

DEMOCRATIC AND POPULAR REPUBLIC OF ALGERIA
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ENGLISH DEPARTMENT



*An Investigation into the Practical Knowledge of ESP Teachers at
Saad Dahlab University:
Perspectives and Challenges*

*Thesis Submitted to the Department of English in Candidacy for the Degree of Doctorate in
Didactics of Foreign Languages*

Submitted by:

Ms. LEHLALI Hanane

Supervised by:

Professor BRAKNI Dalila

Jury Members:

Dr. BOUCHAMA Redha	Chair	University of Blida 2
Prof. BRAKNI Dalila	Supervisor	University of Blida 2
Dr. ATAMENA N.Elhouda	Internal Examiner	University of Blida 2
Dr. ZAHALI Fatma	Internal Examiner	University of Blida 2
Prof. AFKHIR Mohammed	External Examiner	University of Laghouat
Dr. SILHADI Lynda	External Examiner	University of Algiers 2

Academic Year

2023

Declaration

I hereby confirm that this thesis is presented for the degree of Doctorate in Didactics of Foreign Languages. It has been solely the results of my investigation.

Date: December 2023

Name of the candidate:,Ms. LEHLALI Hanane

Dedication

To my beloved mother and father;

My beloved husband;

For their love, endless support and sacrifices

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Abstract

The present research investigates ESP knowledge, pedagogical practices and challenges from the perspectives of ESP teachers at the University of Saad Dahlab of Blida 1, Algeria. The purpose of this inquiry is to explore teachers' knowledge and beliefs about ESP teaching so as to understand their choices of pedagogical practices. The study also highlights the challenges impeding the implementation of this knowledge in classroom practice. For its framework for analysis, the study draws on a qualitative approach and exploratory research design to gain understanding about the issue through engaging in real classroom environments of the ESP teachers and their experience with it. Data were collected through a semi-structured interview with 13 ESP teachers, a classroom observation and stimulated recall interviews with four participants from the above sample. The emergent themes were helpful in providing answers to the research questions. The findings show that ESP teachers hold several core areas of knowledge developed through professional education and teaching experience. Despite their rich understanding about ESP pedagogy, teachers' instructional practices seem to contradict their stated perspectives. Their teaching practices seem to be influenced by some context-based factors especially lack of institutional consideration of their role, students' low competency in English and passive attitudes towards learning. This situation might have hindered the implementation of ESP teachers' knowledge in practice. Insights gained from the study of ESP teachers' knowledge, practices and challenges can be used as a basis for drawing upon some useful suggestions for supporting ESP teachers to grow professionally and improving pedagogical practices to satisfy their learners' professional language demands. These suggestions may help teachers clarify their thinking and form a foundation that enable them to communicate with other teachers and researchers to share their knowledge, skills and experiences in ESP teaching and trigger further interest in this domain.

Key words: ESP teacher knowledge, Practical knowledge, Perspectives, Challenges

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List of Abbreviations

EAP English for Academic Purposes

EFL English as a Foreign Language

ELT English Language Teaching

EMP English for Medical Purposes

EOP English for Occupational Purposes

ESL English as Second Language

ESP English for Specific Purposes

GE General English

PCK Pedagogical Content Knowledge

TPCK Technological Pedagogical Content Knowledge

GENERAL INTRODUCTION

GENERAL INTRODUCTION

The growing tendency towards learning English as an international mean of academic and career advancement has created the need for introducing English for Specific Purposes ESP courses in higher education. In Algeria, ESP courses are integrated in higher education to provide students with academic and communicative language skills they need for their future professions. Teachers of ESP are expected to possess sound knowledge base which encompasses a complex network of understandings crucial for the effectiveness and quality of teaching in the ESP context. The performance of this task poses challenges for many teachers of ESP who might be proficient in English language but struggle with scientific and technical subjects. In fact, the field of teacher knowledge base and teachers' beliefs and practices has evolved significantly in educational research over the last three decades. The shift in teacher education research towards a deeper understanding of the dynamic nature of teaching has highlighted the importance of teacher knowledge domains and emphasizes the significance of valuing teachers' perspectives in researching this issue. This general introduction begins with the background of the issue of teacher knowledge and discusses its significance. It also identified the gap in current literature, the research problem and the purpose of this research and finally presents the layout of this thesis.

1.1 Background of the study

The field teacher knowledge and practices has become more common in English language teaching (ELT) research (Freeman, 2002). It is also highlighted that the study of language teacher knowledge and beliefs has witnessed a growing global interest on the research agenda (Borg, 2006) due to its significance in understanding the “unobservable cognitive dimension of teaching-what teachers know, believe and think” (Borg, 2003 p.81). One central theme to this interest has revolved around the attempt to understand how

teachers' stated beliefs determine and shape their pedagogical practices (Calderhead, 1996; Richardson, 1996; Freeman, 2002; Borg, 2003, 2006).

Unlike the traditional behaviourist view, this field of research is based on the assumption that teacher knowledge comes from their real life experiences inside and outside the classroom (Johnson, 1999). In ESP context, Dudley-Evans (1997) explains that in the ESP classroom "the nature of the communication is made very distinctive by the difference in the subject knowledge between the students and the language teachers". ESP teachers' lack of this area knowledge can explain the subject knowledge dilemma that they often experience in their classrooms. Hutchinson and Waters (1987 p. 158) describe ESP teachers as "reluctant dwellers in an uncharted land" to draw attention to the challenging and intimidating situation that many teachers of ESP experience in the quest providing efficient courses in scientific and technical fields. While this situation has received much attention in the literature, investigating teachers' knowledge and actions in ESP teaching are relatively under examined.

Teacher knowledge research has shifted our understanding away from viewing teachers as passive consumers of the principles and theories goods generated by experts, towards a view of teaching as a thinking activity where teachers can synthesise knowledge and construct their own personal and workable theories of teaching (Richards, 1998; Borg, 2003). This assumption resulted in a new line of research that gave weight to teachers' beliefs and justifications for their practical choices (Elbaz, 1983; Clark and Peterson, 1985; Clandinin & Connelly, 1987; Calderhead, 1987; Kagan 1992; Pajares, 1992).

Consequently, a shift in focus in research on teaching, from studying and quantifying effective teacher behaviour and particular teaching processes that had no guarantee on good teaching, towards exploring and understanding teacher knowledge and thought processes and their effects on classroom decisions and practices started. Accordingly, these studies that

attempted to explore and explain teacher thoughts and behaviour “give prominence to the complex interplay of teachers’ content pedagogical knowledge and the ways that these are used in diverse classroom contexts” (Cochran-Smith & Lytle, 1999).

An extensive review of the literature shows that classroom practices of teachers are often shaped and justified by teachers’ perceptions and knowledge, working environment and educational policies (Calderhead, 1987; Clandinine, 1986; Clark & Peterson, 1986; Elbaz, 1983; Shulman, 1987). The interaction of these context-based factors has also been known to cause dilemmas among teachers. Observations documented by a number of studies in the area of English language teaching (Johnson, 1992; Smith, 1996; Kennedy & Kennedy, 1996; Li, 2003) have shown that there are inextricable links between language teachers’ pedagogical knowledge and beliefs and their teaching practices. Nevertheless, research on the actions taken by ESP teachers in the process of teaching and learning has been scarce (Watson, 2003). This fact reveals that research on teachers’ knowledge base in the area of ESP has not been given proper attention despite its significance. It is important, therefore, for educational authorities to take into account teachers factors that could influence classroom pedagogical decisions and practices in the area of ESP teaching.

Few recent studies among ESP teachers (such as Abedeen, 2015) have typically focused on small sample to investigate how teacher knowledge and beliefs inform teaching practices. These studies have been useful in providing detailed analyses on teachers’ understanding of ESP practices however; the obtained findings on teacher knowledge are context-bound which cannot provide a comprehensive picture on ESP teacher practices in other contexts. Since ESP teachers in the Algerian context are involved in an unfamiliar field, exploring the knowledge that they possess and their practices in dealing with this challenging task constitutes a significant topic of research. Thus, the present study investigates ESP teachers’ knowledge and beliefs in the Algerian context. Such study will provide insights into

the interaction of contextual factors that could have an impact on ESP teachers' classroom practices.

1.2 Context of the research

The context of this research deals with the teaching of English for specific purposes at the tertiary level in Algeria. In Saad Dahlab University, the integration of ESP in almost all scientific fields represents the worldwide dominance of English in the educational context. An instance that clearly demonstrates such interest in the study of English is incarnated in the discipline of English for specific purposes (ESP). ESP plays a central role since it is considered as a vehicle of communication between different parts of the world in different fields under the label of "lingua franca". As a result, English has become the world's prime international language assuring access to up to date documents and discoveries, scientific exchanges, technological development and business negotiations. Additionally, English is viewed as a key for further studies and future professional careers.

In this respect, many tertiary level departments have responded to this increasing demand for specific and occupational courses, and our country is no exception. In Saad Dahlab University, ESP is integrated in almost all scientific fields. The dominance of English in the educational context worldwide has recently been reinforced in Algeria as the Ministry of Higher Education and Scientific Research announced the need for promoting the generalized use of English language at Algerian universities in 2019. This attempt has not been accompanied by any kind of ESP teacher preparation. ESP holds some features that are somehow distinct from English for General Purposes (EGP). The nature of such variation lies not only in the teaching context in which the ESP is held, but also on students' professional needs. Since ESP teachers focus on their students' linguistic and professional needs, their knowledge base must include much more than just the understanding of language as a system,

and the awareness of teaching and learning methods. This latter is important in the implementation of knowledge in practice, however it might not be sufficient to make effective pedagogical decisions in ESP classrooms. In this sense, the knowledge base of the ESP teacher should involve other elements that relate to the nature of specialized ESP courses and the language needs of the target situations (Shulman, 1987).

Current research in language teacher education focuses on the importance of the development of teachers' practical knowledge. To fully understand these it is necessary to draw on a definition of practical knowledge. Calderhead (1988) conceptualizes practical knowledge as "the knowledge that is directly related to action... that is readily accessible and applicable to coping with real life situations, and is largely derived from teacher's own classroom experience" (p.54). Teacher knowledge is conceived of as experiential, practical, personal, situational and contextual. It is experiential because it is gained through the accumulation of experience of the teacher as a person, student and teacher learner. It is also practical because it influences and is influenced by the practice of teaching. It is situational because it is employed to respond to different situations. It is contextual because it is shaped by a particular context. This conceptualization echoes the definition provided by (Munby et al, 2001, Meijer, Verloop, & Beijaard, 1999, Cohran-Smith & Lytle, 1999, Xu & Liu, 2009; Hibert, Gallimor & Stigler, 2002). Practical knowledge was promoted in early work of Elbaz (1981) and since then, it has become an interesting topic of research in teacher education.

The term "knowledge" in the construct "practical knowledge" is used as an umbrella term to include broad insights of teacher cognition, a view endorsed by a group of researchers interested in teacher knowledge. It is recognized that "much of what teachers know originates in practice and is used to make sense of and deal with practical problems" (Borg, 2006, p.13). According to him, the term "practical" implies teachers' classroom skills, teacher's cognitions, what they think, know, and believe. These elements are considered to be essential

in forming the core of teachers' practical knowledge. Teacher's knowledge and beliefs need to be investigated in relation to actual classroom practices (Borg, 2003, Xu & Liu, 2009, Richards, 1994, Jhonson & Goettsch, 2000, Mullock, 2006). In this respect, the study seeks to uncover the knowledge possessed by ESP teachers at Saad Dahlab University of Blida 1 through observing their teaching practices and voicing their views and justifications to their actions in the classroom. Research suggests that beliefs and classroom practices are fundamentally interrelated therefore; investigating the thought processes will uncover the knowledge underlying them. This highlights the need of the current study on teacher knowledge which is one aspect of teacher cognition.

1.3 The Gap in Current Research

Investigating the knowledge base of language teachers and the relationship between this knowledge and actual classroom practices in the institutions of higher education is not a new subject. In fact, in the last two decades alone a considerable number of studies have been conducted to investigate teacher's knowledge in the field of education in general and second language education in particular (Borg, 2003, Elbaz, 1981, Freeman & Johnson, 1998, Golomberg, 1998; Johnson & Goettsh, 2000; Merijer et al. 1999; Meijer, Verloop & Beijaad, 2001; Shulman, 1987).

Despite the usefulness of these studies in helping researchers better understand teachers' practical knowledge, research in the field of second language education is still needed. Meijer et al (1999) described teachers' practical knowledge as "the knowledge base of teachers" (p.60) and stressed the growing concern on how to explore that knowledge in the teaching profession. Under the same line of interest Tom and Valli (2001) stated that although "teachers and some teacher educators stress the importance of teachers' practical knowledge ... it is not clear how that knowledge can be integrated and codified in the knowledge base".

In response to this concern, there has been a periodic interest in the practical knowledge of language teachers such as the works of (Hulshof & Verloop, 2002; Meijer, Verloop, & Beijaard, 1999; Tsang, 2004). Though the focus of these works has typically been on describing what is that teachers know, they ignored how this knowledge is constructed and where it stems from. Relatively, Shulman, (1987) stated that future research should deal with practical knowledge of teachers so that more literature is established.

Corresponding to the shift in thinking about teacher education, research on teacher knowledge moved from the focus on what teachers do to what they know and how do they know what they know referring to the sources of their knowledge and its impact on teaching practices (Corhan- Smith and Lytle, 1999, Borg, 2003, Xu & Liu, 2009, Mollock, 2006, Abdelhafez, 2010). These studies are more descriptive in their attempt to investigate the thought processes of teachers to highlight the knowledge underlying them. In the context of ESP, Abeeden (2015) conducted a study in vocational colleges in Kuwait to explore ESP teachers' knowledge and teaching practices through listening to teachers' stories and justifications for their actions inside ESP classrooms. She highlighted the significance of conducting such kind of studies in the ESP context so that more constructed solutions are suggested to help empower this category of instructors with more adequate, specialized knowledge base which they lack. However, the researcher stressed that ESP teacher knowledge and practices is context bound and suggested that it should be conducted in the context where ESP teaching takes place. In other words, the interconnected relation between teachers' practical knowledge and context highlighted the need for investigating ESP teacher knowledge and practice within the context where language teachers are Algerians.

In the Algerian context, research in the field of ESP has tended mostly to investigate the challenges encountered by teachers in delivering their courses. Under the prospect of issues faced by this category of teachers, Ziani (2016) provides an insight on the difficulties

confronted by ESP instructors. Studies on ESP mostly addressed the areas of course design as well as learners needs (Yaling and Siouzi, 2010; Javid, 2011; Boniadi et al, 2013; Al Qurashi, 2016). However, little attention has been drawn to the professional and practical needs of ESP teachers.

Investigating teachers' knowledge and the way they act in teaching English is a recent endeavour in teaching English for general purposes. However, in teaching ESP this kind of study is scarce. Moreover, exploring the knowledge and teaching practices of ESP practitioners in the classroom and investigating the practical wants of the ESP teacher in the context of this study is lacking from the existing literature on ESP teaching and teacher development. This kind of research is needed so that more insights are provided to understand the complex nature of teachers work and classroom practices (Elbaz, 1983, Cochran-Smith & Lytle, 1999, Borg, 2003, Xu & Liu, 2009). It has empirically been proved that teachers' beliefs and attitudes about pedagogy inform to some extent their actions and decisions in the classroom (Borg, 1998). Yet, research on the practical knowledge of ESP teachers in the process of teaching and learning in relation to classroom practices has been scarce (Watson, 2003).

Current developments and trends in ESP research has neglected the area of teacher knowledge, focusing, instead, on ESP learners' motivation, needs and wants. In this sense, a good body of literature has been devoted to course design, syllabuses, and teaching materials using ICT (Sarri, 2017). Although it has been stated by Borg, (2006) that research on knowledge and practices is needed in context similar to the current study so that more insights are gained about the complex nature of teachers' work, little attention has been paid to this kind of research in Algeria. Gohin (2001) stated that teachers' experiential knowledge is not acknowledged. They are seen as agents fulfilling others' intentions and conduits of externally recommended knowledge. Though the impact of teachers' experiences on their classroom

decisions has been recognized by the above mentioned researchers abroad, this gap needs to be addressed in the Algerian context.

1.4 Research Problem

The Ministry of Higher Education in Algeria issued direct instructions to promote the use of English at the level of all scientific and technical faculties. Therefore, universities need ESP teachers to go in accordance with its policy of improving the quality of teaching to equip university students with required language skills. However, in reality most of the teachers delivering English training to students in the scientific and technical domains are not truly ESP teachers as they were not introduced to any type of professional training to assume such responsibility. There are factors that are within the university's control that directly influence teachers' performance such as the sizes of ESP classes and students' low proficiency in English. These circumstances pose real challenges to the implementation of ESP teachers' knowledge in practice. The question raised is how do those teachers who lack essential training as ESP teachers perceive their duty in the light of the various challenges that they are facing

The issue identified as a basis for this study is the concerns of how teachers' knowledge about ESP is formed and how teachers' beliefs and thoughts shape their understandings and justify their classroom practices. In particular, it concerns the practical knowledge employed by ESP teachers to perform their job inside the classrooms. This becomes especially important with lack of institutional consideration concerning teachers' readiness for the task of ESP teaching.

As literature available posits that teachers' practical knowledge is complex, interconnected and context bound, there is a need to investigate this issue in the Algerian context. Hence, the present study is an attempt to investigate ESP practical knowledge and

challenges by incorporating ESP teachers' perspectives valuing their explanations and justifications for classroom practices. It is worthwhile to state that the present study is meant to suggest solutions to the stated problem with the view to propose teacher development programmes that meets the adequate needs and wants of such category of practitioners.

1.5 Research Questions

The study aimed to answer the following questions:

- 1- What constitutes the practical knowledge of ESP teachers at Saad Dahlab University of Blida1?
- 1.1- What sources shape their understanding?
- 2- How does the context influence the implementation of teachers' knowledge in practice?
- 3- What challenges do ESP teachers encounter in implementing knowledge in practice?

1.6 Research Aims

The aim of the study is to investigate what constitutes the practical knowledge of ESP teachers at Saad Dahleb University of Blida1. It probes into the sources of this knowledge and its role in shaping classroom practices based on their own perspectives. The study also aims to explore the role of ESP context and related challenges encountered by ESP teachers in implementing their knowledge in classroom practices.

1.7 Significance of the Research

There is no doubt that educational research has always focused on teachers as the most important element in the teaching and learning process (Doyle, 1997; Guskey, 2002, Abell, 2007). Teachers have been identified as the main contributors to students' learning and they are critical for socio-emotional development (Guerreiro, 2012). To gain profound understanding of the complex nature of teachers' work, teacher knowledge has gained

popularity as a well-established area of research (Freeman, 2002). The literature provides ample evidence to support the claim that exploring teachers' knowledge and thought processes allows teachers to make sense of the knowledge held and how it relate to classroom practice (Cochran-Smith & Lytle, 1999). This awareness is at the essence of continuing professional development of the teacher. In Shulmans' terms (1987), "proper understanding of the knowledge base of teaching, the sources of that knowledge, and the complexities of the pedagogical process will make the emergence of such teachers more likely" (p.20) . For this purpose, investigating the knowledge base of teachers is important to produce capable teachers.

Teaching is a complex task only mastered by a skilled and knowledgeable workforce. In the ESP context, teachers are required to perform multiple tasks simultaneously. In this perspective, researching their knowledge can be significant in providing insights into the role of the teacher. In fact, it has been argued that "the single factor which seems to have the greatest power to carry forward our understanding of the teacher's role is the idea of teachers' knowledge" (p.10).

Most importantly, Investigating ESP teacher knowledge in the Algerian higher education explicitly examine possible implications of teachers' knowledge and practice for successful implementation of ESP teaching in Algerian universities. It is crucial to investigate ESP teachers' practical knowledge and challenges more extensively, to provide deep understanding of the ESP teaching situation. The findings of such examination will be useful for the setting of agenda with regard to ESP pre-service and in-service training and include subject specific knowledge as a necessary element that ESP teachers lack.

1.8 Layout of the Thesis

The present research is organized into four interconnected chapters. The first chapter is primarily concerned with a review of literature on various aspects of teacher knowledge and the ESP discipline. This chapter starts with reviewing research related to the basic concepts and tenets of ESP as a teaching/learning process, mainly in terms of theoretical perspectives. As such, it investigates ESP area, and then compares it to those of General English for the sake of finding out differences and similarities between the two types of teaching English as a foreign language. It also discusses ESP course design and its related elements. This chapter also examines some crucial issues about the Algerian-British agreement that resulted in the announcement of the so called Algerian ESP project in the ESP Maghreb Conference (1993). Chapter one precedes by reviewing research on the studies and researches which have investigated ESP area in relation to teachers' knowledge and practices. Therefore, it looks into the development of research on teacher knowledge, thinking and actions. It reveals how the shift in researchers' and teacher-researchers' views of how research should serve teaching and learning helps in generating new studies that focused on teachers' practical knowledge and decisions, and justifies the importance of such a research in language teaching in general and ESP in particular.

Next, the second chapter is devoted to the description of the study context and discussion of the research methodology, the procedures of the data collection and analysis and interpretation. It also discusses the ontological assumption and epistemological stance underpinning the theoretical framework of this research. It also describes the study design, the data collection instruments, the participants, and demonstrates the data collection and analysis procedures.

Chapter three presents a detailed description of the qualitative data elicited from the semi-structured interviews, stimulated recall interviews, classroom observations results. It includes interpretation of grouped and categorized data in an attempt to find answers to the research questions.

Chapter four analyses and discusses major findings in light of the relevant literature discussed in chapter one and the study context introduced in chapter two. With reference to the insights obtained in the present study, this chapter concludes the study with some suggestions and recommendations for teacher practice and future research. Finally, the main conclusions of the present thesis are summarised in the general conclusion.

