language (FL) teaching are more expected of being proficient on teaching English for General Purposes (EGP). Nevertheless, EGP is essentially considered as a level that precedes higher-level education in ESP in non-English-mayor universities or vocational colleges. For former FL teaching trainees, teaching ESP is about narrowing the focus of English in a specific arena with a well-defined target; this means, considering the needs assessment which is, besides syllabuses, methodology and required collaboration of experts on the field, one of the mayor components of ESP (Al-Humaidi, 2013).

For new practitioners, assembling educational theory and practical considerations should be supported on needs assessment. But getting right with the 'real' perceived needs of the learners can be an extremely difficult task for teachers when different disciplines converge in one classroom, and when selecting textbooks is not reliable due to publishers seek for the largest possible market (Bhatia, Anthony & Noguchi, 2011). By investigating learner's needs, the content of syllabuses for ESP should be effective on incorporating aspects of the student specific academic field, this involving not only the course designer, but also adapting methodologies and materials to suit the needs of the students. However, traditional training as FL teacher offers the opportunity to focus on course design and methodologies to teach a FL, but it rarely prepares language teachers as ESP practitioners who have to deal with a context-specific environment. A specific discipline naturally establishes its own rules, and the needs and methodologies cannot be extrapolated to another domain in order to serve different requirements (Al-Humaidi, 2013). In this regard, an improving performance of practitioner relies also on pursuing collaborations of experts of the field.

Collaboration with content specialist is essential for practitioners to acquire basic subject knowledge, especially when they are asked to teach into disciplines they are unrelated with. Regarding content knowledge, Chen (2000) considers that it is an element of an ESP teacher qualification though this can help practitioners to "conceptualize appropriates notions for teaching approaches" (p.389). As mentioned before, designing syllabus, methodologies and the choice of accurate materials is prompted when the practitioner gets involved in the disciplinary culture. Beyond studying textbooks, doing our own research and looking up the terminology in a dictionary, learning from colleagues, specially the experienced ones, is helpful when the concern is the weakness and lack of content knowledge that can lead us into an embarrassing moment in front of the students. The communication and collaboration between ESP teacher and subject matter teachers among all its specialized areas is an unquestionable advantage for improving teaching tasks and activities, and advantage that at the Research Department of the Faculty of Dentistry, faculty name, country, is much enjoyed. For novice ESP teachers, this issue is mandatory to consider: it is not possible to ensure promising results in an ESP classroom if we do not get familiar with the subject matter.

Nevertheless, for a trained FL teacher narrowing the focus between the classroom and a specific world of work is a challenging task. As far as possible, teachers aim that students manage all the communicative aspects of a language to avoid limitations. Certainly, it is convenient that students are sufficient in specialist text reading skills and certain registers in order to publish his/her research in an international journal, but they are not compelled to read classic literature as Bhatia, Anthony and Noguchi affirm (2011). Fortunately, an ESP course is not necessarily circumscribed into a strict program and teachers generally have the freedom to teach it in the way they see it suitable. In this sense, practitioners are able to offer wider knowledge of the target language in order to help students to communicate a different perspective in a professional discussion at the moment of responding to questions after a presentation, for example. Teachers are constant participants in decision making of ESP courses after conceptualizing their notions, though eventually, this will mean undertaking self-training and self-reflection to succeed.

Most of former foreign languages students might feel that they have to survive dealing with an ESP course in which they had little to no formal training. In order to offset the situation, self training or self-studying is completely necessary. New teachers have to study by themselves as learners of a new subject, even though it implies investing an important part of their time studying on their own or attending colleagues' courses, and reading papers on the major subject to get familiar for preparing a course. These elements will help to orientate and improve the performance of a novel ESP teacher.

Whether novel or experienced practitioners, we should never underestimate the complexity of an ESP course. The considerations exposed in this paper are expected to orientate students of Foreign Languages and current practitioners to enhance professional development under the assumption that an ESP course has a well-defined scope and it involves many teacher's requirements. There are multiple roles and multiple tasks that ESP teacher needs to cover, since exploration and documentation of the subject is still needed, ESP teachers must endeavor self-training and self-reflection in order to purse the objectives of a successful course.