CHAPTER ONE:
REVIEW OF RELATED LITERATURE

Section One: ESP Teaching

1.1 Introduction

In the Algerian educational system, English language is taught from primary to secondary school. At the tertiary level English has become a requirement within the majority of disciplines (Ziani, 2016). The Algerian educational system encourages ELT development at all levels. With regards to the faculties and institutes of Saad Dahlab University, ESP is integrated within the curriculum, but the training courses concerning the teaching of this discipline have not yet been introduced. Therefore, the main concern lies in providing ESP teachers with adequate professional and practical knowledge to cope with learners' needs and the challenging requirements of ESP teaching.

This chapter comprises two sections. The first part explores the area of ESP, dealing with its definition of ESP, its historical development, course description, and the various roles of the ESP practitioner. The second section of this chapter is devoted to the perceptions of ESP teaching. It focuses mainly on professional knowledge possessed by teachers as well as their practical choices.

1.2 Definitions and Characteristics of ESP

English for specific purposes referred to the teaching and learning of English as a foreign language in which learners' goals behind learning English is to achieve a desired level of language mastery in a particular domain (Paltridge and Starfield, 2013). English for Specific Purposes courses, therefore, do not only emphasize on specialized vocabulary and skills, but also on appropriate methodologies which associate learners' ultimate objectives with their kernel needs (Paltridge and Starfield, 2013). Such definition lies on a recent body of research. A more elaborate consideration described ESP as the teaching of a specific type of mainly scientific or technical English for students with particular aims, needs, professions, or

areas of study. ESP courses are, generally, designed for adult learners who are required to use a foreign language in their target environmental fields, such as science, technology, and aeronautics.

In his definition, Strevens (1988) categorized ESP under two variables and four absolute characteristics:

➤ **Absolute characteristics**

- Designed to meet specific needs of the learner;
- Related in content(i.e. in its themes and topics) to particular disciplines, occupations and activities;
- Centred on the language appropriate to those activities in syntax, lexis, discourse, semantics, etc., and analysis of this discourse;
- In contrast with General English

➤ **Variable characteristics**

ESP may be, but is not necessarily:

- Restricted as the language skills to be learned;
- Not taught according to any pre-ordained methodology.

A more recent definition has been clarified by Dudley-Evans who modified Strevens's definition and elaborated his own. The reversed features are as follow:

➤ **Absolute Characteristics:**

- ESP is defined to meet specific needs of learners.
- ESP makes use of underlying methodology and activities of the discipline it serves.
- ESP is concerned with the language appropriate to these activities in terms of grammar, lexis, register, study skills, discourse and genre.

➤ **Variable Characteristics:**

- ESP maybe related to or designed for specific disciplines.
- ESP may use, in specific teaching situations, a different methodology from that of general English.
- ESP is likely to be designed for adult learners; at a tertiary level or in a professional work situation.
- ESP is designed for intermediate and advanced learners.

It can be clearly noticed from the above that Dudley-Evans extended the list of variable characteristics and disagreed with Strevens (1988) concerning the absolute characteristic that “ESP is in contrast with General English”. According to them, ESP is not always connected to a specific context nor related to adult learners exclusively. That is to say, ESP could be taught to young adults in a more advanced educational context such as secondary school. In order to better fathom the nucleus layer of ESP, a special consideration to the historical development of such discipline should with no doubt be presented.

1.3 Historical Account of ESP

Like other achievements in human sciences, ESP was not a plotted movement, but rather a discipline that emerged from various contributing events. Hutchinson and Waters (1987) showed a long-term interest in identifying ESP and the causes that contributed to its emergence. They suggested that the aftermath of the Second World War which triggered unforeseen demands of a brave new world, a revolutionized linguistics that introduced various forms of English existing in different environments, and finally an orientation towards learners’ needs (Hutchinson and Waters, 1987) marked the origin of English for specific purposes. Hutchison and Waters, in this light, argue that “ESP is not a monolithic universal phenomenon... it has developed at speed in different countries” (p.09). This discipline,

thereupon, has witnessed different stages within distinct contexts. The first phase mainly took place in the late 1960s and early 1970s (Hutchinson and Waters, 1987; Paltridge and Starfield, 2013). This period was distinguished by the global expansion in scientific, technical and economic activity. Those enormous changes required an international language and boosted the English language to play that role. That is to say, the language needed by those scientists and technologists was more specialized to meet the requirement of different disciplines. Thus, the importance of learning English for business, science as well as technology has been growing ever since. The development of this stage was highlighted in Ewer and Latorre's (1969) work where the idea of a syllabus design was used to prepare more tailored ESP courses based on learners needs. In their work, a register analysis was employed to stress on language forms that students may encounter in their scientific studies (Hutchinson and Waters, 1987, p.10). Under the same line of interest, Tarone et al (1981) focalized their attention on the syntactic voice which, according to them, represented the core feature of scientific texts (Paltridge and Starfield, 2013). Thus, the initial developmental phase of ESP precisely witnessed the shift of the profession of language teaching from focusing on general English to a more specific English addressing register analysis across different genres and discourses of English in a scientific context.

As far as the second historical period is concerned, ESP went beyond the syntactic level and steered its focus on a rhetorical- based realm (Hutchison and Waters, 1987). At this phase, ESP witnessed a close relationship with rhetoric due to the emergence of the field of discourse analysis. As stated in Hutchison and Waters' work on "ESP: a Learning Centred Approach", Alen and Widdowson (1974) initially argued that:

We take the view that the difficulties which the students encountered arise not so much from a detective knowledge of the system of English, but from an unfamiliarity with English use, and that consequently their

needs cannot be met by a course which simply provides further practice in the composition of sentences, but only by one which develops a knowledge of how sentences are used in the performance of different communicative acts (p.10).

This quote concisely explains the essence of the second phase. That is to say, unlike traditional linguists who tend to describe the features of language, revolutionary studies and linguists focus on diverse forms of English that are summoned in different communicative situations. A concrete instance that clearly demonstrates such concept is viewed in the rhetorical structure of a medical text that remotely differs from a literary one. Hutchinson and Waters (1987), in this regard, reinforce this idea by claiming that ‘the rhetorical patterns of text organization differed significantly between specialist area of use’ (p.10). To phrase it differently, the quote shows that since language differs from one discipline to another, there a need to adjust language instructions to meet the demands of particular learners in their specific target situations (Hutchinson and Waters, 1987). For example, Paltridge and Starfield (2013) provided two illustrations in order to prove that needs analysis gained a special position among researchers. In Italy, for instance, Terantino (1988) applied a face-to-face questionnaire and interview in order to evaluate the macro-micro level needs of fifty-three (53) EST researchers and students. The second example briefly referred to the study of Jacobson (1986) who focused on the strategic competence of students in physics rather than the grammatical needs. Despite the acute introduction of the above studies, the process of how needs assessment is designed was not mentioned by the researcher. It can be concluded that this stage of ESP development shed light on English for Science and Technology (EST).

The final developmental stage of ESP is also known as “the modern age in ESP”. This period is mainly framed between 1990 and 2011 (Paltridge and Starfield, 2013). The establishment of new international journals prominently characterized this phase. For

instance, the establishment of “*Journal of Second Language Writings*” that was brought by Tony Silva and Lina Leki (1991) received a tremendous attention among academicians (Paltridge and Starfield, 2013). Many articles concerning L2 were published in this journal such as that of Ken Hyland (2007) entitled “Genre Pedagogy: Language, Literacy, and L2 Writing Instruction”. Along with the uprising of other journals, such as, the “*Journal of English for Academic Purposes*” established by Ken Hyland and Liz Hamp – Lyons in 2001, many other concepts witnessed a universal birth like the notion of “intercultural rhetoric” as well as the “genre analysis” conceptualized by Swales in 1990 (Paltridge and Starfield, 2013). This period was marked by a significant shift in educational psychology, where more attention was given to the learners and their attitudes to learning (Gatehouse, 2001, p.2). Studies claimed that learners come from various backgrounds, driven by various motives, and use various skills and strategies to acquire language. Thus, this shift in psychology brought the urgent need for designing not only specific courses based on learners’ interests, but also includes the use of different pedagogies that suit the different learning strategies, skills and motives to improve their knowledge of the language. Awareness about learners’ learning strategies and interests has become a crucial part of ESP teachers’ pedagogical content knowledge (PCK). This type of knowledge equips teachers with appropriate instructions to facilitate learning and help learners attain their target goals. Along with the continuous growth of English as a lingua franca required in various disciplines, these developments exerted pressure on the profession of language teaching to design educational programmes that are more specific than general in nature namely ESP. relatively it experienced many novice topics that contributed to the formation of the 21st century’s ESP.

1.4 The ESP and EGP

While some researchers agree that the distinction between English for Specific Purposes (ESP) and English for General Purposes (EGP) is not clear (Kelling, 1994, Gatehouse, 2001) and both are representations of ELT (Hutchinson & Waters, 1987), others, attempted to draw clear line between the two varieties of English . In this regard, Widdowson's (1983) definition of ESP and EGP reveals a distinction between the two concepts in terms of the purpose of learning English. He believes that EGP is “essentially an educational operation which seeks to provide learners with a general capacity to enable them to cope with undefined eventualities in the future” (p. 6), while ESP is “generally a training operation which seeks to provide learners with a restricted competence to enable them to cope with certain clearly defined tasks” (p. 3).

In other words, the aim of EGP is to equip students who have no specific needs with general knowledge about language use, while ESP is meant to prepare students for more specific use of language needed in particular situations. These differences do not appeal for a strict distinction between ESP and EGP rather than reveal the very features of each of them.

Robinson (1980, p. 6) states that: “The student of ESP is learning English en route to the acquisition of some quite different body of knowledge or set of skills." The rationale is that, ESP courses are designed for specialized use of language. It focuses on specific communicative needs related to learners' specific subject and/or professional discipline, rather than generalized abilities to use second (or third) language in indefinite occurring situations. This definition conforms to Hutchinson and Waters (1987) concept about ESP being, "an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning" (p.19).

In the Algerian context, General English courses are offered at different levels, i.e. in middle and secondary school where students are introduced to different language abilities such as: grammar, phonology, and lexis. At this phase, English teachers are concerned with transmitting general competences about language use rather than learner's needs. Learners are not aware of their need in learning the language their sole purpose though, is to sit for exams or tests.

On the other hand, ESP course in the Algerian context is introduced mainly for advanced learners of English (adults), especially in higher education institutions as it is the case of the scientific faculties at Saad Dahlab University (the context of the present study). These learners have already been acquainted with EGP and are, now, expected to be prepared for effective communication in their specific fields. Unlike EGP learners, ESP learners are adults who are aware of their needs in learning the language. This view is supported by Hutchinson & Waters (1987) who say: "What distinguishes ESP from General English is not the existence of need as such but rather an awareness of the need" (p.5).

Basturkmen (2006) adds that ESP differs from General English in that the former is mainly practical, it is goal directed and has particular objectives to attain, she says "Whereas General English teaching tends to set out from point towards an often... indeterminate destination... ESP aims to speed learners through to a known destination." (p.9). In other words, what distinguishes the two approaches is that ESP differs from EGP not only in terms of learner and the course, but also in terms of the objectives of teaching, and the specialized subject matter as well.

Accordingly, it could be argued that the most important difference lies in the approaches underlying both concepts. General English is recognized as a language-centred approach which covers general language perspectives encompassing all language skills, target

culture and literature, while ESP is seen as a learner-centred approach in which the learner, his needs and objectives are fundamentally important. In fact, most researchers agree on the concept that ESP courses are goal-oriented and research-based, informed by the results of needs analysis that determines as closely as possible exactly which language skills are most needed by students and what is that teachers have to include in the syllabus (Robinson, 1991; Dudley Evans and St. John, 1998, Flowerdew & Peacock, 2001; Hyland, 2007; Harwood & Petrić, 2011). ESP is taught to a homogenous group of largely adult learners who are expected to belong to a particular subject area at university or to a professional discipline. Therefore, ESP and EGP teachers are required to employ different methods. This reality shows that ESP practitioners have to face different tasks from those of EGP teachers. While the latter can use the same syllabus and teaching materials over and over again with minimum or no adjustment to the teaching methods and techniques, the former is required to conduct needs analysis of each and every group of learners and then design courses and select teaching materials that cater for those needs and purposes (Swales, 1985; Davies, 2006). This reality shows the dynamic nature of ESP and thus, the multiplicity of roles that the ESP practitioner is expected to perform and the EGP teacher is not. These responsibilities include the process of evaluating, interpreting, understanding, designing, implementing, and re-evaluating the programme – course, material, methods and techniques, and assessment (see figure 1.3).

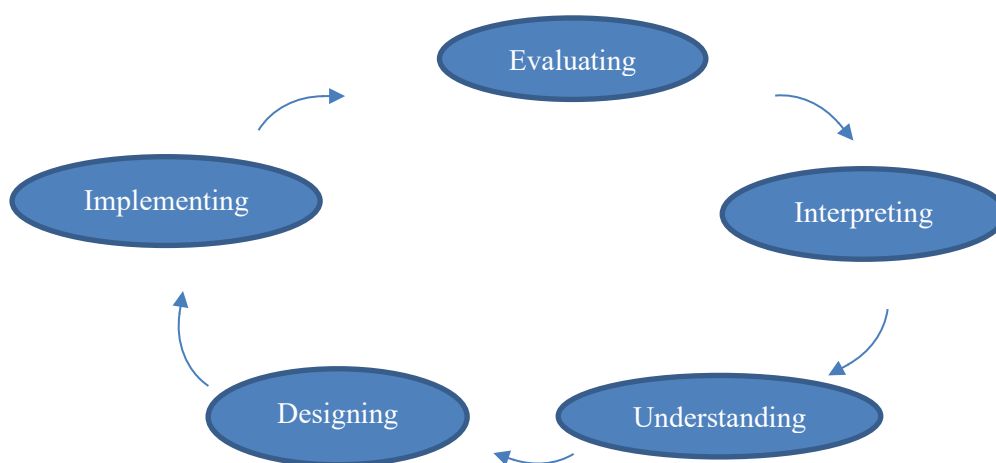


Figure.1.1: The Multiplicity of ESP Responsibilities

It seems that the ESP practitioner's roles and responsibilities differ considerably from that of General English teacher. These responsibilities include; expertise in conducting needs analysis, designing a course, developing authentic materials, coping with the specialized content areas as well as technical terminology relevant to learners' particular community (Belcher 2006, p. 139).

It could be understood that the above arguments reveal that although all language courses are geared towards specific purposes, however, ESP is taught "not as an end itself (as the case in EGP) but as an essential means to clearly definable goal" (Mackay et al, 1978: 28). This goal varies from one discipline to another distinguishes and defines these two fields. This view is supported by Strevens (1980) who deem that ESP is distinct from general English in that it relies on careful analysis of the learners' communicative necessity for a specific situation as well as close analysis of the language used in that situation. Therefore, ESP practitioners are required to widen their scope of knowledge about the language use and discourse of other occupations either in academic or professional fields. This aspect is of paramount importance as it serves the ultimate objective of learning English (Widdowson, 1983; Hutchinson and Waters, 1987; Dudley-Evans and St. Johns, 1998).

In essence, it could be noticed that EGP and ESP should be considered as a continuum rather than a dichotomy in that EGP forms the basis of ESP. In other terms, EGP is the springboard for a more specialized English language course which is ESP. Thus, it is highly required that learners pursuing an ESP course should reveal an acceptable level in general English.

To sum up, ESP and EGP overlap in many ways but differ in the following points:

- Identification of learners' purposes of learning English;
- ESP learners are adults who are supposed to develop an already acquired knowledge of English in a more specialized way to be able to communicate a set of professional skills and to respond successfully to particular job-related situations;
- ESP program is based on needs analysis that determines which language skills are most needed by the learners;
- ESP focuses on language in context; i.e. language is taught with relation to a subject matter which is determined by students' field of interest;
- Content area knowledge; ESP focuses on a subject that is already known by the learners and concerns them;
- As it is based on learners' needs analysis, ESP reflects the learners' real world;
- Authenticity of materials is a must rather than a choice in the ESP context;
- ESP is a research-based approach to teaching English as it can never stick to a predetermined program; research, creativity and innovation make the cornerstone of a successful ESP course.

Eventually, it is clear that what makes the difference between EGP and ESP is not the language itself but the specific purpose of learning the language. In other words, what is focused on in ESP courses is not part of domains of knowledge familiar to all educated native speakers as in the case of EGP. For instance, teaching English for Medical Purpose (EMP) to a group of doctors might involve medical terminology, course content and patterns of doctor-patient interaction that are not familiar to those outside the medical realm. Further clarification of ESP can be achieved through the discussion of its types.

1.5 Types of ESP

ESP is tailored to serve the learners' vocational, professional or academic requirements. Many studies have been conducted to classify ESP varieties. Among them Hutchinson and Waters (1987) who divided ESP into two branches: English for Occupational Purposes (EOP) and English for Academic Purposes (EAP). They further stressed that the two categories can be used interchangeably as (EAP) encompasses learners' needs in their study environment, and (EOP) encompasses their needs later in their respected professions. Hutchinson and Waters provided a detailed classification of ESP illustrated in the ELT tree which has been recently modified by Williams (2014: 2.3) to include additional subfields listed as follow:

- English for Science and Technology (EST)
- Vocational English as a Second Language (VESL)
- English for Vocational Purposes (EVP)
- English for Specific and Academic Purposes (ESAP)
- English for Professional and Academic Purposes(EPAP)
- English as a Lingua Franca in Academic Settings (ELFAS)
- English for Occupational Purposes (EOP)

- English for Business Communication(EBC)
- English for Sociocultural Purposes (ESCP)
- English for General Business Purposes (EGBP)
- English for Medical Purposes (EMP)
- English for Legal Purposes (ELP)
- English for Legal Academic Purposes (ELAP)
- English for Research Publication Purposes (ERPP)

And in today's digital era, recent additions included

- Electronic Business English (e-BE)
- Electronic Medical English (e-ME)

The above review of ESP varieties revealed that the significance of such classification rests on the need to design appropriate ESP courses to fulfil both Academic and Occupational demands of learners enrolled in Saad Dahlab University of Blida. Course design is a crucial element in ESP teaching which is highlighted in the following section.

1.6 ESP Teaching

ESP is an approach to language teaching since its main goal is to satisfy certain specific needs (Barrantes, 2009). Though the content of ESP approach may differ from that of general English, Hutchinson (1987) argued that ESP teaching is not different in kind from any other form of language teaching. This idea is agreed by Strevens (1988) who maintains that both forms of language teaching (ESP and general language teaching) makes use of some methodologies and activities which he summarizes as follow:

- Shaping the input.
- Encouraging the learner's intention to learn.
- Managing the learning strategies.

- Promoting practice and use.

The main feature of ESP teaching is that it is recognized by its learner-centeredness (Hutchinson & waters, 1992), since “all decisions as to content and method are based on learner’s reason for learning”. Therefore, learner’s needs, wants and goals in addition to motivation, attitudes and learning strategies are considered as key parameters in the process of ESP teaching. Placed at the centre of attention, learners are expected to be active components in their learning inside and outside the classroom. Learning is thus, more individualized than standardized where students are supposed to be interactive, discuss new ideas and assume responsibility for their own learning (Kashani et al, 2007, p.87).

The ESP teaching is a highly demanding task that requires additional responsibilities in part of the teacher who is supposed to be “... a knowledge provider and facilitator of students’ learning and no more as a resourceful authority.” (Kashani et al, 2007, p.87). Given that the ESP teachers have not received any type of training, performing a variety of new tasks in the ESP context can be challenging. In this respect, Strevense (1988) described the ESP teacher as “... a teacher of general English who has unexpectedly found her/himself required to teach students with special needs”. In other words,, the ESP teacher is a General English teacher who is pinpointed to teach learners with precise needs and has to get involved in a ‘strange and uncharted land’ for which he has not been well prepared. For this reason, Basturkmen (2010) views that teachers may find themselves dealing with content in a domain that they are not familiar with. For many ESP teachers, formal EFL training has been largely concerned with general English which makes the task of ESP teaching very challenging.

In fact, Swales (1985) made use of the label ‘ESP practitioner’ to describe the ESP teacher due to the additional activities that this type of instructors are required to perform alongside teaching while the general English teacher is not. These tasks include needs

analysis, course design, material development or adaptation and evaluation. Accordingly, Robinson (1991) believes that ESP teacher should be flexible in order to deal with the ESP learners as well as the different situational tasks. In addition to the roles that ESP teacher is assigned to perform, deciding upon the course content of each field requires much effort. Course design is often a substantial activity that falls under the responsibilities of ESP teacher (Hutchinson, 1987).

1.6.1 ESP Course Design

Course design is an efficient element in the process of ESP teaching. Hutchinson and Waters (1989) stated that course design is the process of interpretation of the results of needs analysis to produce a set of teaching goals and objectives leading a particular group of learners to their desired purposes. Munby (2001) further states that ESP courses “are determined in all essentials by the prior analysis of the communication needs of the learners”. Then, it can be argued that the analysis of learners’ needs is a key feature that any ESP course design should be based on. It is a prerequisite step in the ESP teaching since it determines the choice of teaching material as well as the appropriateness of the content for ESP learners.

Dudley-Evans and St John (1998) described ESP course design in form of five necessary steps which are as follow:

- Needs analysis.
- Course (syllabus) design.
- Material selection.
- Teaching and learning.
- Assessment/evaluation.

This definition reveals that any ESP course is determined by a set of interdependent rather than separate parameters. The following figure illustrates the interactive nature of the various elements included in ESP course design according to Hutchinson & Waters (1987, p: 22).

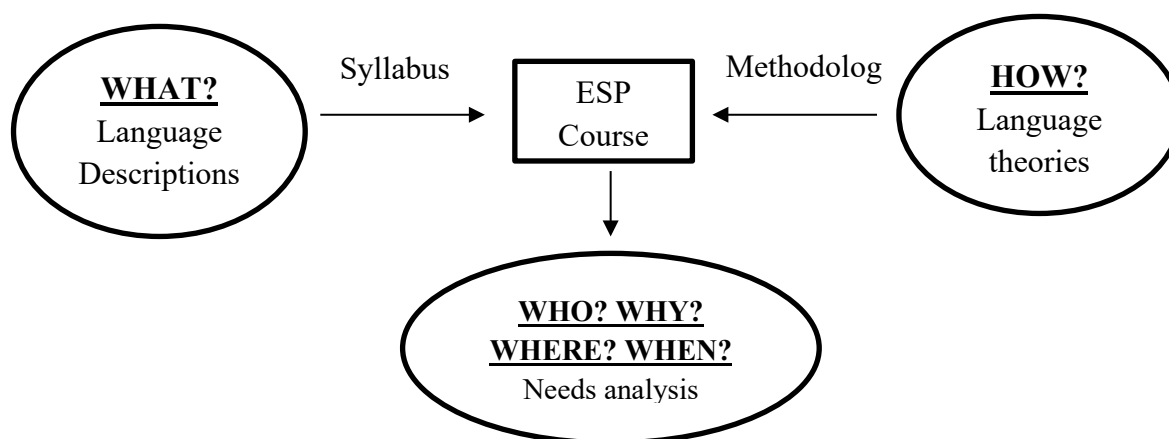


Figure.1.2: Elements Effecting ESP Course Design (Hutchinson & Waters, 1987, p. 22)

It can be argued that ESP course design encompasses a set of parameters that starts with the needs analysis, interpretation of the results of needs analysis to identify relevant data, defining teaching rationale where the reasons and the nature of the course are stated. Additionally, it is relevant to any course design to select or develop teaching material, decide for the methodology and evaluate the whole process. In this context, an ESP course designer should focus on the learning outcomes through representing new concepts, ideas, techniques...etc. that can lead students towards their defined goals. The illustration below demonstrates the process of course development.

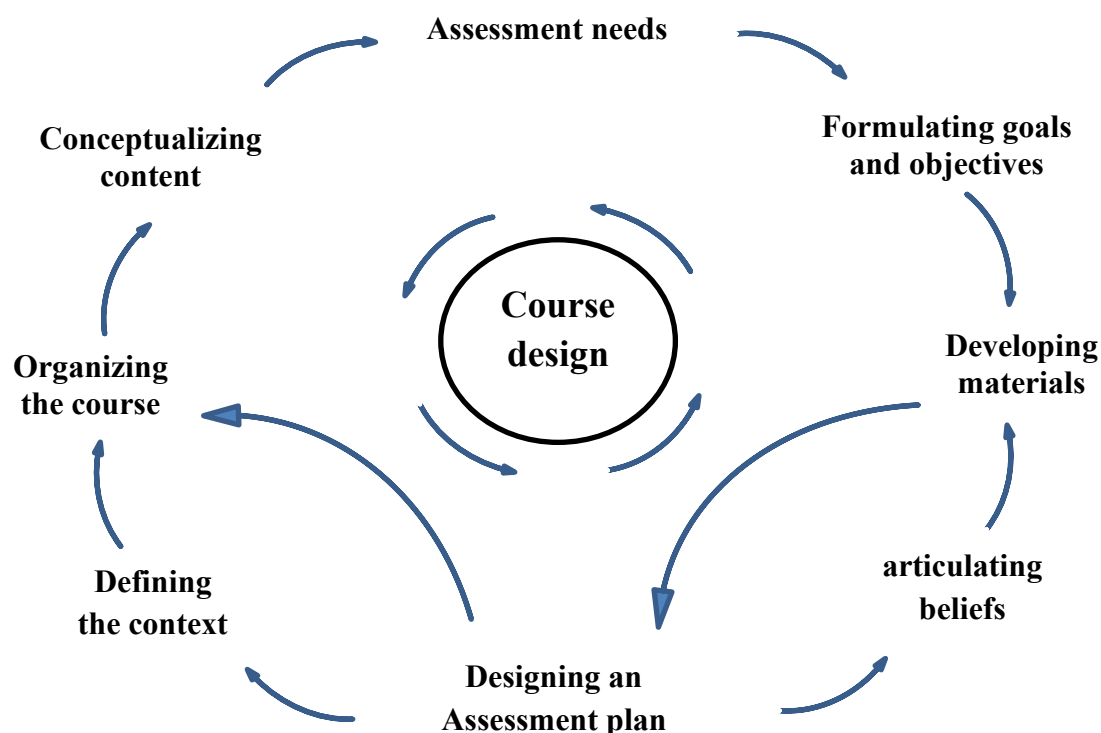


Figure.1.3: Course Development Process (Graves, 2000, p.3)

It can be noted that these activities should be rigorously based on student's needs analysis which have a significant impact on the success of an ESP course. This reality reveals that designing a course and putting it into practice is not an easy task of ESP teacher.

1.6.2 Characteristics of ESP Course Design

Throughout the development of ESP course design, most researchers such as (Stevens, 1988, Dudley-Evans, 1997 Gatehouse, 2001; Bojovic, 2006) seem to agree on main course design characteristics suggested by Carter (1983). These features are identified as: a) authentic material, b) purpose-related orientation and c) self-direction.

a) **Authenticity:** Authenticity is one of the main characteristics emphasised in the process of ESP material development. This concept denotes the use of material which includes text books, forms, graphs, tasks, activities... etc. which is not pedagogically modified. In other terms, authentic material contains real life language exactly as it is used in

natural communication environments usually produced by native speakers. Nowadays, various adjectives can be used to describe this type of material such as “authentic, genuine, real, unsimplified (Valle, 2010). Since ESP course are offered to adult language learners and are aimed at preparing them for proper communication in certain job-related situations, Dudley-Evans (1997) suggested that authentic materials serve an appropriate choice to use. In this regard, Gatehouse (2001.p.4) states that “the use of authentic content materials, modified or unmodified in form, are indeed a feature of ESP, particularly in self-directed study and research tasks”. He adds that ESP learners involved in the field of health service are encouraged to use authentic material from various resources in order to complete tasks and assignments given to them for the purpose of evaluation.

Authentic material may include real life language related to the main field of study of the learners or their occupation. Therefore, it could be argued that authentic material can raise student’s interest and motivation and ambition to reach their desired goal. Unauthentic material that does not take into consideration the language data that meet learner’s communicative target purposes could have a negative impact on their language learning experience. However, the extent to which material could be authentic caused a great deal of controversy throughout the development of ESP (Dudley-Evans & St, Johns, 1998, p.27). This latter reveals that text is recognized to have different degrees of authenticity. Some ESP researchers believed that a slightly modified version of authentic text can be misleading; therefore, text should be presented to learners in their raw form. Others such as (Morrow, 1977), however, believe that presenting text in their raw state which is produced in their natural situations cannot fit classroom context. He further explained that ESP text which is not simplified or modified can make it difficult for learners to grasp. This difficulty can be encountered by teachers as well who will have to struggle with knowledge of subject matter as well as knowledge of the language, which would be challenging to deal with.

As stated by Jordan (1997) authentic material “is normally used in the students’ subject area: written by specialists for specialists” (p.113). Thus, authentic material is meant to expose learners to real world language but is not generally developed or produced for language teaching purposes (Robinson, 1991; Harmer, 1991; Lee, 1995; Jordan, 1997; Basturkmen, 2010 in Lesiak-Bielawska, 2015, p. 09). The aspect of authenticity is still subject to different controversial ideas and views.

Jordan (1997) stresses the issue of authenticity in terms of the appropriateness of the material to the language learning context when retrieved from the original text. For example, the extent to which the topic of the text, purpose and language are appropriate and efficient for the learners. As such, the focus is made on the authentic uses of materials in the classroom rather than on authentic materials themselves. He further agreed on the idea of adapting material or a specially producing one in the earlier stages of learning as long as it serves student’s communicative needs, and stated that:

There is nothing intrinsically wrong with non-authentic texts, especially in the earlier stages of language learning: it depends on the pedagogic purposes in using the texts. However, as soon as students can cope with texts from their own subject area, they should have the opportunity of reading (listening to) them. This presupposes that there is a clearly-defined and appropriate purpose-communicative and pedagogic-combined with a meaningful context that information gap and task-dependency principle can be adhered to. (p.114)

The above argument is agreed by researchers such as (Morrow, 1977; Widdowson, 1979) who consider communicative authenticity as a key requirement for ESP material. Thus, a text is authentic as long as it meets communicative needs of specific type of learners who are aware of their goals in learning the language. Thus, an ESP classroom should ensure authenticity through the use of activities based on texts inspired by real communicative situations, e.g. role plays after watching video; or through problem-solving activities which

involve collaboration between students (Belcher, 2012, p. 09). Concerning the content of ESP material, Hutchinson (1998) adds that it should be ‘learner-centred’ and ‘teacher friendly’. In other words, ESP material should focus on student’s needs but keeps within the capacities of ESP teacher who find it often challenging to cope with highly technical content of ESP material. Dudley-Evans & St. Johns (1998, p.28) states that:

Exercises that ask students to answer comprehension questions by finding relevant sentences in the text are not authentic, but those that ask students to use information from the text in a task or problem-solving activity are.

Such tasks and activities would improve students’ communicative skills and equip them with language learning and personal problem-solving strategies; hence gain clear insights of their desired aim in learning the language (ibid.)

A more eclectic approach to material development is the one suggested by Michan’s (2005) as it combines theory, research and practice to provide a five criteria for measuring authenticity (Valle, 2010, p.146).

1. Provenance and authorship of the text.
2. Original communicative and socio-cultural purpose of the text
3. Original content of the text.
4. Learning activity engendered by the text
5. Learners’ perceptions of and attitudes towards the text and corresponding activity.

Accordingly, the literature provided on the authenticity of ESP material enhanced its use in ESP teaching/learning provided that it links between the classroom and the real world. However, the use of available material should not ignore the role of needs analysis in determining the process of course design as well as material selection. In this regard, Lesiak-Bielawska (2015) suggests the use of needs-responsive instructional materials based on the

results of needs analysis, then adapted or developed by the ESP teacher (Belcher, 2012; Lesiak-Bielawska, 2015).

b) **Purpose-related orientation:** as identified by Gatehouse (2001), purpose-related orientation is the simulation of communicative tasks to help learners cope with different target settings. Learners are allowed to practice through simulation to equip learners with required skills to handle different linguistic acts encountered in the target setting. For instance, Carter (1983) reported student simulation of different activities required for a conference. In the context of English for Business courses, Carter (1983) reports that students might be required to accomplish tasks which include preparing, writing and presenting papers of some specific business situations such as market research and poster design. As narrated by Gatehouse (2001), students in health science institute were expected to attend seminars to improve their listening skills and then, practiced what they have learned with English-speaking residents in their target situations. The use of simulation activities reflect the real world language and situations that learners are expected to use and perform their future job. These activities can be considered as a valid tool of assessment for teachers whereby they can measure learner's performance, diagnose their weaknesses and strengths and offer necessary help.

Simulation is both functional and cohesive in a sense that it almost employs the language of real target environment which brings students closer to their future job context. Most simulations allow student to practice the language and interact with different situations that the simulation activity provides. This will eventually, improve student's language skills and enhance their communicative competence. Relatively, Johnson (1982:9), states that

A good simulation is like a nuclear power breeder reactor; it produces its own fuel. Communication leads to more communication, ideas generate ideas, talk leads to thought and thought leads to talk. (P 9)

It can be argued that the nature of such activity provides students with the chance to learn through the need to argue, analyse, negotiate, conciliate, agree, explore problems and reach conclusions which can be self-satisfactory, interesting and motivating for students. In Johnson's (1982) words, "A good simulation can break up the frosty silences, allow and encourage well-motivated talk and action" (p.12). Simulation can help create a motivational, creative and innovative classroom for both students and teachers.

c) **Self-direction:** Self-direction is one of the characteristics of ESP course which are concerned with providing students with the chance to be active participants in their learning process. It entails that students should "have a certain degree of freedom to decide when, what and how they will study" Gatehouse (2001, p.5). Some researchers believe that discussing the course content and valuing learners' views in the design of ESP course raises learners' interest and motivation to participate in the class and ultimately increases learning (Kaur, 2007)

Since ESP is an adult education programme, it is preferable for teachers to raise learners' awareness about effective learning strategies. Thus, self-directed learning techniques can help learners involve in a professional track, a desired aim which the whole ESP programme is designed for.

1.6.3 ESP Needs Analysis and Process

Since its emergence, ESP witnessed various developmental stages. In her attempt to identify the theoretical evolution of ESP, Lesiak-Bielawska (2015, p.1) referred to four chronological phases which include register analysis phase, discourse analysis, the third phase which marked the appearance of key ESP concepts like needs analysis , genre and rhetorical moves; and the last and most recent phase include genre theory and corpus linguistics. Belcher (2004, p.165) has identified three different but overlapping perspectives in her

description of recent trends in ESP practice. This latter include socio-discoursal approach to ESP which is based on genre theory, genre informed pedagogy; the socio-cultural approach and its theories of situated learning; then the socio political approach which support theories and applications of critical pedagogy (Belcher, 2004, p.165). Like other achievements in human sciences, ESP was not a linear movement as it evolved at different speeds in different countries. Hutchinson et al (1987) make reference to five phases of development. Each of these stages is linked to a particular activity that marked the process of ESP evolution. For example, the first phase is related to register analysis.

- **Register analysis**

Register analysis marked the first phase in ESP syllabus design and was associated with the works of Peter Strevens (1964), Jack Ewer (1969), and John Swales (1971). This stage dealt with the grammar and vocabulary of scientific and technical English communication. The term register has been defined by Spolsky (1998) as:

A variety of language most likely to be used in a specific situation and with particular roles statuses involved. Examples might be a toast at a wedding, sports broadcasts or talking to a baby. A register is marked by choices of vocabulary and other aspects of styles (p.34).

In order to link register analysis to ESP, it can be understood that material developers tend to rely on needs analysis to identify the grammatical and vocabulary of these registers. Then, they design courses, syllabi and curricular depending on these linguistic features (obtained from the results of needs analysis) that they believe to be relevant to a given specialty.

‘A Course in Basic Scientific English’ by Ewer and Latorre (1969) best illustrates such a syllabus (Hutchinson and Waters, 1987). He asserts that a scientific writer is required

to conduct close analysis of a given register to identify the basic lexical components of that language (Ewer and Latorre, 1969, p.222). The assumption underlying register analysis was that while scientific, technical writing and general English are not different, material developers tend to focus on certain grammatical and lexical features. To better clarify this point, Basturkman (2006, p.35) provides the following example:

Analysis of scientific and technical texts by Barber (1962/1985) which showed that the passive tense is used more frequently in such writing than in general English and identified a set of sub-technical vocabulary items that were more likely to occur.

At its essence, register analysis focalizes its attention on words and sentences only. This stage was followed by another approach known as “Rhetorical” or “Discourse Analysis” which operates beyond the sentence level.

- **Rhetorical or Discourse Analysis**

This stage was marked by a new approach, mainly influenced by the works of Lackstorm, Selinker, and Trimble (1972) and Widdowson (1979). This approach paved the way for the development of the field of rhetorical or discourse analysis. At this phase, ESP shifted research attention from language at the sentence level to the level above sentence to include more focus on the text. Accordingly, Widdowson (1979) argues that student’s difficulties in learning ESP is not related to their lack of knowledge of the system of English ‘usage’ but from the complexity of English in ‘use’. Thus, a course that focuses on the composition of words and sentences only will not serve their needs in ESP learning; instead, a course that focuses on how sentences are used in different communicative situations would better serve their purposes. As a result, ESP specialists become more concerned with how organization of sentences forms discourse (Hutchinson and Waters, 1987: 11), where

discourse analysis became the core concept of this approach. Dudley-Evans et al (1998) defined it as:

Any study of language or, more specifically, text at a level above sentence is discourse study. This may involve a study of cohesive links between sentences, of paragraph structure, or the structure of the whole text. The results of this type of analysis make statements about how texts –any texts- work (p.87).

Discourse analysis, therefore, deals with the way sentences are organized to produce a meaningful act of communication. The results of this analysis constitute the basis on which syllabus of an ESP course is designed and material is developed. In the same vein, both Widdowson (1979) and Hutchinson and Waters (ibid) further agreed that this phase of the ESP development focus on identifying the organizational patterns in texts, and specifying their linguistic features in order to form the syllabus of an ESP course. This resulted in designing textbooks based on the notional/functional approach, such as the Nucleus Series cited by Dudley-Evans (1976) and the Focus series (Swales, 1990; Bhatia, 2011).

- **Target Situation Analysis**

The third developmental phase of ESP is recognized by the shift toward learners' needs analysis and target situation analysis. This concept has been explained by Chambers (1980) in his analytical approach where he states that:

By the language I mean the language of the target situation. Thus, needs analysis should be concerned with the establishment of communicative needs and their realizations, resulting from an analysis of the

communication in the target situation – what I will refer from now on a target situation analysis (TSA) (p. 25).

Hutchinson et al (1987, p.12) further defined it as: “the situation in which the learners will use the language they are learning.” According to these definitions an ESP course design, at this stage, should begin by identifying the target situation, conducting a thorough needs analysis and finally, forming the syllabus of the ESP course based on the identified features.

In his “Communicative Syllabus Design”, Munby (1978) provided an important example on target situation analysis where he analysed the needs of a group of learners in terms of their communication needs before he moved to develop an ESP specification that serves those goals. To sum up, this developmental phase attempts to relate language analysis to the learners’ goals for learning (Hutchinson and Waters, 1987, p.12).

- **skills and Strategies**

The fourth developmental phase of ESP has been characterised by the shift in attention from focusing on the surface form of language to the deep analysis of language skills and strategies that govern language use in a discourse. In this respect, Hutchison et al (1987) argued that:

No need to focus closely on the surface forms of the language the focus should rather be on the underlying interpretive strategies, which enable the learner to cope with the surface forms (p.13).

Dudley-Evans and St, John (1998) further described this stage by associating language skills with the ability to understand and interpret communicative meaning from discourse. Therefore ESP should focus on the interpretive strategies along with reading and listening strategies that promote language skills. A close examination of this developmental phase

reveals that the aim of strategy analysis is to shed more light on the learner's expectations for the way they should learn than what they want to learn. Additionally, it is the particularities of a situation that learners may encounter that determines the appropriateness of one skill over another. In this context, Dudley-Evans et al (1998) explained by stating that:

In many situations, especially when the medium of instruction was not English, for example in Latin America, this meant a focus on reading. In other situations it might involve a different skill, such as listening for international students embarking on academic courses in the UK (p.24).

In short, this developmental phase dealt with the interpretive and thinking process which underlies the use of language in discourse. Moreover, it focuses on enhancing learner's skills and strategies to acquire the language.

- **learner-centred approach**

By delineating its focus on the learning-centred approach, ESP considers learner as a key component in the teaching and learning process. This approach allows the learners to determine their needs, wants and lacks and whether or not the ESP course has been effective in fulfilling their purposes. Therefore, ESP syllabus should be designed based on learner's needs. This latter can be achieved through the process of 'Needs Analysis' which is a key parameter in developing material in the area of ESP.

In conducting needs analysis using learner-centred approach, Berwick (1989) and Brindley (1989) highlighted two important types of needs that should be taken: objective or perceived needs (based on the perspective of the expert); and subjective or felt needs (based on the perspective of the learners). According to Brindley (1989), objective needs are those derived from factual information about learners such as learners' real-life language use situations, their current language proficiency, and their language learning difficulties.

Subjective needs, on the other hand, are those derived from information concerning their affective and cognitive factors such as personality, confidence, and attitudes (Kaewpet, 2009).

In order to broaden the concept of learner-centred phase, Hutchinson and Waters (1987: explained that:

Learning is not just a mental process as the learner-centred approach implies, it is rather a process of negotiation between individuals and society that sets the target, and individuals must do their best to get as close to that target (p.72).

In this sense, this developmental phase not only placed the learner's needs and wants at the centre of attention but also considers the learner's socio-economic and cultural context in which the ESP course will be designed and for whom it will be implemented. In this regard, it will be possible for course designers to use learner's needs as a starting point to set the course objectives and determine its content.

- **learning-centred approach**

This approach to needs analysis identification was later announced by Hutchinson & Waters (1987) through extending the meaning of needs analysis from the target situation to the learning needs of the students. Relevant to this, two aspects of needs might be identified: “target needs (i.e. what the learner needs to do in the target situation) and learning needs (i.e. what the learners need to do in order to learn)” (p.54). In conducting needs analysis, course designers focused on what is needed by learners to attain their desired objectives including student's learning skills as well as learning styles. Similarly, Allwright (1982) stresses the significant role of learners' wants and lacks in implementing language programs.

According to Dickinson (1991): “needs are those skills which a learner perceives as being relevant to him; wants are subset of needs, those which a learner puts at a high priority given the time available; and the lack is the difference a learner perceives between his present competence in a particular skill and the competence he wishes to achieve”. From his part, Dudley-Evans & S. John (1998) add that needs analysis is “the process of establishing the ‘what’ and ‘how’ of a course”. In such a way, needs analysis is viewed as a key element in designing an ESP course. It is the cornerstone of more needs-focused program that really caters to students’ demands, wants and lacks.

- **Task- based approach**

A task –based approach to needs analysis is another developmental phase that has been generally concerned with the practical part of language courses. It has been advocated by Dudley-Evans & S. John (1998) as he maintained that "ESP has been in the vanguard of the development in ELT, moving from grammatical, functional and notional syllabuses to a more eclectic and task-based approach."