REFERENCES

Al-Humaidi Majid, "English for Specific Purposes Review of Literature" (2013). Accessed: October 24,2015, http://faculty.ksu.edu.sa/alhumaidi/Publications/English%20for%20Specific%20Purposes%20Review%20of%20Literature.pdf.

Barrantes, Luis. "A Brief View Of The ESP Approach". Letras 46 (2009): 25-143. Accessed: August 2015, http://www.revistas.una.ac.cr/index.php/ letras/article/view/1661

Basturkmen, Helen. Ideas *and Options In English For Specific Purposes*. Mahwah, N.J.: Lawrence Erlbaum Associates, Publishers, 2006.

Bhatia, Vijay, Laurence Anthony, and Judy Noguchi. "ESP in The 21St Century: ESP Theory And Application Today". Proceedings Of The JACET 50Th Commemorative International Convention, 2011, pp. 143-150. Accessed October 25, 2015, http://www.laurenceanthony.net/research/20110830_0902_jacet_national_pres/jacet50_bhatia_anthony_noguchi.pdf

Chen, Tsai-Yu. "Self-Training For ESP Through Action Research". English for Specific Purposes 19, no. 4 (2000): 389-402. doi:10.1016/s0889-4906(00)00008-9.

Cianflone, Eugenio, "What Degree of Specificity for ESP Courses in EFL Contexts? A Preliminary Case Report for the Degree in Mediterranean food-and-wine Sciences and Health", Scripta Manent, (2010). 5(1-2): 3-8.

Dudley-Evans, Tony, and Maggie-Jo St. John. *Developments in ESP*. Cambridge [u.a.]: Cambridge Univ. Press, (1998).

Frydenberg, Gro. "Designing An ESP Reading Skills Course". ELT Journal, (1982), 36 (3): 156-163. doi:10.1093/elt/36.3.156.

Górska-Poręcka, Bożena. "The Role of Teacher Knowledge in ESP Course Design". *Studies in Logic, Grammar and Rhetoric.* (2013), 34 (1). doi:10.2478/slgr-2013-0021.

Graves, Kathleen. *Teachers as Course Developers*. Cambridge [England]: Cambridge University Press,1996.

Hutchinson, Tom, and Waters, Alan. *English for Specific Purposes*. Cambridge [Cambridgeshire]: Cambridge University Press, (1987).

Kaur, Sarjit. "ESP Course Design: Matching Learner Needs To Aims". English For Specific Purposes World, 2007. Accessed: August 2015, http://www.esp-world.info/Articles_14/DESIGNING%20ESP%20COURSES.htm

Kazem, Barzegar and Fatemeh Hemmati, "Evaluation of an EAP Textbook: English for the Students of Dentistry". *Merit Research Journal of Education and Review*, (2014), *Vol*. 2(4), 062-076.

Langham, Clive. "Team teaching a medical and dental English program". Nihon University Journal of the School of Dentistry,(2006), *34*，47-58.

Lesiak-Bielawska, Elzbieta. "English for Instrumentalists: Designing and Evaluating an ESP Course". *English for Specific Purposes World* 15 (43) (20014): 1-32. Accessed October 20, 2015, http://www.esp-world.info/Articles_43/Lesiak-Bielawska.pdf

Li, Qing, and Xinghua Huo. "Research On Narrow Context ESP Course Design In Adult Education". Proceedings of The International Conference on Education, Language, Art And Intercultural Communication. 2014. doi:10.2991/icelaic-14.2014.33.

Mizel, Mohamed, "English for Specific Purposes (ESP) and Syllabus Design" *Journal of College of Languages,* (2009). *20*, 97-131.

Sysoyev, Pavel. "Developing an English for Specific Purposes Course Using a Learner Centered Approach: A Russian Experience" *The Internet TESL Journal*, (200), VI (3). Accessed October 20, 2015 http://iteslj.org/Techniques/Sysoyev-ESP.html