In the same line of interest, Long (2005) stated that teaching and learning should not focus on structures of linguistic features; rather, it should focus on how learners use the language in performing different tasks. He adds that:

Learners are far more active and cognitive-independent participants in the acquisition process than is assumed by the erroneous belief that what you teach is what they learn, and when you teach it is when they learn it (p.3).

In this respect, task becomes another element that should be considered in the process of needs analysis along with the type of discourse involved in performing that task. A task

based activity should therefore, provide learners with the opportunity to transfer language skills to actual job-related contexts.

1.7 The Algerian ESP Centre Project

In the past few decades, the demand for learning English for specific purposes ESP in higher education has been increasing. In the Algerian context, French has been a dominant language over English for many educational, professional and administrative institutions. However, the on-going process of globalization in today's world and the increasing influence of English as a lingua franca worldwide have highlighted the need for learning English as a tool for education, academic research and publishing. In response to the worldwide growing demand for English, the Algerian universities show a considerable interest in integrating ESP into most, if not all, of tertiary level studies

At the tertiary level, university students are expected to attend ESP courses related to their field of specialism. With the recent LMD reform that was introduced to the higher education system of Algeria, ESP teaching has been widened to include all specialities throughout all the Bachelor, Master and Doctorate degrees.

In the ESP Maghreb Conference (1993), the national coordinator of the Algerian Universities ESP Project, Osmane Bencherif, declared that the Algerian ESP project was a result of a partnership between the Algerian Ministry of Higher Education and Scientific Research and a number of British Universities, namely the University of Manchester, Glasgow, Leeds, Sheffield, Nottingham, and Salford (Bouabdallah & Boyacoub, 2017, p. 2018). The aim of the agreement was to enhance Algerian-British cooperation in the field of science and technology. In the process of developing this cooperation, the British universities allow some of the Algerian students to enrol in full time postgraduate programmes in different fields related to science and technology. For this project to operate, three ESP centres were

established in three different Algerian regions (Oran, Algiers, and Constantine) where each of the Algerian institution work in cooperation with one of the concerned British universities as follow:

- University of Blida with Salford University which had to deal with mechanical engineering.
- University of Constantine with Glasgow University for computing purposes.
- University of Oran more precisely USTO (Université des Sciences et Technologie d'Oran) with Nottingham University to fulfil electronic needs.
- INELEC (Institut National d'Electricité et d'Electronique) and the University of Sheffield which had to tackle electricity and electronics techniques (Ibid, p. 219).

These centres started to operate in 1988 under the support of British council that was responsible for providing necessary pedagogical equipment. The aim of these centres was to provide adequate ESP courses, maintain strong link between ESP units and the British universities and ensure appropriate conditions for specialized ESP teachers and subject specialists who hold PhDs. from Anglo-Saxon nations. Under the cooperation between the Algerian experts and foreign missionaries, the ESP centre organised different trainings and seminars for specialized ESP teachers (Ibid). As cited by Bouabdallah and Bouyacoub, the following are the most important objectives underpinning the Algerian ESP project:

- Educational and scientific objectives consist of knowledge base acquisition, access to technology and science, participation and effective communication and continuing professional development.
- Economic and business objectives aim at creating opportunities for development, better preparing managers and employers for globalization, ensuring profitable partnership and participation, and widening economic and investment horizons.

- Cultural objectives aim at developing individual potential, fostering cultural understanding, enhancing literacy skills and curiosity, and preparing learners as world citizens. (Ibid)

According to the study conducted by Benyelles (2009), the dissolution of the ESP centre was due to the absence of any legal status. The centre's attempts of legislating its status has been refused by the Algerian Ministry of Higher Education and Scientific Research.

Though the Algerian ESP project seems to contribute to the popularity of ESP teaching, the reality reveals a considerable amount of deficiencies. According to (Izidi & Zitouni, (2017, p.17) "most Algerian institutions and universities fundamentally do not propose a balanced and well equipped ESP programs to their learners". Furthermore, Policy makers have not thought about integrating ESP teacher training instead, they assigned ELT teachers to fulfil that role. This category of instructors have not received any kind of training in considering learner's needs and interests in learning the language.

While most non-native countries around the world respond positively to the growing popularity of ESP and attempt to keep updated to the changing world by providing effective teaching and learning of English to their students, ESP teaching in Algeria still suffers from a number of deficiencies in terms of the quality of teaching both theoretically and practically. This is especially more complex as EGP is taught in contexts where English is supposed to be taught for specific purposes in highly specialised field such as: Medicine, Computer Science and Engineering... etc. Algeria is still struggling with serious issues related to ESP teaching quality, lack of student's motivation and shortage of specialized well trained ESP teachers.

Courses of ESP are introduced in Algerian higher institutions as a response to the demands of the work world. All faculties included these courses in the curriculum of compulsory subjects at the level of all university specialities. While the teaching of English in these specialities is expected to provide ESP courses relevant to student's specific needs of

their specialized field of study, theoretical framework for ESP curriculum planning is still under development. The actual ESP teaching situation in these faculties reveal challenging issues related to the absence of sufficient administrative interest. These issues has been observed by many scholars interested in researching ESP teaching situation in Algeria Mebitil, (2011) and Baghli (2014) express their dissatisfaction about the administrator's ignorance to ESP teaching. This reality places ESP teachers in a difficult situation, struggling with the task of teaching ESP course that is planned to be taught for one hour and half per week only, the absence of well-designed syllabus, relevant resources and material as well as the total absence of any kind of teacher training programs. ESP teachers had to suffer the outcomes of administrative ignorance of ESP teaching situation. In this context, Bouroumi (2018) states that:

The context (or the institutions) within which the ESP classroom operates, tremendously effects the ESP teacher's efforts which are rendered ineffective, at times useless, because of (1) the existence of the ESP course in isolation from any other ESP curriculum components and from the specialism's curricula, (2) the almost non-existent ESP community and its support, (3) the lack of resources and ex-curricular learning and practice opportunities (p. 01).

Bouroumi's (2018) statement clearly indicates the impact of the contextual conditions on teacher's job and highlights the importance of exploring not only teacher's knowledge and practices but also the surrounding social environment or context that makes it.

Izidi & Zitouni (2017) further claims that "programs of science courses are devised by the Ministry of Higher Education and Scientific Research. For ESP courses, no program is available or has been advanced or proposed by the Ministry" (2017, p.20). As far as the context of the present is concerned, the scientific faculties and institutions at Saad Dahlab

University show great interest in teaching their students ESP, also referred to as technical English, to equip their students with necessary English vocabulary to communicate effectively in their target situations. Despite their awareness, teachers are supplied with no ESP teaching materials or resources to prepare and design their ESP courses. Eventually, it is the Ministry of Higher Education and Scientific Research to assume responsibility of improving the ESP teaching situation through allocating more time to the teaching of ESP course, providing the required teaching materials and dealing with the lack of qualified ESP teachers by providing appropriate training for ESP teachers to handle the task of ESP teaching effectively.

1.8 ESP Teacher Training

ESP is taught by EFL trained teachers who have not received any specialized orientation to deal with the various parameters of ESP classroom environment (Hutchinson & Waters, 1987: 158). Therefore ESP practitioners might find it difficult to deal with learners whose needs and interests are highly specialized. Moreover, the highly demanding nature of English for scientific or technological purposes could impose some challenges for teachers whose previous education did not prepare them to perform various ESP activities.

Unfortunately, the discipline of English for Specific Purposes in Algeria is not fully mastered by teachers (Baghli, 2014). In an attempt of meeting the world's development on an educational scale, Algeria has integrated the English language mostly in all disciplines. Policy makers, however, did not integrate training courses that prepare teachers for their new context and equip them with the necessary skills and competencies for ESP teaching (Mebtil, 2013; Ziani, 2016). In this respect, it is also argued by Ziani (2016) that the failure in the Algerian institutions can be summarized in the lack of teacher training because teachers are not aware of the unseen parameters of classroom environment. In fact, this issue is not limited to the

Algerian context; it is the case in some other parts of the world (Harwood & Patic, 2011) where English is not the native language.

The concept of educational training was prominently used by the Algerian government. In the past, teachers had to sit for two-year training in order to become qualified future teachers (Ziani, 2016). From a foreign language teaching and learning view point, namely English, teachers to be at that time had to study several modules related to their profession. Those instructors were formed in professional institutions which, unfortunately, nowadays have closed their gates (Ziani, 2016). Thus, the idea of training vanished with the closure of such institutions. In the present day, however, such trainings no longer exist. For this reason, many ESP teachers may not only face challenges when teaching a given profession, but may also experience a certain debilitating fear that may cause them to retrieve from taking such a step.

1.9 ESP Teacher

ESP teachers are neither mere instructors whose concern is purely grammar or correctness of language, nor specialists in the field who are well knowledgeable about a specific subject. They are, therefore, the product of both since Dudley-Evans and St John entitled this category of teachers “ESP practitioners” (Ahmed, 2014). The reason why they are given such title is mainly due to the several roles they are required to perform (Ahmed, 2014). This section, hence, thoroughly examines the various challenges they could encounter when teaching ESP, in Addition to the roles they may perform based on the objective they desire to attain.

1.10 Challenges of ESP Teachers

Teachers in different educational contexts face obstacles which interfere in the process of teaching and learning. In an ESP environment, ESP teachers also encounter a number of

challenges. The latter are seen in the lack of training, teaching overcrowded and heterogeneous classes, integrating skills in the process of syllabus design, and the complexity of scientific or technological vocabularies.

1.10.1 Problems Related to Lack of Training

To examine the problems of ESP teachers related to knowledge of content and other activities they are required to perform, the lack of training appears to be taking the lead. Several studies undertaken on either the national or the international ground have proven that teachers who have not been trained face several hurdles when teaching ESP. When the idea of lack of training of ESP teachers takes place at the tertiary level, unlimited sets of issues may arise. To better demonstrate such case, Ziani (2016) conducted a study at the Department of Sociology in the University of Oran in which three (03) ESP teachers were questioned in order to gather the necessary data. The researcher did not only employ a structured questionnaire, but also a structured observation represented an essential tool in the process of data gathering. The findings of such research revealed the existence of several problems in the department of sociology and thus, interfering with the flow of English language teaching and learning. The challenges concerning the discipline of ESP comprised the lack of teaching materials and clarity of learning objectives which worsened the amount of teaching difficulty, and most importantly lack of teacher training. As for instructors' related factors that contributed to the complexity of ESP teaching, these mainly dealt with their inexperience in such a field. In this light, Ziani, (2016) advocates the idea of teacher training in the Algerian educational ground in order to enhance instructors' professional competence in terms of knowledge and practice.

Another study addressing the situation of lack of ESP training in Algeria is undertaken by Mebitil (2013). Her research is conducted at AbouBekr Belkaid University of Tlemcen

where three distinct faculties were chosen; The Faculty of Exact Sciences, The Faculty of Law and Political Sciences and The faculty of Economics and Commercial Sciences that represent a means to an end in order to highlight the prominent issues encountered by language instructors in teaching ESP. The results obtained from employing triangulation of research tools like class observation, structured questionnaire and a structured interview demonstrated that 82% of teachers did undergo any kind of professional training by neither the government, nor the private institutions in the discipline of ESP. Besides, 18% indicate that the type of training they sat for was purely theoretically- based and no practical or ‘on the field’ training was offered. ESP teachers enrolled in AbouBekr Belkaid University of Tlemcen encountered many challenges, including their unfamiliarity with the ESP environment as well as their inability designing appropriate materials.

A study undertaken by Mai and Hoa (2016) in the context of Vietnam sheds light on the challenges of 361 ESP teachers related to the lack of training. The findings revealed that the lack of training resulted in three main issues faced by this category of instructors: 1) a heavy dependency on the theoretical part of ESP in which no scientific or practical activities were provided, 2) according to the subjects, lack of training disqualified them from being ESP teachers because they only held English certificates, and therefore faced many challenges, 3) since no training was provided to them, specialized knowledge was not among their expertise which was seen in lack of contextualization when teaching technical vocabulary. Other problems such as over-crowded and heterogeneous classes are also considered among the challenges that ESP teachers experience.

1.10.2 Teaching Overcrowded and Heterogeneous Classes

The concept of large classes constitutes a crucial problem that exists in the Algerian universities. This issue does not only harm teachers, but also learners. In a study conducted by

Suzini et al (2011) in Iran, over crowdedness is regarded as a negative point indicated by the Iranian learners because it leads to lack of concentration. Such situation affects ESP teachers more than students because of the multiple tasks that are supposed to be performed during the delivery of the lesson (Suzini et al, 2011). Maruyama (1996), in this light, argues that most of the time students' number in ESP classes surpasses 80 which can worsen the situation in teaching English and, therefore, negatively interferes with the process of teaching and learning (Mai and Hoa, 2016). Thus, teaching overcrowded classes may prevent most learners from having the opportunity to practice language and content. The fact that overcrowded classes influence the effectiveness of an ESP environment, heterogeneity within a class also constitutes a problem to ESP teachers. According to Maruyama (1996), such situation would not only influence students' motivation in learning English, but even teachers would face difficulties during the process of lesson and activity design (Mai and Hoa, 2016). In other words, in a mixed ability class, there is a variation between high and low proficiency in English. That is to say, the material designed in these classes could either be too easy or too difficult for students which, again, would result in a lack of motivation. A mixed-ability could be less cooperative, the students can get bored easily and this can cause commotion in the classroom (Hess, 2001). Therefore, planning the lesson and making work-material can be time consuming for the teacher and the planned material could, again, cause problems to students.

1.10.3 The Integration of Skills within Syllabus Design

Another obstacle that ESP teachers may face when teaching English for Specific Purposes is related to students' mastery of some English language skills in relation to their specialty. Adam (2013) examine the challenges that ESP teachers face when integrating the following abilities: the use of technical vocabulary, the competency of mastering sets of academic skills such as writing articles, and presenting information to audiences, and finally

the ability to use words and sentences based on linguistic proficiency. Adam (2013) observed that the process of integrating learning objectives into ESP syllabus design is the most challenging task encountered by ESP instructors. Another descriptive study conducted by Mai and Hoa (2016) addresses 361 students as well as teachers at eleven universities in Vietnam: commerce, communication and transport, national university of education and university of science and technology. The results concerning the integration of skills during the process of syllabus design include the difficulty to relate the four skills to content. 64% of language teacher indicated that writing was the most difficult skill that could be incorporated in syllabus design. As for the least challenging one was reading skill in which 54% chose this answer. Concerning speaking and listening, the former was selected by 59% of the population, while the latter got 54.97%. Thus, incorporating the skills in relation to content during the process of syllabus design is far from being an easy task to ESP teachers, especially when a given field is featured by its complex terminology.

1.10.4 Challenges of Teaching Technical Terminology

Besides the previous obstacles of ESP practitioners, the challenge of teaching technical vocabulary is seen to be on top of the list. To better portray this idea in an authentic context, a comparative study conducted in two different countries by Şahin and Hashim (2007) illustrates this matter. A number of fifteen (15) lecturers from Secluck University in Turkey and the University of Malaysia Pahang represent the participants of such research. The prominent problems obtained from the findings are mainly related to the lack of confidence, time constrains, and a total absence of contextualization. In other words, lack of expertise as well as specialized knowledge about technical vocabulary can negatively affect ESP teachers' confidence and hence results in a debilitating fear of teaching specialized fields. As for the factor of time, teachers complain that they have always struggled with the task of explaining technical vocabulary in a short period of time. They have further noted that

jargon was taught in its utmost isolation while its delivery should have been settled within appropriate contextual instances.

For example, in the field of medicine, Adam et al (2013) stated that the unfamiliarity of medical vocabulary to both teachers and students is another challenge encountered by ESP teachers. This obstacle clearly resides in the nature of such terminology which is viewed as the most complex language among other specialized terms in the field of ESP because of the diversity of its sources. In fact, it is widely acknowledged that most medical terminology derived from Latin and Greek origins. Due to the complexity of these terms being mostly compound, long multi-morphemic words including a mixture of strange old and new terms, participants involved in the field of medicine struggle with this vocabulary and found it hard to teach and understand.

In the light of the barriers that may result from teaching technical terminology, a supporting voice inclined towards subject specialists has witnessed the dawn. In this respect, (Khalifa, 2012), argues that technical terms, notions and topics should be delivered by subject teachers merely because of their familiarity as well as the mastery of specialized vocabulary. The above opposing views have been and still are debatable subjects that exist within the educational arena. In fact, the research of Ahamadi and Sajjadi (2009) as well as Rahimy and Shahin (2015) clearly demonstrate such arguable conceptual existence.

1.11 Dudley- Evans and St John's (1998) Key Roles of ESP Teachers

Teaching ESP can be a highly demanding task. It includes a range of responsibilities, such as investigating learner's needs and specialist discourse, developing courses, and materials in addition to classroom teaching. Therefore, teachers face a range of activities which, often, require additional knowledge and skills. Swales (1985), Dudley- Evans and St John (1998, p.13) and other researchers prefer to use the label "practitioner" to refer to the

ESP teacher which entails the additional tasks that they are expected to perform in the ESP context. In this perspective, Dudley- Evans and St John (1998, p.13) claim that:

The ESP practitioner has five key roles: teacher, course designer and material provider, collaborator, researcher, and evaluator.

In addition to that, these practitioners who are involved in a foreign and uncharted land of ESP (Hutchinson and Waters, 1987) are required to collaborate with subject specialist teachers for guidance concerning the specialized content imposed on them. The content knowledge of ESP learners is strange to ESP teachers and could trigger some challenging situations for them since their formal training has been very largely concerned with general ELT. Most ESP researchers reviewed in this study agree with Dudley- Evans and St John (1998) that teachers involved in the field of ESP are expected to do much more than teaching. they are expected to play the role of the teacher, course and material developer, researcher, collaborator and evaluator.

1.11.1 As Teachers

Successful teaching in an ESP context implies the capacity of the teacher to create a motivating learning environment that is based on interaction and discussion. Additionally, ESP teachers should not only consider the requirements of the learners' field of interest, but they should equally be flexible in dealing with the different situational acts in the classroom. These qualities are agreed by a number of researchers to be a set of sub-tasks that need to be performed by an ESP practitioner as a teacher (Kennedy et al, 1984; Hutchinson et al, 1987; Robinson, 1991; Dudley-Evans et al, 1998). Yet, considering that teachers in ESP courses are not specialists in the field and may, therefore, possess a scanty amount of content related to knowledge and skills where their primary focus is on the language. To put it differently, students in such courses might exceed the ESP teacher's area of knowledge on the subject

material (Ahmed, 2014). It can be assumed that performing various activities in the classroom at the same time is difficult to accomplish. This is especially in relation to the previously reviewed problems related to time and lack of training. Therefore, the teacher has the opportunity to draw on students' knowledge of subject-specific content to initiate interaction and discussions in the classroom. For example, when teaching students how to write a medical report, it is important that the teacher provides knowledge of communicative skills and practices but needs to negotiate with the students on how to best explore these skills and practices to accomplish the task. ESP teachers need to be flexible, willing to interact with his students and take considerable interest in the professional field that the students are involved in. The issue of ESP teachers' lack of sufficient content knowledge generated a discussion on who should be teaching the ESP course; subject-specific teacher or English language teacher. These two distinct viewpoints towards ESP teaching has been highlighted by Khalifa (2012) who discussed the qualifications of each category of instructors in the process of ESP teaching. Furthermore, she provided an appropriate suggestion in which the two distinct types of teachers join efforts under the process of co-operation, collaboration as well as team teaching.

1.11.2 As Course Designers and Material Providers

Teaching materials in an ESP context are considered as crucial elements that provide learners with an access to English (Dudley-Evans and St John, 1988). In this respect, Dudley-Evans (2001) emphasized that ESP teaching materials should be directly related to the needs of the students. This task can augment the amount of responsibility of the ESP practitioners, since selecting material represents one of the multiple tasks that they are expected to perform (Ahmed, 2014). These teachers do not only adopt materials to their learners' needs and competencies, but also are involved in the act of material production when there is a lack of published literature in the fields of interest (Ahmed, 2014). Hutchinson and Waters (1987)

state that the ESP teaching material should include motivating passages and tasks which should, relatively, be manageable for both teachers and learners so that it could increase teaching and learning opportunities. According to The previously mentioned course design related tasks, ESP instructors are expected to assess the effectiveness of the material in use (Ahmed, 2014). This latter is consistent with Hutchinson and Waters' (1998) statement that "ESP teachers will have to deal with needs analysis, syllabus design, materials writing or adaptation and evaluation" adding that "the majority of ESP teachers have not been trained as such". Under the same line of interest, Hessany and Mohebi (2014) conducted a study to investigate learners' perception of EAP material as well as the challenges that may accompany the teaching of this area in four different Iranian Medical Science Universities. The data gathered from this qualitative study demonstrate that the absence of appropriate reading materials, lack of clear instructional objectives, in addition to the lack of content knowledge are concluded by the researchers to constitute major challenges in material development.

1.11.3 As Researchers

Undertaking different natures of research being theoretical or practical is a necessary task included under the scope of ESP teaching. Ahmed (2012) believes that research skills are among the essential features of ESP practitioners. This role requires teacher's involvement in the process of needs analysis which in turn determines the course design and material selection or adaption as well as evaluation. In carrying out all of these tasks, ESP teachers need to draw on findings of research about specific ESP situations. In addition to this, ESP practitioners need to incorporate materials in relation to spoken and written communication (Bojović, 2006). Conducting needs analysis is not an easy task for ESP practitioners since it requires previous education about research methodologies and their underpinning theories. Many EFL trained teachers however, are not familiar with this type of knowledge.

1.11.4 As Collaborators

ESP teachers have to rely on help and guidance from various sources. One source might be the collaboration with specialists in the field. In this respect, the ESP teacher and the subject specialist work hand in hand in order to design activities as well as lessons which are directly related to their learners' professionally oriented needs (Ahmed, 2014). According to Bojović (2006), an ideal collaboration between the two categories of teachers is seen in the team teaching of the same class (Ahmed, 2014). According to Khalifa (2012), team teaching, is defined as the simultaneous performance between the English language and the subject teachers within the same classroom. However, team teaching may positively impact not only the macro skills (speaking and writing), but also the micro one including, listening and reading (Khalifa, 2012). Such influence could be witnessed in the roles of both English language and subject teachers; the former, for instance, may engage in the process of lessons and activities preparation under the guidelines of the subject teacher, while the latter may have the capacity to clarify misconceptions as well as managing discussions that have a content-based nature (Khalifa, 2012).

1.11.5 As Evaluators

As an evaluator, the ESP practitioner is required to assess learners' understanding of the nature of language use in target settings. The practitioner also needs to evaluate the effectiveness of course and material to provide students with the required knowledge. This process involves testing students' progress, course evaluation, and students' attainment of the course objectives (Ahmed, 2014). In ESP classes, tests are administered for two reasons; the first is solely based on the evaluation of language and skills of students required for their academic course and professional career. Under the same vain, one may mention internationally recognized tests that students need for their postgraduate studies, such as,

IELTS and TOEFL (Ahmed, 2014). The second purpose, meanwhile, is mostly product-oriented in which students' achievement in terms of acquisition of knowledge from the ESP course is being assessed (Ahmed, 2014). In such educational context, thereupon, not only students' performances are evaluated and assessed by ESP teachers, but also the courses and teaching materials as well (Bojović, 2006). Based on the collection of tasks that ESP teachers are expected to accomplish, such profession thus abounds with challenges and difficulties.

1.12 Conclusion

This chapter which constitutes the first part of the theoretical dimension of the present research attempted to review the available literature revolving around the study field of ESP as an expanded branch of ELT through highlighting the theoretical perspectives as far as ESP teaching is concerned. It discusses the emergence and development of ESP as a practical approach to language teaching that is tailored towards learner's specific target interests. It also discusses the various roles performed by the teachers in the ESP context.

As such, the first section of this chapter was devoted to depict the shift from traditional paradigm of EFL teaching/learning to current critically-based approaches to teaching ELT generally and ESP particularly. As the latter is the focus of the present study, following section of the same chapter is dedicated to the diagnosis of the various aspects of course design through foregrounding the conceptualization of goals and objectives, materials development, ESP classroom teaching methodology. The chapter also highlighted the context of the present research by investigating ESP teaching in Algeria which is also given momentum through pondering on the Algerian ESP project since its inauguration and shedding light on some of its current challenges and raising opportunities

In the same vein, the next section endeavours to complete the theoretical part of this study through indulging into related literature about the development of research on teachers' knowledge and practices mainly in terms of pertinent issues and pedagogical implications.

Section two: ESP Teachers' Knowledge and Practices

1. Introduction

The second section of this literature review chapter is devoted to the historical and theoretical background about research on teacher knowledge. It includes an overview of the perspectives, concepts and constructs of the knowledge base of language teachers that should be taken into account. It also focuses on the importance of investigating teachers' knowledge base in relation to classroom practices.

2. Theoretical Frameworks and Previous Research

In the last three decades there has been a renewal of interest in psychology, educational research and how teaching, learning and school were viewed in the research literature. This period marked a shift from examining a given phenomenon in terms of the outcomes it produces to attempting to explain such issues cognitively and gather data about it to make necessary changes. In this regard, earlier educational research concerned about language teaching and learning effectiveness shed light on teachers' subject matter knowledge and focused on providing a set of fruitful behaviours that can be adopted by teachers to improve their instructional practices and ensure students learning. In this sense, language teachers were supposed to respect and rely on the knowledge produced by behavioural theories introduced by process-product research for their classroom practices and choices (Cochran-Smith and Lytle, 1993).

Cochran-Smith and Lytle (1993) referred to the behavioural theorists and researchers responsible for producing knowledge base presented to teachers in their educational programmes as "outside experts". This perspective as stated by Cochran meant that practicing teachers had to construct knowledge about teaching by completely drawing on the results gathered by outside researchers who are not themselves involved in the activity of teaching,

ignoring completely the actual realities of the face to face experience with students in the classroom context as well as their own observations and suggestions.

Under the influence of skinner's theory of behaviourism, researchers viewed language teaching and learning as a scientific process and tended to examine the link between teachers effective behaviour (stimuli) that resulted in successful students learning (response) as an attempt to put forth or quantify a set of effective characteristics responsible for effective learning (Freeman, 1992; Richards, 1998; Shulman, 1987). Relying on research ideas, teachers had to treat learning and knowledge construction as a mechanical process (Berliner, 1990; Shulman, 1987). Under the same line of the influence of behaviourism on teaching theories, Kumaravadivelu (2006) views teachers as passive consumers whose mission is to apply theorist's ideas on their students. With such prospective in mind, teacher's thoughts and suggestions were not taken into account. They also found that their success was hard to justify and prove scientifically.

Against what had been the popular process-product research in the field of education (Dunkin & Biddle 1974), many researchers started to doubt the ability of behavioural theory to understand the complexity of teaching and learning processes alone and whether other elements could be considered. This dissatisfaction (Roberts, 1998) necessitates teacher researchers to criticize behaviourist's use of scientific method in an attempt to deduce good teaching behaviours because it seemed to be unsuccessful in practice. Researchers such as Elbaz (1981, 1983); Clandenin (1989) and Connelly (1987); Golombek (1998); Shulman (1987), and Kagan (1992) are research teachers who criticized behaviourist's objectivity and use of scientific approaches in researching teaching, claiming that their theories are incapable of practical solutions. This issue is a direct result of ignoring the complex nature of teaching and teacher's thoughts and actions. In this sense, the process- product research treated teachers as empty vessels whose role is to passively receive and accept their suggestions

disregarding teachers' active participation in implementing the proposed theories in their classrooms, and suggesting their own views and perspectives concerning whether the behaviourist ideas proved successful for students learning or not. This argument has, similarly, been used by Shulman (1987) to claim that the theories of behaviourism suffers from a lot of deficiencies since they neglected the valuable perspectives of teachers and the practical choices that they made in their classrooms. Elbaz (1981) pointed that teachers are directly involved in the teaching environment and therefore are considered as the best source of knowledge concerning what, why and how various elements interact in the classroom to result in successful learning. Recognizance of the shift of interest in psychology inspired researchers to investigate the knowledge processed by teachers and how they translate what they know and understand into practices in their classrooms.

Respectively, the development of constructivist epistemology, which grants researchers with the ability to present people's knowledge and various understandings of reality based on different personal experiences, empower researchers to tail their studies within the scope of a qualitative paradigm. This is reflected in the use of descriptive methods such as interviews and classroom observations to investigate teacher's knowledge, its sources, and the challenges encountered by this category of teachers in implementing what they know into classroom practices and its implications for future advancement.

In his attempt to review literature about the concept of knowledge on research on teaching, Fenstermacher (1994) stated that an interesting distinction between knowledge produced by practicing teachers based on their experience, and the knowledge of teaching produced by theorists and researchers interested in teaching gave rise to an insightful line of research in their field. He, epistemologically, categorizes teacher knowledge research in form of four questions as follow:

a. What is known about effective teaching?

Researchers interested in answering this question tend to focus on a set of characteristics responsible for good teaching. Fenstermacher (1994, p.7) claims that, “researchers in this category do not see themselves as studying teacher knowledge so much as they perceive themselves producing knowledge about teaching ... they seek the determinant of good (successful or effective) teaching.” The previously mentioned process-product studies constitute a perfect illustration of this type of research.

The aim of these researchers is to make of teaching an objective process that can be controlled by applying scientific methods and collect data to produce knowledge responsible for good teaching. According to these researchers, teaching is not treated differently from medicine and law. Among researchers interested in this kind of studies is Gage (1992) who considered teaching to be an art based on science. Thus, he attempted to establish a scientific basis for teaching. This type of research program is interested in designing a science-oriented ground for teaching. They conceptualize information about teachers and teaching as “truly specialized knowledge” (Berliner, 1987, p8). This knowledge is gathered through the use of the positivist design in research on teaching where results are “intended to yield a commonly accepted degree of significance, validity, generalizability, and intersubjectivity” (Fenstermacher, 1994, p8). In other words, these researchers believed in the efficacy of a scientific search for knowledge about effective teaching with the use of experiential research design and quantitative data.

Researchers such as Golombek (1994) and Freeman criticized this category of studies believing that these researchers are “outside authorities”; as a result they fail to recognize many other behavioural and environmental elements that can intervene in the construction of teacher knowledge. Golombek (1994) added that employing scientific methods in researching

knowledge about teachers and teaching is limited because it ignored the background and experience of teachers who are directly engaged in the teaching context under research. She stated, in this regard, that:

What gets defined as teacher's knowledge may not only be ineffectual in practical terms for the teacher but may marginalize the status of teachers whose knowledge lies outside of the status knowledge domain. (p.405)

b. What do teachers know?

While the first type of research treated teaching as a science like process and established scientifically-oriented knowledge for teachers to rely on, the second question “what do teachers know?” seeks to investigate the knowledge already processed by teachers.

Researchers like Clandinin (1986) and Richards (1994) do not perceive teachers as passive receivers of information produced by others instead, they view that teachers hold a great deal of knowledge gained through training and experience that can inform their classroom practices. An important research in this category was carried out by Clandinin (1986, p.8-9) when he stated:

Teachers are commonly acknowledged as having had experiences but they are credited with little knowledge gained from experience. The omission is due in part to the fact that we have not had ways of thinking about this practical knowledge and in part because we fail to recognize more practically oriented knowledge.

In agreement with this view, Richards (1994) further stressed the importance of experience in shaping one's life both on the personal and professional level. Therefore, teachers cannot set their life apart from their classroom actions.

In the quest of exploring what teachers know, two different stands of research surfaced under this type of studies; the first view is shown in the work of Elbaz (1981), Freeman, and Clandinin and Connelly who focused on teacher's practical knowledge. The second view is conceptualized in the work of Schon, Munby, and Russell who focused on reflective knowledge.

Since the present study seeks to explore the practical knowledge of ESP teachers from their own perspectives and the challenges they encounter in exercising what they know in practice, both practical and reflective knowledge of teachers fall within the scope of this study.

c. What knowledge is essential for teaching?

One of the researchers interested in understanding the knowledge required for teaching is Lee Shulman (1986, 1987, and 1992) who criticized the process-product research for being heavily limited and fruitless when applied in the field of education. This category of research shows interest in examining the process of learning to teach a subject being familiar with or not yet acquired (Grossman, 1990; Grossman, Wilson & Shulman, 1989; Wilson, Shulman & Richert, 1987). To phrase it differently, it focuses on what type of knowledge teachers need to be able to do their work.

Shulman's work in this concern is more directive than descriptive in a way he focuses on categorizing knowledge that teachers should be equipped with so they can successfully perform their job. Relatively, he shows interest in both formal knowledge and practical knowledge. Suggesting that teachers need them both, Shulman differentiated between three types of knowledge; propositional, case and strategic throughout his progress in research on teacher knowledge

Propositional and case knowledge are viewed by Shulman to be part of theoretical, formal knowledge possessed by teachers. Strategic knowledge, relatively, refers to the actions and professional judgements and skills done by teachers, executed by teachers in their attempt to find solutions and appropriate practices to the appearing conflicts in the classroom context. In other words, strategic knowledge represents the skills and actions taken by teachers when theoretical principles (propositional knowledge) prove ineffective in settling particular and unique issues faced by teachers in practice (case knowledge). Strategic knowledge, in this context, can be regarded as practical knowledge.

Unlike Elaz, Clandinin and Connelly whose studies tend to rely on describing teacher knowledge, Shulman's work was more directive as he wanted to draw clear norms for the knowledge carried by teachers with special emphasis on pedagogical content knowledge (PCK) which will be discussed in sub-section 2.8.4 of this chapter.

d. Who produce knowledge about teaching?

The problem of who should assume responsibility for producing knowledge about teaching surfaced when studies attempting to explore teacher knowledge and practices gained more attention in order to establish knowledge base for teachers and teaching. Among researchers interested in answering such question are Marilyn Cochran-Smith and Susan Lytle (1990, 1993) who initiated a "teacher research movement". This movement is based on their shared beliefs that teachers are not a passive recipient of knowledge generated by university researchers but active agents in their professional fields as they use both university researchers suggested information and the knowledge they develop themselves as a result of experience, interaction with other on-going activities in a large environmental field.

According to the reviewed literature, it could be argued that types of research on what do teachers know? And who produce knowledge about teaching? better inform the present

study which attempts to investigate the knowledge of teachers and their own perceptions about teaching their subjects, how that knowledge informs their teaching practices, and the challenges they encounter in the implementation of knowledge in action. The works of Elbaz, Clandinin and Connelly, Golomek, Shulman and Schon, therefore, better inform this study as it focused on the practical and pedagogical knowledge of ESP teachers.

3. Definition of Terms Used in the Study

3.1 Defining Knowledge and Beliefs

The term knowledge in the current study is used in its broad meaning to provide teachers with freedom to cover a wide range of thoughts, ideas, views, intuitions, memories, awareness, insights, understanding, beliefs and values. Thus, it is suitable to use it in its general meaning especially because it is very difficult and complex to draw boundaries among such terms. Besides, teachers may not have clear distinctions among these terms and may use them to mean the same thing.

It can be observed from literature review on teacher knowledge that researchers and scholars use this broad meaning of the term “knowledge”. In most studies, it is used to reflect the same meaning of beliefs and defined by some scholars as “justified belief”. In this respect, Zheng (2009, p. 74) states: “In literature, knowledge is either taken as different from beliefs by nature, or used as a grouping term without distinguishing between what we know and what we believe”.

The statement shows the complexity of making a distinction between the two terms. This view is shared by a number of researchers such as Borg (2003) who chooses to include the term knowledge, belief, and value under the term teacher cognition to avoid such problem. Similarly Verloop et al (2001) uses the term teacher knowledge to refer to teacher cognition. Jonson (1999) defines teacher knowledge in relation to practice which encompasses teachers’

experience and knowledge of their profession as influencing factors shown in their classroom actions (Abdelhafez, 20210). Grimmett and Mackinnan (1991) used the label “craft knowledge” to focus on the practical aspect of knowledge. This latter is not different from Elbaz’s use of the term “practical knowledge” to express his interest on teachers’ use of the knowledge they possess when encountered with different situations in their classroom context (Abedeen, 2015). Other researchers who, similarly, used the concept “knowledge” to refer to the cognitive processes that guide teacher’s actions in their classrooms are (e.g. Elbaz, 1981; Turner-Bisset, 1997; Mayer & Marland, 1997; Golombek, 1998; Meijer et al. 1999, 2001; Gatbonton, 1999; Johnston & Goettsch, 2000; Tsang, 2004; Mullock, 2006; Xu & Liu, 2009).

Focusing on the personal aspect of the knowledge of teachers, Connelly and Clandinin use the concept ‘personal practical knowledge’ considering knowledge in this way to be ‘local’ (Goldenberg & Gallimore, 1991) and context bound (Abedeen, 2015).

Research in the context of education makes use of the term ‘beliefs’ to refer to “ideas and theories that teachers hold about themselves, teaching, language, learning and their students” (Richards & Schmidt, 2002, p.541). Beliefs are considered as part of teacher thinking and “reflect the knowledge or information they may have of specific aspects of their work” (Kennedy & Kennedy, 1996, p. 355). It is these ideas, theories and thoughts that teachers possess can be considered as perspectives and principles that inform their teaching. Many studies conducted in the context of teacher knowledge used the term knowledge and beliefs interchangeably. This is mainly due to the similarities that exist between the two concepts. Therefore, it seems very difficult to draw clear distinctions on where belief ends and knowledge begins. In this regard, Pajaris (1992.2), views that the notion of knowledge or belief “is a messy construct that travels in disguise and often under alias” such as “implicit theories” (Clark & Peterson, 1986), “images” (Golombek, 1988), “conceptions” (Ekblad &

Bon, 1994), “maxims” (Richards, 1996), “personal theories” (Borg, 1999), and “perception” (Schulz, 2001, Abedeen, 2015).

Pajaris shares the same view with researchers who believe that separating between knowledge and belief is a useless effort (Pajaris, 1992; Richardson, 1996; Calderhead, 1996; Woods, 1996), and acknowledge the complexity of distancing the two terms which has always been hard to accomplish.

Nevertheless, Kagan (1992) views that a great deal of the knowledge gained by teachers throughout their profession can be considered as a belief. This knowledge evolves thanks to their experience to form a well-organized set of beliefs that includes teacher’s perceptions, judgements and behaviours. Richards and Lockhart (1994) stated that beliefs include both subjective and objective aspects, actions and decisions inside their classrooms. Pajaris (1992, p.311) supports this claim and views that beliefs are stronger than knowledge in terms of determining the way teachers choose to deal with various issues in their classrooms. Connelly and Clandinin (1988:25) defined teacher knowledge in relation to practices and considered that the knowledge held by teachers is reflected in their teaching practices (Abedeen, 2015). Thus, to avoid getting further confusion that can rise out of the attempt to limit the various uses and senses of the term knowledge, this paper could use the term knowledge in its wildest possible sense to include teacher’s beliefs, perspectives, judgements, views, perceptions, conceptions, personal theories, internal mental processes, practical principles, justifications and the entire range of their understanding. Nevertheless, knowledge and beliefs about teaching and learning are seen to have a significant influence on teacher’s classroom practices and decisions.

3.2 Practical knowledge

The shift that took place in the field of education resulted in a more inclusive and subjective form of studies that attempted to value teachers' voice and allow them to express their views concerning the knowledge they establish when performing their teaching activities and extending their roles (Elbaz, 1981: 43). Moreover, this type of research is interested in how teachers make sense of the knowledge they possess while observing and understanding their actions and the decisions they made in their teaching contexts (Clandinin & Connelly, 1988). This new line of research gives rise to an interesting area of research called "teachers' practical knowledge."

Elbaz (1981) is one of the widely known researchers who provided a comprehensive investigation of the teachers' practical knowledge. In the Canadian context, Elbaz (1981) examined the practical knowledge of a high school English language teacher called Sarah. The guiding assumption behind her study is that "teacher is the single factors that carry forward our understanding of the teacher's role in the phenomenon of teacher's knowledge." In her study, Elbaz suggested five areas to be the major elements and components of teacher's practical knowledge which are: knowledge of self, milieu, subject matter, curriculum development and instruction.

In practice, teachers' knowledge revealed three categories; first, as rules of practice, which are teachers' well established knowledge and skills held by teachers and the way it is used in actual classroom situations (Elbaz, 1983). Second, as practical principles, which refers to teacher' purposes and third, as images which are related to teachers' own perception of themselves and their position in the teaching activity. This area helps the teacher better organize the knowledge possessed in the appropriate subjects.

Using interview, the study of Elbaz (1983) shed light on Sarah's knowledge and beliefs about her profession without imposing theory or structured methods on the form of research conducted. Her findings revealed that "what Sarah knows is not theory or empirical propositions but how to carry out her instructional tasks, resolve conflicts, adjudicate competing considerations and connect aspirations to plans and then to instructional performance" (Fenstermacher, 1994: 8). These sets of conceptualizations and understandings are what Elbaz believes to be Sarah's 'practical knowledge'.

The concept of practical knowledge is also promoted by Clandinin and Connelly (1987, 1991). They suggested that teachers' background knowledge does not only affect their present teaching experience but constitute a fundamental assumption from which their future plans and actions are developed as well. Clandinin (1992) argued that:

It is knowledge that reflects the individual's prior knowledge and acknowledges the contextual nature of that teacher's knowledge. It is a kind of knowledge carved out of, and shaped by, situations; knowledge that is constructed as we live out our stories and retell and relive them through processes of reflection (p.125).

The method used by Clandinin and Connelly (1991) in exploring teachers' knowledge is not different from the story telling method used by Elbaz. They listened to teacher's stories and justifications to understand the reason behind teacher's actions in particular situations. Similar to Elbaz (1983), Clandinin and Connelly's (1991) choice of the narrative approach was mainly to prevent the influence of any suggested theories on the personal practical knowledge of teachers. They describe the method used to be "gentle" and "soft" because it allows teachers to openly tell their stories and express their knowledge and perceptions which helps researchers better understand and explore the personal practical knowledge held by teachers (Fenstermacher, 1994:11). In this sense, interviews are seen as the main tool of

gathering information for researchers whose quest is to achieve understanding of teacher's professional experiences, their perceptions about teaching their subject and justifications for their actions.

Considering these researchers' views in exploring teachers' personal practical knowledge, much evidence has been gathered which supported the claim that teacher's classroom practices are determined, to a substantial degree, by their personal pedagogical belief system (Borg, 1998, 2015). While the literature is replete with research into what should be taught (Hewings, 2002; Borg, 2015), relatively there is paucity of research investigating teachers' perspectives about ESP teaching. Therefore, researching teacher's practical knowledge and beliefs turns to be significant area of educational research. This is important because such inquiry can provide nuance understandings about the congruence between teachers' perspectives and classroom practices, which can, in turn, help teachers improve their teaching and learning processes.

3.3 Reflective Knowledge

Seeking a better understanding of the knowledge that teachers hold and bring into their teaching contexts, Donald Schon's (1983, 1987, and 1991) work on reflective knowledge criticized technical rationality and its belief in the use of science-based methods to control the evolving issues related to practice. The conceptions that Schon brought to practical knowledge are different from the previously mentioned assumptions provided by Connelly and Clandinin (1991). According to Schon, knowledge cannot be scientifically examined as suggested by research-based theories rather, it is the knowledge of practice which resides in the midst of chaos that exist in authentic situations where technical rationality views prove ineffective and create lack of confidence in professional knowledge. Thus, he valued the

knowledge gained from experience as a result of direct engagement in the context. He states “that our knowledge is in our action” (Schon, 1983: 49).

In this respect, Schon’s main idea is that many insights into our thought processes can be obtained through knowing and reflecting in action because it is the knowledge needed and utilized by teachers when they decide what to do and how to do it. In this sense, reflective knowledge which is gained through direct involvement in the teaching situation is different from theoretical and formal knowledge. Investigating teacher’s reflective knowledge is crucial since it brings verifiable insights into the teaching profession that cannot be achieved by outside theorists and researchers being outside the classroom context (Kumaravadivelu, 2006: 10).

Researchers such as Munby & Russel (1992) stated that Schon raises their awareness towards the importance of the knowledge that teachers learn from their experience when he criticized technical rationality and valued practical knowledge. Therefore, they decided to consider the role of context as a crucial element that can affect teacher’s decisions in their attempt to examine teacher’s practical knowledge.

Teachers’ reflections on their actions in classroom situations constitute a useful source of knowledge since it provides teachers with the chance to realize their implicit knowledge base and learn from experience. Therefore, such studies that draw attention to teacher’s reflection and reflective practice are very useful and can inform the present study in many ways and bring new interesting insights into the area of teacher research and teacher’s education programmes so that more opportunities are given to teachers to learn through reflection.

4. The Knowledge Base of Language Teaching

Teaching profession is seen as a highly skilled activity and one that calls for extensive knowledge base and intellectual abilities. However, considerable confusion remains about what constitutes the knowledge base of ESP teachers and how this can be applied to the dilemmas regularly encountered in their classrooms.

Research in the field of language education had started to show tendency towards understanding how teachers acquire knowledge of teaching and how they use such knowledge in their profession. This in turns, led to questioning the knowledge base of a language teacher. A knowledge base can be described as “a widely accepted conception of what people need to know and are able to carry out their work of a particular profession” (Johnson, 2009). In the context of ESP, teachers’ knowledge about language is not that different from the knowledge held by EGP teachers. The knowledge they possess constitutes a clear conceptualization of the structure of language system, and general theories and methods of teaching and learning. In teaching, it is fundamental for teachers to be equipped with this knowledge to practice their teaching activities yet, it may not be sufficient in the context of ESP teaching, given that this category of teachers are assigned to play various roles and make certain pedagogical choices in their highly specialized classrooms. This view of teacher learning reveals that unlike EGP teachers, the knowledge base of ESP teachers must include not only disciplinary or subject matter knowledge, it must also account for another element that relates to the specialized content and target related nature of ESP teaching situation.

The issue, as Shulman (1987) cogently argues, is that teachers might possess disciplinary knowledge of what language is and how it is used and acquired. However, they may not possess the appropriate strategies and techniques to apply knowledge to teach the content to students and ensure language learning. Therefore, teachers are in need of additional

components that would enable them apply what they know in various classroom situations to teach effectively. Teaching is a complex mission that, naturally, requires a complex knowledge base which teachers need to perform multiple tasks simultaneously and implement effective teaching and learning environment. While several models exist, the most influential model describing the knowledge base required by teachers was developed by Shulman and his colleagues (1987) in the late 80s. Shulman divided teacher knowledge into seven important components: subject matter knowledge; general pedagogical knowledge; pedagogical content knowledge, curriculum knowledge; knowledge of educational aims, goals and purposes; knowledge of learners and their characteristics; knowledge of learning. The first three knowledge domains have been widely used in literature but have been further developed (Konig, 2015; Ulferts, 2019; Fernandez, 2014, Guerriero, 2017). For example, further research used slightly different concepts and elaborated the definition of general pedagogical knowledge to include knowledge about learners and their characteristics or ways of assessing students' learning and outcomes. Guerriero (2017) suggested a broad definition to include areas of general pedagogical knowledge. He defined it as “the specialised knowledge of teachers for creating effective teaching and learning environments for all students independent of subject matter” (p. 80). Beyond these three knowledge domains, few other conceptualizations exist. For instance, Grossman (1990) and Carlsen (1999) include context-based factors as an additional category of knowledge to stress that context is part of teacher knowledge. Carlsen (1999) distinguishes knowledge about the “general educational context” such as the university from “knowledge about the specific educational context” such as the classroom and the students. Baumert and Kunter (2013), on the other hand suggested “organisational knowledge” and “consulting knowledge” as additional knowledge categories.

4.1 Content Knowledge

Content knowledge constitutes a significant area of teacher knowledge required by teachers to effectively perform their profession. In the context of ESP however, this kind of knowledge encompasses not only knowledge of subject matter but also the content knowledge of different specialized disciplines that exists within the field of ESP. This area of knowledge places special demands on the ESP practitioner compared to the language teacher who is not required to deal with unfamiliar subjects and concepts outside his zone of expertise. In ESP it is not sufficient for the teacher to know about subject matter, what is more important is to know how to communicate content pedagogically according to the purposes of ESP learners and the requirements of their target disciplines that EGP teachers do not have to care about since the aims and objectives of general language programmes are well identified by curriculum designers.

It is highlighted through literature that for ESP teachers to successfully translate the knowledge they carry into classroom practices, a deep understanding of what ESP is and the objectives it was meant to serve are required from the teachers. Beyond developing a content, ESP teachers need to be aware not only of the technical knowledge of English that EGP teachers are not concerned with, but also of the language use in various discourses of the target fields. This is because teaching a foreign content which has not been deeply understood by a teacher is a difficult task to accomplish (Hegarty, 2000). Acquiring a specialized knowledge that is used in particular target situations constitutes a challenging task for ESP teachers who have not received any kind of specialized knowledge base or training to deal with the particular needs that ESP serves. This situation generated many debates about who should be teaching ESP; whether English language or subject specialist teachers

The above highlighted debate also contributed to one of the current controversies in ESP research which deals with questioning the amount of content knowledge expertise ESP practitioner is must hold in order to teach in ESP contexts. In response to this question, researcher's views and comments vary between those who believe that content knowledge is relevant to teach ESP (Troik, 1994) and those who believe that this type of knowledge is not sufficient to teach ESP and might require other new conceptions such as pedagogical content knowledge and classroom management (Taylor, 1994; Hoyle and John (1995). In order for ESP practitioners to attain the ESP course objectives, they need to possess specific type of content and pedagogical tools to ensure that learners are exposed to English that reflect the needs and wants of their future target environments.

4.2 Pedagogical Knowledge

The role of teachers in the ESP context is highly challenging since their responsibility goes beyond simply conveying knowledge of content and pedagogy to enhance learning, but also includes the need to reconceptualise that knowledge with pedagogies capable of connecting both the specific content of ESP which can be highly technical and learner's interests together.

Two elements of pedagogical knowledge have been described by Shulman (1987): general pedagogy which includes broad principles and strategies of teaching in general and content pedagogy which includes “the ways of representing and formulating the subject that make it comprehensible to others” (Shulman, 1986, p. 9). In other words, the knowledge of how to teach a subject which Shulman called pedagogical content knowledge (PCK). Cognizance about the fundamental importance of this kind of knowledge makes it an interesting topic of research. Research investigating PCK revealed that this form of knowledge is based on teachers' beliefs perspectives and practices and encompasses a set of

skills, tasks and actions that teachers need and use in their classrooms teaching activities. Research also shows that PCK is the most consulted type of knowledge by teachers among others (Gatonton, 1999). PCK includes a set of strategies and techniques that teachers can use to enhance learning. It also covers knowledge required for designing adequate tests to assess learner's understanding and measure their achievements of language use in various contexts. Researching PCK in language education is still in its initial phase. Researchers such as Gatbonton (1999); Mullock (2006); Meier et al. (1999) and Golombek (1998) attempted to investigate the components of PCK of language teachers in various areas of interest. However, they agree that knowledge of learner constitutes an important component of teacher knowledge (Abdelhafez, 2010). Other elements of PCK includes environmental fields where teaching and learning takes place as well as the educational policy. In the same line of interest, Golombek's study concluded four elements that can frame teachers' personal practical knowledge which are: knowledge of self, of subject matter, of context, of instruction. These elements of knowledge are interrelated and they vary greatly as they appear in teacher's justifications for their practices.

4.3 Curriculum Knowledge

Curriculum knowledge is considered as a crucial category of teachers' knowledge. Shulman views this type of knowledge as a general understanding of the programs tailored for the teaching of specific topics and a clear identification of the instructional procedures that serves the aims of those programs which is the foundation of curriculum planning and course design. Curriculum knowledge includes awareness of various instructional processes, the type of material to be used and teaching procedures. It also entails the identification of the learning goals and objectives as well as the methods of assessment. ESP teachers need to be aware of the target goals and objectives for the intended subjects and topics for the teaching of specific learners to be chosen according to different teaching situations. Moreover, ESP teachers must

consider learners context, requirements and expectations from the course to choose appropriate tools and materials as well as a clear understanding of the aims that assessment is meant to serve (Shulman, 1986, p.10).

Shulman refers to two dimensions of curriculum knowledge which is lateral curriculum knowledge and vertical curriculum. Lateral knowledge refers to knowledge about what their students are learning in other subject areas in an attempt to link the knowledge of curriculum that they teach in their own classes to the curriculum taught in other classes. In the field of ESP, lateral knowledge can be challenging as it imposes heavy demands on the ESP teacher who is unfamiliar with the subject being taught in scientific faculties. Yet, it is considered as crucial. Vertical curriculum knowledge refers to teacher's "familiarity with the topics and issues that have been and will be taught in the same subject during the preceding and later years at school, and the material that embody them" (Shulman, 1986, p 10). This knowledge is helpful in making student's experience in learning a subject more interrelated.

In ESP, curriculum knowledge is very important for teachers since it provides them with the ability to realize different instructional processes and materials relevant to the designed programs. It is equally important for teachers to make appropriate decisions concerning the teaching procedures, methods and assessment instruments that serve specific goals and objectives of the programme.

4.4 Pedagogical Content Knowledge (PCK)

The claim for pedagogical content knowledge was founded in Shulman's observations that effective teachers in the "Knowledge Growth in Teaching Study Project" employ metaphors, analogies and various forms of illustrations that were appropriate to student's learning as well as the subject matter being taught (Carlsen, 1988; Grossman, 1999). According to Shulman (1986), PCK is a unique domain of teacher knowledge "which goes

beyond knowledge of subject matter per se to the dimension of subject matter knowledge for teaching” (p.9). It was defined by Shulman (1987) as:

A special amalgam... or blending of content and pedagogy into an understanding on how particular blending of content and pedagogy into an understanding on how particular topics, problems or issues are organised, represented and adapted to the diverse interests and abilities of learners and presented for instruction (p. 9).

Nevertheless, this definition revealed that PCK is more of a combination between content knowledge and pedagogical knowledge rather than being a distinct domain and knowledge. PCK also includes teacher’s ability to anticipate learning difficulties and student’s misconceptions combined with the ability to help them understand subject matter knowledge employing the “most useful forms of those representations, and the most powerful analogies, illustrations, examples, explanations and demonstrations in a word,, the ways of representing and formulating the subject that makes it comprehensible for others”. (ibid: 10)

This definition reveals four components of PCK: representations, which refer to the range of analogies, illustrations, examples, explanations and demonstrations used to present key ideas and concepts to students; what makes the learning of specific topic easy or difficult; learner prior knowledge: preconceptions and misconceptions that students bring with them, and knowledge of appropriate teaching strategies

The ability to understand a subject is different from the ability to represent it to learners. It requires a distinct type of knowing a subject in form of appropriate teachable units to be taught. Grossman (1999) further divides PCK into four components: conceptions of purposes for teaching a subject matter, knowledge of student’s understanding, curriculum knowledge, and knowledge of instructional strategies. Shulman argues that PCK is subject to

development, an important aspect that helps teachers gain expertise. Relatively, Shulman highlights “pedagogical reasoning”, a process by which teachers use subject matter knowledge to produce PCK (Shulman, 1987; Wilson et al, 1987)

Although conceptualisation of PCK differs, literature on the issue revealed that two components are mostly included, knowledge of students understanding and learning, and knowledge of teaching in concrete content domain (Depaepe et al, 2013). These components refer to subject matter in concrete situations, a fact that places PCK apart from general PK and learners, learning and teaching. Recent studies show that PCK included distinct and unique features compared to CK concerning teacher’s ability to predict appropriate class activities and students understanding (Baumert et al, 2010; Sadler et al, 2013). These studies resulted in two main conceptualizations of PCK. The first, described PCK as a redundant concept contained within subject matter knowledge (McEwan and Bull, 1991). The second is based on the integrative model of PCK (Gress-Newsome 1999), content knowledge, pedagogical knowledge and context knowledge are considered as distinctive areas of teacher knowledge, and PCK can be generated from these resources in actual teaching situations.

PCK of English language teachers becomes one of the specific issues to be discussed. In this respect, Liu (2009) discussed the PCK of English teachers in the US context. Based on Shulman’s model, Liu (2009) conceptualizes PCK as the integration of subject and pedagogy. The research focused on the process by which teachers translate subject matter into well organised, interesting units that meet student’s needs. Liu (2009) concluded that ESL teachers with CK would be able to teach whereas, those with PK would be more efficient in providing a variety of teaching strategies. PCK, as an integration of both content and pedagogy can be developed through practice in actual teaching environments. In the same line of interest, Irvine-Niakari and Keily (2015) investigated PCK of ESP teachers in teaching reading skills. The research concluded that these teachers need to possess not only

knowledge about text and its context, but also knowledge about reading instructional strategies to help student properly understand the text as a whole.

The research also highlighted the role of teacher's mental cognition in effective teaching. This includes teacher's way of thinking, knowing, and personal beliefs about the complex nature of teaching and learning. At this stage, PCK components encompass teachers understanding of subject, learners, curriculum, context and pedagogy. Subject matter and pedagogy are central elements of teacher's knowledge in real teaching contexts. Shulman's introduction to the concept of PCK was influential in the field of teacher research. It paved the way for further research on teacher knowledge in the context of ESP. It also highlighted the significance of teacher's understanding of the domain and its relationship to teaching.

4.5 Knowledge of Learners and their Characteristics

This type of knowledge refers to cognitive, physical, emotional, social, historical and cultural factors that account for student's needs and interests (Shulman, 1987). Research into teaching profession has identified teachers' knowledge of their students as the main contributor to students learning in schools and is considered as a critical element for student's socio-emotional growth and well-being (Burroughs et al, 2019; Clinton, 2016). This type of knowledge is highlighted by Shulman (1987) and Turner-Bisset (1999) in their classification of knowledge base for teaching. It refers to teacher's awareness about student's understanding.

Teachers are responsible for creating positive learning environment (Fenstermacher, 1994). This responsibility requires teachers to possess knowledge of students understanding backgrounds, perceptions and attitudes to learning (Hyland, 2006). With this knowledge in mind, teachers can effectively select teaching material and modify target instruction towards student's learning needs. Teacher's knowledge of their learners and characteristics includes

awareness of the unique skills, backgrounds and beliefs about needs for language learning that each student brings to the classroom. Research suggests that those beliefs affect student's variations in learning expectations such as their motivations and interests (Cook, 1996).

For instance, different students have different perceptions toward language learning while some come to language classroom with awareness about the need to extend their knowledge by learning English as a foreign language other than their native language; others perceive it as a threat to their own native culture and identity (ibid). Those perceptions have strong impact on student's behaviours and experience as language learners. In this regard, it can be stated that students contribute largely to language classroom since they come with previous schemata on language learning. This becomes especially very important in the context of ESP. therefore; it is of paramount importance for teachers to be knowledgeable about their student's preconceptions and misconceptions towards ESP in different settings and their needs in learning English.

Additionally, teachers need to account for their students' variations in learning language such as the factor of motivation which guides their desire to succeed in learning. In this context, Gardner and Lambert (1972) described students motivation as "the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes towards learning the language" (as cited in Ellis, 2000, p.509).

The role of learner's motivation in ESP is strongly acknowledged in the field of educational psychology as stated by Ellis (2004):

Not surprisingly teachers recognize the importance of motivation, both with regard to the motivation that students bring to the language classroom (extrinsic motivation) and the motivation that is generated to inside the classroom through the choice of instructional activities (intrinsic

motivation). Similarly, motivation has attracted increasing attention from researchers, reflected in a growing number of theoretical models of L2 motivation and in consequent research studies (p.11).

Therefore, this component constitutes a fundamental factor in ESP teaching/learning process because it aims to satisfy the needs of students. After all, teachers assume the responsibility for enriching learning experience, creating a favourable climate for language learning and personal development, and facilitating learning to suit individualized needs. Teachers are also active agents of the educational arena and inclusion. They are in charge of creating inclusive learning environment

The above discussion revealed that the knowledge that teachers hold about their students could have a great influence on their classroom settings. Students' different backgrounds and beliefs imply the need for differentiation of instructional methods and personalization of syllabus. In this way teachers need to vary their design decisions and be selective with the teaching materials and approaches employed in terms of both content and performance to fit learners' needs. In addition to this knowledge, Johnson (1992) asserts the role of student's psychological choices. The findings of his case study of ESL teachers showed that the student's different expectations and behaviours affect teacher's instructional decisions and actions.

In the ESP context, the process of need analysis allows the teacher to understand learners' needs lacks and wants. Needs analysis permits the teacher to gather information about students' learning purposes from the ESP course, motivation for ESP study and their learning preferences. Knowledge of students' understanding of ESP could have pedagogical and curricular importance. Pedagogically, it allows the ESP teacher to make effective instructional decisions to cater for their students' various needs and interests. As far as

curricular importance is concerned, knowledge of students will enable teachers to design relevant courses, and set clear objectives of what students need. This becomes even more important since ESP is tailored to learners' needs which can be considered as a starting point for ESP teaching.

Even though the fundamental premise that this discussion rests on might be challenging- that teachers alone are responsible for the miracle of learning, and need to even know the unique characteristics about every student- the idea here is related to teachers' rethinking their knowledge of students and how it relates to curriculum, and then adapt both curriculum and learning models to fit their students' personalized learning needs.

4.6. Knowledge of Educational Contexts

Investigating teacher's practical knowledge could also be achieved through taking into consideration the context in which ESP teaching takes place. Teacher's thoughts and understandings could be shaped by various context-based factors, representing, thus a set of beliefs and perspectives that they attempt to realize in real classroom context. However, the application of what teachers know might be encountered by several actual contextual elements as stated by Xu & Liu (2009) that the reality of teacher's situations is very different from their own accounts.

Thus context has considerable effects on the relationship between knowledge and practice. These researchers further believe that the educational context in which teaching takes place could either facilitate or hinders the actualization of teacher's knowledge in real practice. In this respect, Verloop et al (2001) maintained that teachers are not always conscious about what they do in their classrooms. This view reveals that not all teacher's knowledge is represented in practice. In other words, teachers sometimes possess the knowledge but they are not necessarily aware of how to apply it in their classroom. ESP

teachers in Algeria are encountered with different contextual constraints such as the absence of syllabus, lack of teaching resources and excessive class size. Along with the absence of ESP training, these constraints could negatively affect the ESP teaching and learning situation.

4.7. Technological Pedagogical Content Knowledge

Promoting the new electronic learning environment and digital culture requires effective integration of technology in foreign language teaching practices. Teaching language requires a successful combination between content knowledge, pedagogy and technology. In other words, this blending refers to the ability to mediate content through the use of effective pedagogical strategies and the use adequate educational technologies available. The relationship between these components contribute to the development of technological pedagogical content knowledge (TPCK) framework suggested by Mishra & Koehler (2006). This framework provides a theoretical basis for discussing the integration of technology within the pedagogical content knowledge of foreign language education in the digital era. The construct of TPCK (Mishra & Koehler, 2006; Koehler & Mishra, 2013) refers to the components of teacher knowledge required for effective teaching with the use of technology within a particular subject. It is the interrelated nature of teacher's technological, pedagogical and content domains of knowledge that contribute to successful integration of technology into foreign language classroom. The COVID-19 pandemic has made the role of general pedagogical knowledge for online teaching more visible than ever. Teachers with adequate digital literacy could adapt their online teaching more to student needs and maintained frequent contact with students during school closure (Konig, Jager-Beila and Glutsch, 2020).

The interrelated nature of teacher's technological, pedagogical and content domains of knowledge shows that teaching foreign languages in the 21st century has become a complex process which necessitates a combination of a new set of knowledge, skills and behaviours.

Zhao (2003) acknowledges the importance of teaching foreign language through the use of technology believing that it can provide students with high quality authentic materials, communication opportunities and immediate personal feedback. These benefits may contribute to the richness of the students' learning experience. He equally stressed the need for providing teachers with adequate training so that they can successfully implement technology in their teaching practices. It can be noticed that the use of technology alone is not enough for the success of the course; it is teacher's mastery of the subject matter, along with the pedagogy on how to creatively represent that subject and make it comprehensible for students that add to the success of the course. Moreover, Kang and Li (2010) stated that teachers should help their students use technology to connect with the native community outside the classroom since he believes that the task is challenging for students to manage. Effective teaching entails the ability of language teachers to manage the complex interplay between the three areas of knowledge; technology, pedagogy and content in teaching the specific subject while catering for the requirements of language teaching skills for the digital era.

In today's digital world, new technologies are successfully used in ESP courses all over the world. The benefits of technology in ESP pedagogy is acknowledged by Butler-Pascoe (2009, p. 2-3) who argued that it can provide authentic material, communicative activities and effective strategies for language development in discipline specific settings and situations. He further stated that technology can be very effective in rising students' motivation, self-esteem and autonomy in learning English. Some of the extensively used technologies by ESP teachers around the world are the internet, Skype/online conferencing tools, mobile technologies and social media.

ESP Teachers need to be adequately prepared to combine the various components or areas of knowledge into a comprehensive and fruitful framework for language teaching which

not only integrates technology, but also considers the appropriate pedagogical practices that serve learners needs. To handle the increasingly changing world characterized by diverse digital technologies and devices in support of language teaching, teachers are not only expected to renew their knowledge, but their skills and strategies as well so that they can translate their technological knowledge into effective practical decisions and actions.

The specificity of ESP teaching reviewed above represents a challenge in itself, in the way that teachers have to deal with a field specific content that might be completely foreign to him. Accordingly, the ESP teacher whose multiple roles include that of a teacher, material designer, collaborator, assessor and researcher have expanded and evolved through the affordances of technology (Arno-Macia, 2012: 90; Lesiak-Bielawska, 2015).

5. Sources of Teacher Knowledge

Research on teacher knowledge revealed that background experience contributes largely in shaping teacher's understanding, beliefs and perspectives (Freeman, 2002). In this respect, Clandinin (1985) maintained that the core knowledge base of teachers encompassed elements of professional experiences which contribute to the development of new understandings and knowledge. Based on this view, it can be stated that teacher's prior knowledge is a potential element that influences teacher's practical knowledge. This suggestion is further agreed by researchers such as Hegarty (2000) and Borg (2003) who believe that teaching experience and interaction with learners contribute to the growth of teacher knowledge base. Borg (2003) added that prior teaching experience informs teacher's cognition. He stated that:

Teachers' prior language learning experiences establish cognitions about learning and language learning which form basis of their initial

conceptualization of L2 teaching during teacher education, and which may continue to be influential throughout their professional lives (p.88).

As a concern for his study, Borg (1998) explored teacher's pedagogical knowledge and teacher cognition in the field of second and foreign language teaching. The data gathered in his study identified three main categories which guided teacher's practical decisions. The categories were: knowledge of context, educational experience, and teaching experience.

Other researchers such as Freeman (1996), Richards (1994) highlighted the role of teachers experience as learners in informing and shaping their teacher educational learning programme as well as their instructional practice. Richards and Lorkhart (1994) also indicated that past experience as learners and teachers is not the only factor that shapes teacher's knowledge. They also included teachers' personal education, established teaching practice and personality factors.

Researchers' studies and conclusions seem to elaborate that teacher's experiences are influenced by two major theories of teaching and learning; behaviourism which can be shown in teacher's being passively influenced by traditional methods used by their teachers and repeating what they have mastered as learners and establish knowledge, and constructivism which can be shown in teacher's actively construct new knowledge through the accumulation of previous learning.

6. Conclusion

Since the current study focuses on teachers' knowledge and practices, this section of chapter one reviewed the literature on these areas. It tackled the development of research on teacher knowledge based on various epistemological stances. Teachers' practical and pedagogical content knowledge were given a special emphasis since this study attempts to explore ESP teacher's knowledge and its impact on their practice at Saad Dahlab University. Other important constructs related to practical knowledge such as ESP teachers' background experiences both as learners and teachers were reviewed in order to identify the possible sources that informed their teaching practices.

CHAPTER TWO:
RESEARCH CONTEXT AND METHODOLOGY

2.1 Introduction

The present chapter investigates the ESP teaching situation in Saad Dahlab University of Blida 1. Also, it discusses the research methodology followed in the current study for the purpose of investigating ESP teacher practical knowledge and attaining the desired objectives. The construct of practical knowledge of teachers is viewed to be context bound (Borg, 2006). Furthermore, the process of language teaching and learning is complex in nature which is influenced by certain contextual features. This is even more important in the ESP setting (Holliday and Cooke, 1982; Kaewpet, 2009). Therefore, the present chapter ought to introduce a general background of language teaching situation in the Algerian educational system.

It starts by reviewing the language teaching education in Algeria in general and ESP in particular. This is followed by overall explanation of relevant concepts such as ontology, epistemology and methodology. It further discusses the theoretical assumptions underlying this research and the extent to which it informed the methodology adopted in this study. It also outlines detailed description of the research design and procedure offering a detailed account of the choice of the methods employed, research participants and the ethical issues that need to be respected in carrying out qualitative research. Also, this chapter presents information in regards to data collection process and data analysis. It is worthwhile to note that the extensive body of literature reviewed about the practical knowledge and knowledge base of language teacher had a considerable contribution in framing the focus of the current research design.

2.2 The Context of the Research

In conducting any research investigation, it is of paramount importance to start by providing a detailed description of the context in which the enquiry will take place. This is

especially important since teachers' knowledge and practices are influenced by the surrounding contextual conditions (Borg, 2006). Since context has certain impacts on the teaching of English language in general and ESP in particular, it would be relevant to understand teachers' educational background and environment. Therefore, the researcher provides a review of English language teaching situation, policies and methodologies adopted in the Algerian educational system. The aim of analysing the context of the research is to introduce the present system of English language teaching in the universities of Algeria. This is followed by a description of the different elements and components of ESP programmes at Saad Dahlab University. It also highlights the main factors that influence the teaching of ESP course within faculties and institutes of Saad Dahlab University, Blida 1.

2.3 The University of Saad Dahlab – Blida 1

The study was situated against the broad context of nationwide curriculum reforms of English language teaching in Algeria, entailing a shift from English for general purposes (EGP) to English for specific purposes (ESP). The data were collected from the University of Saad Dahlab (Blida-1 University), an Algerian higher education institute which was founded in 1981. When it first opened its doors, the university included four key disciplines that students could enrol in: Architecture, Agronomy, Technology and Medical Sciences. Besides, it was considered as “centre universitaire” and was affiliated to the INESSM of Algiers. Soon after, in 1989, it was declared as an independent university and extended its specialities to include, Aeronautics, Electronics and Chemical Industry. In 1995, the university added the following specialties: Veterinary Sciences, Law and Administrative Sciences, Economic Sciences and Foreign Languages where each speciality had to operate under an individual institute or faculty. This reality resulted in a new frame of the University, made up of seven faculties, as demonstrated in the following figure:

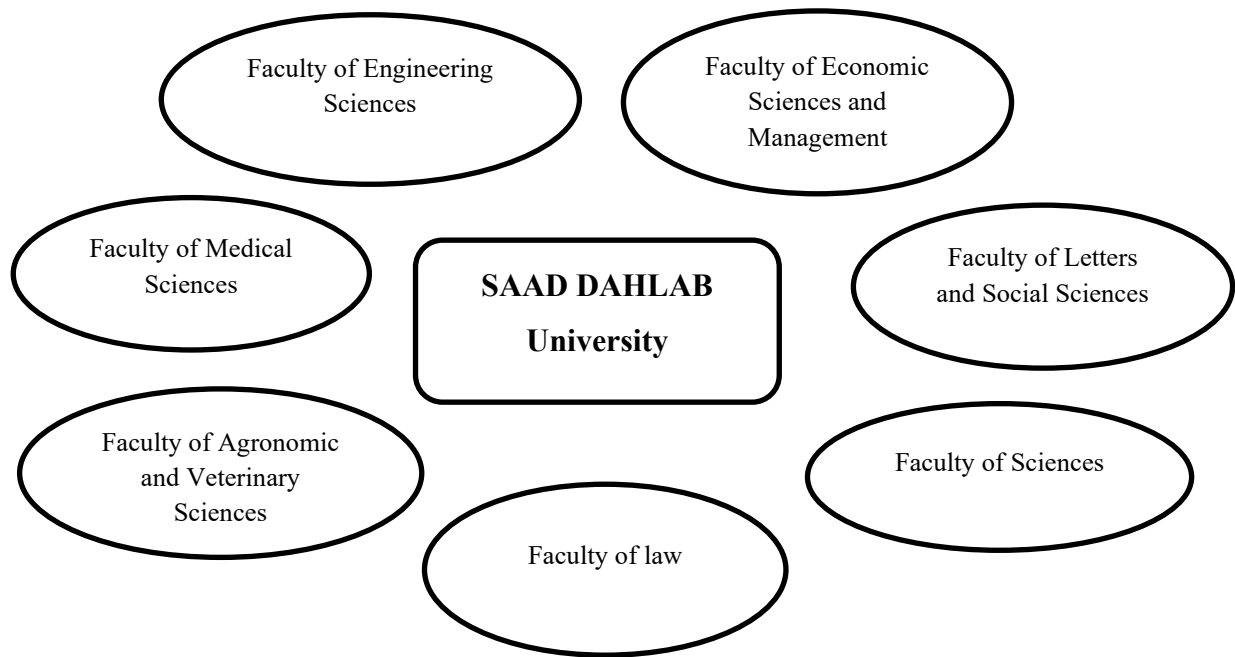


Figure 2.1: Faculties and Institutes in SAAD DAHLAB University

However, this structure was altered when a second university (Blida 2) was established in Blida, in 2011. Three faculties, such as Law, Economic Sciences, and Letters and Languages, were moved to the second university. However, the Medical Sciences Faculty, which is nowadays called the Faculty of Medicine, is still in its initial location. Consequently, Saad Dahlab - Blida 1 University structure was changed and was divided into four faculties: Medicine, Technology, Sciences, Life and Natural Sciences, and three institutes: Veterinary Sciences, Architecture and Urbanism, and Aeronautics and Spatial Studies. The following figure illustrates this new structure:

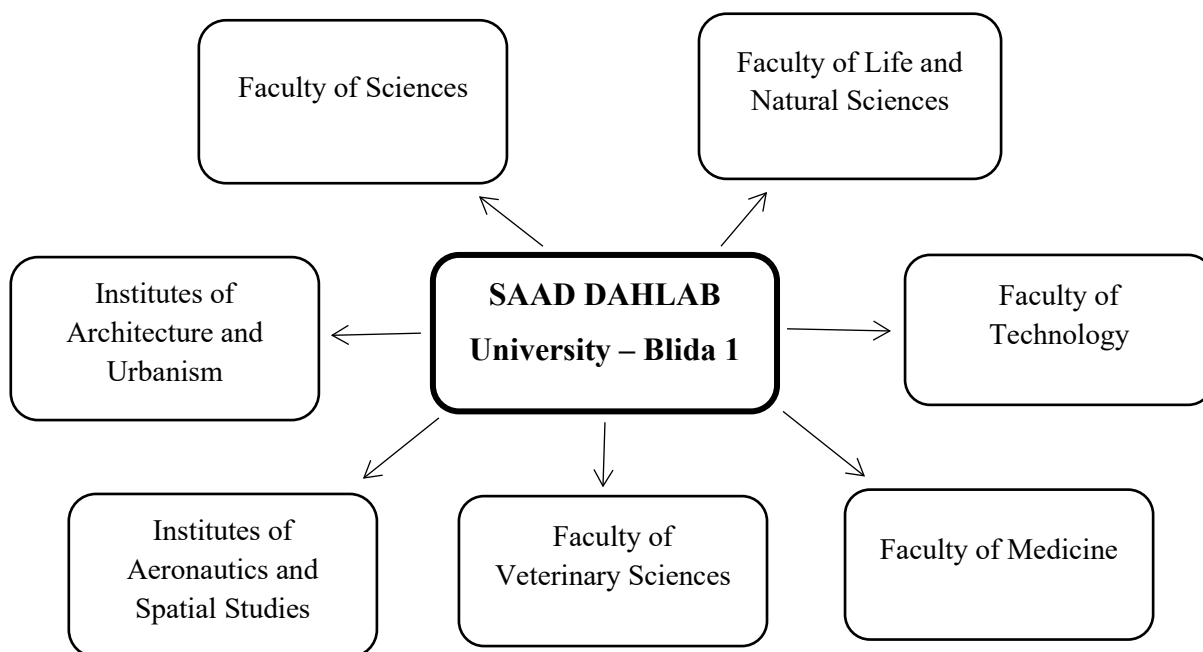


Figure 2.2: The New Structure of Saad Dahlab University

2.4 The Status of English Language in Saad Dahlab University

The growing proclaim of English use as an international language of various domains such as technological and scientific inventions, medical development and scientific research can be viewed as a feature of today's globalized world. Considered as a source of knowledge, academic research and change, the Algerian universities should not ignore the fruitful adaptation of such a language. With the trend of integrating ESP courses in higher education institutions, Algerian university went a step further and decided to implement ESP courses in all the disciplines to meet the increasing demand of English language courses in various professions. Thus, students of diverse majors are all required to learn English as part of their university courses to be up-to-date with the new world in which English is a lingua franca and gain more knowledge about what is going around them in their own areas of interest.

The recognized significance of English language in science and technology propels the need to investigate the status of English in Saad Dahlab University and use it as a field in which the present study is to be conducted. English course is offered to students enrolled in

the all faculties and institutions of Saad Dahlab University but not at all departments. These courses are provided to serve the professional and communicative needs of both students and teachers. The former, seeks to learn English to obtain more insights into their field of expertise and show more progress. While the latter needs to update their pedagogical knowledge and communicate their research findings with a larger audience such as international conferences and symposiums where English is the language of communication with colleagues from all over the world.

Though the situation in Algeria seems theoretically rewarding, in practice ESP teachings suffers from a considerable amount of problems. It is worthwhile to note that Algerian universities in general, Saad Dahlab University in particular, do not provide adequate specialized ESP courses. This is evident in the fact that most teachers assigned to teach ESP courses at Saad Dahlab faculties are part-time inexperienced teachers. They hold either a master or BA degree in English. These teachers are assigned randomly by the faculties and institutions of the university. Thus, they are not equipped with any sort of training or guidance to practice their job. Moreover, the absence of official syllabi designed for the special needs of the students makes it even more challenging for the teachers who are left to decide what to include by themselves. The scanty amount of time, low credit and coefficient allocated to the ESP courses compared to other speciality courses created a sense of underestimation and negligence of the course among students. This reality raises serious concerns given that English is one of the key parameters leading to intellectual, social and economic development. For this reason, this study focuses on understanding the ESP teaching situation in Saad Dahlab University by investigating their perspectives in teaching ESP and challenges they may encounter in performing their job and implementing their knowledge in practice. The study, then, provides relevant solutions and recommendations.

2.4.1 ESP Teaching Situation at the University

The University of Saad Dahlab, Blida 1 offers ESP courses at the various scientific faculties. It concentrates on English for Science and Technology (EST), linked to medical, engineering, and technology courses and designed towards students with more science background. The ESP programme embraces all technical faculties and institutes, with English syllabus developed by ESP teachers engaged in the teaching of this area without necessarily conducting any type of needs analysis activities. The ESP syllabus is sometimes designed based on the interaction between subject and ELT teachers. For instance, in the Faculty of Medicine which consists of three departments; medicine, dentistry and pharmacy, only one EFL teacher is responsible for teaching the ESP course. This teacher was required to take decisions related to syllabus content with limited interaction with subject specialist teachers and total absence of needs analysis process.

The fact that only one ESP practitioner teaches approximately 200 students in each department augments the burden of teaching ESP in the medical field. As a result, the roles as well as the tasks that may be performed in one classroom would be doubled in terms of energy, time, and challenges. For instance, instead of evaluating maybe forty (40) students and providing valuable feedback to them, assessing the performance of 200 students in one hour and thirty minutes may in itself constitute a challenge. In addition to that, ESP practitioners are required to at least possess some background knowledge about the specialized field they are teaching to be able to manage the content of their learners' speciality. This may appear as an extra work that ESP teachers have to do before the delivery of the lesson. To put it differently, besides planning, assessing, and managing the classroom, ESP teachers are also expected to make research in order to develop subject-matter knowledge necessary for explaining difficult ESP vocabulary to their students.

This situation is similar to the teaching of ESP in the Institutes of Architecture and Urbanism, Institutes of Aeronautics and Spatial Studies, Faculty of Veterinary Sciences and the Faculty of Life and Natural Sciences where only one subject specific teacher is available to take in charge the responsibility of teaching the ESP course in each. These faculties and institutes suffer a serious lack of English teachers and thought about assigning subject teachers to teach English. For instance, the Head of the Institutes of Aeronautics and Spatial Studies which consists of three different departments described the issue of lack of ESP teachers by “a crisis”. The Institute has to deal with this issue only by assigning a subject specialist teacher who holds a PhD in Aeronautics to fulfil that role. This teacher was chosen by the faculty based on the assumption that since he received his PhD studies in England, he would be able to teach the ESP course. This situation is not different from that of the rest of faculties of Saad Dahlab University.

Concerning the Faculty of Technology which consists of seven departments and the Faculty of Sciences with six departments, the ESP teaching situation is even worst. Both faculties acknowledge the important role of ESP teaching for its dominance in the realm of science and technology and thus required well qualified ELT teachers to hold such responsibility. However, these faculties faced the problem with part-time ESP teachers dropping out their classes when they find better opportunities. To avoid this problem, the Dean of the Faculty of Technology, for example, decided to hire only subject teachers with an acceptable level of proficiency in English to teach the ESP course. Therefore, most teachers enrolled in these two faculties are subject specific teachers.

Both subject specific and EFL trained teachers in charge of teaching the ESP course were not fully aware of their roles as teachers of English in technical faculties. There were no career prospects or training opportunities. There were no organized professional meetings and there was no co-ordinated English programme. Consequently, lack of training prevents ESP

teachers from the opportunity to design effective activities and design relevant courses in which learners could practice technical vocabulary in context and improve their field-related skills. ESP students enrolled in the faculties of Saad Dahlab University, Blida 1 are keen to learn English but poorly motivated by English classes in the technical faculties. The ESP course had low priority and students' attendance was very low. Only one to two hours are allocated to the ESP course per week; often not an optimum learning times.

2.5 Purpose of the Study

The aim of this study is to investigate ESP teachers' knowledge and practices in the Algerian context. In order to attain this purpose and answer the research questions, an exploratory research design is adopted. One of the reasons for undertaking exploratory type of research is to have better understanding of the existing phenomenon and acquire deep insights into it (Babbie, 2013). The attempt to investigate teachers' perspectives and challenges about their teaching practices stems from researcher's desire to understand what constitutes the knowledge base of ESP teachers, how it is constructed and why teachers decide to do what they do. This is important in studying teachers' behaviour in specific context because it could identify sociocultural dimensions that may impact their decisions and actions in the classroom environment. This could, eventually; help the researcher makes necessary suggestions for improving ESP teachers' practices and overcoming teaching difficulties. This kind of research is valuable because it helps in obtaining new insights into the investigated issues (Ranold, 2001). It also helps lay the foundation of a research, which can lead to further research.

Exploratory type of research is often referred to as grounded theory approach or interpretive research as it used to answer questions such as what, why and how. The formulated research questions are as follow:

2.6 Research Questions

- 1- What constitutes the practical knowledge of ESP teachers at Saad Dahlab University Blida 1?
- 1-1 What sources shape their understanding?
- 3- How does the context influence the actualization of teachers' knowledge in practice?
- 4- What challenges do ESP teachers encounter in implementing knowledge in practice?

2.7 Philosophical Stances

2.7.1 Ontology

As a philosophical stance, ontology deals with the “nature of reality”. In his first book, Aristotle defined ontology as “a science of being” or the science of “what is”. In other terms it is the study of the nature of existence and questions which of the different possible attributes are actually true of reality in the universe. In the field of education, ontology refers to the way researchers attain to obtain reality existing in the world. As far as social reality is concerned, two known philosophical stances can be distinguished; the positivist's views of social reality and the constructivists view.

According to the positivist's assumption, reality is external to individuals i.e. that is to say constructed through observable events (Crotty, 2003, p11). Thus, it has an objective nature whereby researchers employ scientific approaches to collect data and analyse them. This ontological assumption attempts to gain knowledge objectively by observing various attributes that affect human behaviour (Cohen, et al, 2007, p19). In the field of education in general and language education in particular, the ontological stance resulted in behaviourism

which employed scientific methods based on the “stimuli” and “response” model to gain knowledge about learning and teaching.

The qualitative/ interpretive view however, adopted the ontological assumption which considers reality to be the “product of individual consciousness” thus, not imposed on them from outside. To phrase it differently, the ontology that embraces a constructive/interpretive theoretical framework believes that knowledge about the world is constructed as a result of the constant interaction among members of the society and shaped by their own negotiations, experiences, and thought processes (Cohen, et al, 2007). This assumption values individual voices, perspectives and interpretations of the world around them. In this respect, not only one single reality does exist, but rather, multiple realities. This applies in researching what teachers know and how their knowledge is translated into classroom practices. The multiple realities constructed by teachers are explained, interpreted and justified according to their unique, personal experiences and perspectives. Therefore, it has a subjective nature which relates to teachers every day encountered situations.

In an attempt to argue for the use of such ontology in social science studies, Cohen et al, (2007) stated that inquiries in educational research are;

Seen as a subjective rather than objective undertaking, as a means of dealing with the direct experience of people in specific context, and where social scientists understand, explain and demystify social reality through the eyes of different participants; the participants themselves define social reality (p.19).

This implies that the educational researcher is concerned with the study of their respondents’ “multiple realities” because social members explain, justify and establish their reality according to their views and perspectives that is shaped by their unique experience.

Therefore, the argument indicates that in researching teacher knowledge diverse realities can be obtained and eventually, diverse conceptualizations and interpretations for the views that they hold. Even if teachers may practice their work in similar circumstances such as teaching ESP at various university faculties, for example, the knowledge that they construct is not necessarily the same. This is because the way they understand reality and react to their classroom situations is shaped by their subjective and different filtering of the experiences and circumstances that they encounter, and thus is regarded as one reality. This ontology is compatible with the constructivist/ interpretive research framework which inform the present study. This theoretical framework enables the researcher to understand the ESP teachers' conceptualizations of meanings, knowledge and actions based on their perspectives and experiences in dealing with various ESP teaching situations.

2.7.2 Epistemology

As a branch of philosophy, epistemology deals with “the study of the nature and validity of human knowledge” (Wellington, 2000: p.196). It is also referred to as the theory of knowledge. In other words, it is the study of knowledge and justified views. In this sense, any sort of knowledge or conclusion obtained by a researcher needs to be justified in terms of what the researcher claims to be a valid version of the reality that is studied. Epistemology is defined by Bryman (2008) as “an issue that concerns the question of what is (or should) regarded as acceptable knowledge in a discipline”. Furthermore, Manisson and Marisson, (2007) stated that epistemology is about “the very bases of knowledge-its nature and forms, how it can be acquired and communicated to other human beings”. These definitions reveal the significance of epistemology because it provides a philosophical ground for the nature of knowledge discovered by researchers, how it can be gained and the extent to which knowledge can be acquired. It influences the approach, methodology and methods taken to answer the research questions and what is claimed to be valid knowledge.

According to the positivist assumption, knowledge is claimed to have validity only if the subjects researched and data collected are based on objective methods. In this sense, only one objective truth is obtained, one that can be measured is accepted as knowledge. Researchers informed by an objectivist epistemology would be referred to as behaviourists or empiricists when only behaviours that can be observed and measured are regarded as valid knowledge.

In contrast to the positivist position, relativists believe that various versions of truth about any subject or entity under study do exist. They also believe that meaning is constructed through mind. These views are informed by an epistemology of constructivism that is defined by Crotty (2003) as follows:

the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted with an essentially social context (p. 42).

An epistemology of constructivism seems to better inform the current study. It is adopted because it helps in answering the research questions, accommodating emergent views and presenting personal perspectives related to practical knowledge of ESP teachers, the challenges that they encounter and how these views are influenced by the context in which the teachers perform their work.

2.7.3 Theoretical and Philosophical Perspectives

According to the above discussion of philosophical presuppositions, it can be noted that the present investigation of teachers' practical knowledge requires relativist ontology and a constructivist epistemology. In order to know the content of ESP teachers' knowledge and

interpret their views and perspectives, adopting an interpretive theoretical assumption seems to best suit the relativist/constructivist philosophical stance.

Constructivist approach presents a suitable framework for research on language teaching (Roberts, 1998). This is because it argues that knowledge is not passively received by individuals but rather it is constructed from the interaction between individuals' personal experiences and the social dimensions around them such as culture, context, learners' needs, interpretations of reality as well as the application of knowledge, which can be studied by the researcher to recognize their role in teacher development.

Valid knowledge is generated as a result of analysing and interpreting various views and perspectives representing the content of the knowledge base of ESP teachers. Based on research on teacher knowledge, Freeman and Johnson (1998) believe that "a social constructivist view of language learning would seem to interface more directly with the nature of classroom language learning" (p. 411).

The constructivist approach takes into consideration not only the knowledge generated by individuals, but also the socio-cultural and environmental aspects that intervene in the construction of that knowledge. Various perspectives generated by individuals are explored by research underpinned by constructivism instead of being restricted by the traditionally scientific based information about the knowledge base of language teacher. Furthermore, Crotty (1998) argues that instead, "such research invites us to approach the object in a radical spirit of openness to its potential for a new or rich meaning" (p.51). In this sense, reality is not discovered independently of consciousness, but rather constructed through individual's cognition and thought process. Therefore, constructivism and interpretivism offers a consistent framework for the current study. Interpretivism focuses on the interpretation of elements of the study. Thus, offers the opportunity for deep understanding of the meanings that teachers

attach to their practices from inside-out. In this context, Ring (2004) agreed by stating that “to understand particular events, one must see things from the point of view of the participants or the people who are involved- how they interpret events and thereby constitute those events of certain sort” (p. 100).

Moreover, adopting an interpretive mode of inquiry helps in achieving a deep understanding of teacher cognition and actions. This is because allowing teachers to be involved in the process of thinking about their experiences could enhance their sense of awareness and help them in realizing various factors that shape their knowledge and influence their actions and justifications of it. It also promotes teachers’ awareness about why certain situations or challenges persist and eventually think about consistent solutions.

In this regard, it can be argued that the constructivist/interpretive researcher establish theory based on data gathered in relation to particular situations under investigation. However, interpretive study does not necessarily attempt to establish theory. This latter can be generated from several studies with similar interests, which “gives way to multifaceted images of human behaviour as valid as situations and contexts supporting them”. (Cohen et.al, 2007:22). That is to say, it allows for various accounts of human behaviour which varied according to the particularity of each situation under study.

The aim of this study is not to impose performance generated from the outcomes of research (Doyle, 1986) but to achieve understanding of the knowledge held by ESP teachers enrolled at the University of Blida 1, their justifications of their actions and the identification of the challenges that they encounter when implementing their knowledge in practice. This in turn, would hopefully, help teachers realize the sources of their well-established meanings and understandings as well as the aspects underpinning their decisions and behaviour to make necessary adjustments. In this context, Doyles (1986) stated that:

The value of educational research for educational practice is the help it provides in identifying what is required to change the true value of premises of practical argument in the mind of the teacher, or to complete or modify those premises or to introduce an altogether new premise into the practical argument in the mind of the teacher.

The theoretical framework adopted in the present study is influenced by the work of a number of researchers who stress the importance of involving teachers as a basic element when investigating their knowledge and classroom practices. These researchers share their support to the argument that teachers' voices and expertise need to be highly acknowledged and valued due to its significance in boosting educational improvements. Among these researchers are: Clark and Peterson (1986), Shulman (1986, 1987), Clandinin & Connelly (1987), Elbaz (1981, 1983), Golombeck (1994, 1998), Connelly & Clandinin (1997), and Borg (2006).

2.8 Methodology

In order to conduct any scientific study, it is prerequisite to provide a detailed plan of the research methodology that provides a solid base for the whole research. Methodology is defined by Wellington (2000) as “the study of the methods, design, and procedures used in research” (p198). This includes the research design, the participants, and the various research tools and procedures that were used for data collection and analysis. It is equally important to include any considerable circumstances or obstacles encountered in perusing this research.

2.9 Research Design

In order to present valid outcomes of the study, one has to start by selecting appropriate framework for the study. According to Creswell and Plano Clark (2007) a research design is the “procedures for collecting, analysing, interpreting and reporting data in

research studies” (Creswell & Plano Clark, 2007, p.58). It is the overall strategy that provides detailed direction for procedures in research process through which researchers formulate their problem and objectives and present their results from the data obtained.

Research design has an important influence on the reliability and validity of the findings obtained and therefore functions as a pedestal of the present study. It allows for the smooth working of the many research steps. This makes the research as effective as possible by providing a considerable amount of information within bounded timeframes. Research designs vary depending upon the considerate statements of purpose, objectives, and associated research questions of the phenomenon under study.

The aim of the study is to investigate and understand ESP teachers’ perspectives and justifications for their classroom practices and the challenges that they encounter in implementing their knowledge. It hopes to provide deep insights that would be used to design courses that promote ESP teachers’ awareness about their practices, decisions and actions. For this reason, the researcher decided to adopt an exploratory methodology to attain the objectives of this study. As the term suggests, an exploratory study is a methodology approach that investigates a phenomenon that has not previously been well defined in depth. It is often conducted to gain additional insights and better understanding of the topic of the enquiry/ existing phenomenon. However, it is not used all times to reach conclusive results. Exploratory research involves collecting information using many qualitative data collection techniques to interpret them such as in-depth interviews and observations.

Babbie (2013) states that exploratory studies have three main purposes: to fulfil the researcher’s curiosity and need for deeper understanding, to test the feasibility of conducting a more in-depth research, and to develop the methods to be utilized in further future projects. In many cases, exploratory research is carried out to fulfil all the three mentioned purposes, but

it would usually focus on only one of them. The present investigation of ESP teacher's practical knowledge at higher education at the University of Blida 1 is an attempt to fulfil the researcher's curiosity and need to gain precise understanding into teacher's perspectives and challenges in the world of ESP which falls under the first reason for conducting exploratory. Exploratory research design is used in this study to answer questions like what, why and how teachers take certain decisions in the context of this study and the challenges that they may encounter from their own perspectives. Qualitative data collection tools can be helpful in providing rich information but at the same time, it may not provide conclusive results due to complexity of interpreting. Yet, it can be helpful in developing understanding of the context where the phenomenon under investigation takes place (Babbie, 2013).

In investigating ESP teacher's knowledge and practices at Saad Dahlab University, exploratory research design allow the researcher to tap into the teacher's network of meanings and provide an effective way to probe into the teacher's deep cognitive and emotional reasons that affect their behaviour. This is more important in researching teacher's practical knowledge, since it would be useful in determining teacher's views towards certain behaviours, actions and decisions as well as predicting the surrounding elements that intervene or contribute to their behaviours and actions. Combined together, these understandings can provide detailed insights related to underlying motivations and behaviours of ESP teachers and permit the researcher to make suggestions for further improvement or/and change.

Constructivism implies that individuals' cognitive processes are active in generating and constructing knowledge (Spivey, 1997). In relation to interpretive research, constructivism means that developing meaning of human actions involves a "conceptual framework" in the mind of both researchers and informants (Guba & Lincoln, 1989; Schwandt, 2001). Therefore, research informed by interpretive approach valued personal

views and interpretations. It generally employs qualitative methods such as interviews and observations to collect data from participants' perspectives. The study began with the administration of the semi-structured interviews as one of the tools to assess teachers' understanding of their realities. This design is suitable for researching teachers' knowledge because of the need not only to investigate the participants' views and perspectives of practical knowledge, but also to explore the different understandings and interpretations which they bring with them to the situations. It is highlighted that while studying teachers' knowledge, researchers should use methodologies that integrate teachers' perspectives (Golombek, 1994)

2.10 The Methodological Approach

This research adopted an exploratory study in which the investigator has tried to explore a situational phenomenon in attempt to uncover what constitutes the practical knowledge of ESP teachers as well as the main reasons and factors contributing to their understanding and informing their classroom practices. This exploratory mode of inquiry seeks to gather more in depth insights about the challenges encountered by ESP teachers in their attempt to implement their knowledge in practice by listening to their accounts and observing their actions in their classroom settings. This is possible through a careful consideration of the contextual factors surrounding this category of instructors such as the lack of ESP pedagogical training and the absence of awareness of the requirements of the different ESP teaching contexts.

The theoretical perspective informing this study is both interpretivist and constructivist which is helpful in gathering valid data through the use the interpretation of various perspectives of ESP teachers to achieve full understanding of the components of the knowledge base of these teachers and its sources. The use of the constructivist approach seems

to be most appropriate for the case of investigating the practical knowledge of ESP teachers because it offers more adequate framework for exploring the nature of the complex process of language teaching (Roberts, 1998; Freeman Johnson, 1998). Being subject-specialist or EFL trained participants, these teachers have not received any professional training to teach the ESP course. These teachers, being subject specialist participants or EFL trained participants are both appointed to teach ESP having received no professional training to do so. Therefore, constructivism allows for the exploration of unrestricted set of views and interpretations about ESP teachers thinking and practice. This has been reflected in the use of qualitative methods within this research protocol to provide answers for the research questions. The first research instrument is a semi- structured interview which is the main research tool in the study. It provides deep insights into the mind of the participants to explore their views and justifications about their ESP knowledge and practices.

The second research tool is classroom observation which is used in the current study to collect data related to ESP teachers' practices and their underpinning knowledge. This tool can be helpful in gathering authentic data and constructing a clear image of what actually happens in the classroom and the ESP teachers' interpretations and justifications of these actions. Finally, stimulated recall interview is conducted after each classroom observation for data triangulation. This tool will allow ESP teachers and researcher to discuss the lessons observed. As it has been mentioned above in this work, the main focus of this study is the ESP teachers who are involved in different ESP contexts. Hence, the research design of the study is described below.

2.11 Research Methods

2.11.1 Teachers' Interview

Interviews are an integral part of qualitative studies, which can include other research tools of data collection such as observations and stimulated recall observations. Merriam (2009) considers interviewing in qualitative research as “the primary source of obtaining data needed for understanding the phenomenon under study” (p. 14). In the current study, interviewing the research participants is used as the main research method for collecting qualitative data. Considered as “the gold standard of qualitative research” (Silverman, 2000, p.51), the interview is typically employed as a research instrument to collect the richest information from various participants' views and beliefs concerning particular research issues under study (Lambert and Loisell, 2007). It provides the researcher with various ways of exploring individual's views and helps in obtaining in depth insights and meanings from each participant's perspective. Interview does not only allow the researcher to collect data and achieve the desired objectives but also to ascertain the validity of data gathered through other research tools (Cohen, et al, 2007, p.351) such as questionnaires and classroom observation.

Broadly defined, interview is a face-to face verbal interchange which involves the researcher or the interviewer and the participant or the interviewee. It appears to be like a conversation but this conversation is carefully planned to peruse specific purposes. Qualitative interview allows the researcher to go beyond treating the participants' verbal talk; it paves the way for discussion and negotiation of meaning with the participants about the world around them, and interprets situations in accordance to their own perspectives. In this respect, Cohen, et al (1998:349) argues that: “In these senses the interviewer is not simply concerned with collecting data about life: it is part of life itself, its human embeddedness is

inescapable”. In other terms, it is when teachers are engaged in recounting and telling their experiences in life that meaning is deduced and knowledge is constructed.

Among the advantages of interviewing is flexibility. The information obtained from the questions could lead to the formulation of other related questions. This is possible only when the researcher allows the participants to express their thoughts, feelings and beliefs spontaneously. Consequently, the researcher will gain useful insights about the topic of inquiry (Cohen et al., 2007). This is especially important if the issues researched require complex questioning and considerable probing.

Compared to the questionnaire, Oppenheim (1992: 81.2) stated that interviews have a higher response rate than questionnaires for a number of reasons. Mainly, because interviews are conducted face to face, it helps the researcher elicit more information than is usually communicated through responding to questionnaires in a written form. The interview provides the researcher with the chance to better explain the aim and objectives of the study, and thus assure that respondents’ answers serve the purpose of the interview. Moreover, through interview, more complex issues can be clarified which helps in avoiding potential ambiguity that could sustain when answering questionnaires. Furthermore, the interactive nature of interviews helps increase respondents’ motivation to get involved in active exchange of various thoughts, views and interpretations of the issues investigated.

Interviewing constitutes a significant part of research procedures that adopted a qualitative paradigm. It provides the researcher with the chance to review the questions asked, the answers gained and whether the areas under study are clear or require further adjustments for better understanding. Following this type of research design, new insights can be established throughout the research process and data collection procedures. This indicates that flexibility is required in qualitative research design, an aspect that has been supported by

various researchers. Maxwell (as cited in Ritchi & Lewis, 2003, p.47) asserts, “That the overall design will need to be modified in interaction with research setting.” He further stated that “social research will always involve an element of the unknown”. In the phase of data presentation and discussion, the researcher relies on his/her own interaction with the interviewee to establish new insights and knowledge about the area of interest (Ball, 1993).

When using interviews, it is very important to consider that different types of interviews are available in qualitative research. These types differ in terms of characteristics and level of formality. As stated by Nunan (1992:149): “Interviews can be characterized in terms of their degree of formality, and most can be placed on a continuum ranging from unstructured through semi-structured to structured”.

These types are; structured interview that is intended to ensure that fixed responses are obtained from each participant using more focused set of questions. Semi-structured interview is more flexible as it uses predetermined questions, but still allows a degree of freedom and adaptability for the researcher gaining further information and clarifications from the interviewee. The third type is an unstructured interview that takes the form of an informal conversation between the researcher and the respondent. No predetermined questions are asked so that the respondents’ responses remain as open and adaptable as possible. (Cohen et al, 2007).

This study employs a semi-structured interview which would best serve the desired aim and objectives. This research tool is suitable for small-scale studies which increase its appropriateness to collect richer and thicker set of data in the context of this study. The use of a semi structured interview creates a more relaxed environment for the interviewee. As a result, it provides them with the chance to elaborate on their experiences and viewpoints and share more interesting information. The semi-structured interview questions were developed

to serve the purpose of the study. These questions covered all different areas of teacher knowledge that had predominantly been taken from the conceptual framework and models of knowledge base for teaching developed by several researchers. The participants were asked about issues related to teacher knowledge domains, personal knowledge, challenges and related perspectives that needed to be explored through the interviews. These questions probe beneath the surface to explore the reality of ESP teacher knowledge and practices from each teacher's perspective. It also provides further insights clarifying the claims made by the participants. Moreover, employing in-depth interviewing allow the researcher to unveil the contextual aspects and challenges affecting the implementation of knowledge in practice. Finally, the use of semi-structured interview as the first and main research tool helps the researcher to identify and formulate some items to be checked later in the classroom observation.

2.11.2 Classroom Observation

In order to obtain in-depth insights about classroom practices of ESP teachers, the researcher has chosen to conduct classroom observation. It is regarded as one of the most commonly used tools in qualitative educational research because it offers rich information about teachers' occurring classroom interactions (Goe, Bell, & Little, 2008). Borg (2018) stated that classroom observation is a valuable method used in measuring classroom processes. It provides the researcher with the opportunity to capture the reality about various teaching practices as it occurs in its natural contexts rather than listening about it. When employed in combination with interviews, observation can enable the researcher to check the accuracy of the data obtained through interview. It also allows "the researcher to look afresh at every day behaviour that otherwise might be taken for granted, or expected to go unnoticed (Cohen et al., 2007). In addition, observation provides more authentic data, which makes it a unique and valuable research tool.

When interviewed about their teaching activities, teachers tend to refer only to what they believe are effective practices which may oppose what actually happens in the classroom. Therefore, a semi-structured or unstructured observation could provide the researcher with a first-hand account of the classroom situation to check whether teachers actually apply what they know. In case teachers' actions seem to oppose the knowledge that they hold, this type of conversation would enable the researcher to elicit reasons of this contradiction as well as the factors that may prevent the actualization of teachers' knowledge in practice. This indicates the significance of conducting a stimulated classroom observation.

2.11.3 Stimulated Recall Interview

The increased digitalization of today's world provides researchers with the opportunity to apply technology through the use of various devices available in their research (Creswell, 2012). The growth of research on teacher thought processes and classroom practices resulted in the need to employ stimulated recall as a qualitative research method (Dempsey, 2010). This method allows the participants to see themselves as they teach which will help them recall their thoughts of the act at the time. Stimulated recall interviewing involves videotaping teachers while performing their job and then inviting them to watch a video tape or audiotape of their own lesson behaviour. Teachers are required to reflect on their thought processes that they had in mind while performing the task and elicited their ideas through an interview.

The present study employed stimulated recall interviewing to collect thorough insightful and useful data to investigate the way teachers justify their teaching practices and behaviours and their underlying knowledge. This research tool was utilized in previous research on teacher's knowledge and classroom practice and proves to be successful in as it helps in understanding and improving the practice of ESP teaching (Golomek, 1998, Gatboton, 1999, Mullock, 2006, Adelhafez, 2010, Abedeen, 2015).

2.12 Sample of the Study

Probability and non-probability are two types of sampling that are used to serve the research purposes. Probability sampling is believed to be the most appropriate approach for statistical, quantitative research. However, it is considered inappropriate for qualitative studies. Ritchie and Lewis (2006, p.78) stated that “in a non-probability sample, units are deliberately selected to reflect particular features of groups within the sampled population.” Thus, the type of sampling relies primarily on the characteristics of the population as well as the research tools employed (Babbie, 2013; Ritchie & Lewis, 2006). According to Cohen et al (2007, p.100) appropriate methodology and methods as well as the sampling procedure determines the quality of research. They also stated that the type of research determines the size of sample, which is usually small in qualitative studies because the nature of this type of inquiry makes it difficult for the researcher to gather data from a large sample. Therefore, they opt for a smaller sample assuming that it is representative of the whole population under study (ibid).

Considering the main concern of the present research which attempts to investigate ESP teachers' perspectives on their professional lives, teachers with no or limited experience in teaching ESP would not constitute a representative sample of the ESP teachers. For the purpose of this research, the participants of the study were nine ESP teachers working in the non-English departments at the University of Saad Dahlab, Blida 1 with five to more than five years of teaching experience are selected to be interviewed. Years of experience do not necessarily guarantee expertise; however, it plays a significant role in developing expertise (Gage and Berliner, 1991), and shaping teachers' knowledge. Furthermore, interviewing and observing experienced teachers is believed to be more adequate than novice teachers. Reynold (1995) argued that, “expert teachers have established procedural knowledge for solving

discipline problems than do novices, experts can divert more of their attention to problem definition, representation and strategy evaluation”.

Four more teachers with less than five years of experience were included in the sample. This decision was taken mainly in order to examine similarities and differences between the two categories of teachers. Moreover, including less experienced teachers could create a “balanced picture” of the context studied (Babbie, 2013). Westerman (1991) argued that five years of experience can be set as a benchmark for development to take place. The total number of ESP teachers who participated in this study is thirteen (13) teachers from various faculties. The respondents of the study had been teaching ESP at seven (7) higher education faculties and institutes of Saad Dahlab University of Blida 1. They were selected in order to serve the research aims and purposes. They had neither been educated in ESP teaching, nor taken any official training in ESP. They all expressed their willingness to get involved in this study. They were informed of relevant ethical issues required for conducting research.

<i>Participants</i>	<i>Educational background</i>	<i>Faculty</i>	<i>Years of ESP teaching</i>
<i>Interviewee (1)</i>	PhD in Engineering	Technology	More than five years
<i>Interviewee (2)</i>	Master in English	Medicine	More than five years
<i>Interviewee (3)</i>	Master in English	Science	From three to five years
<i>Interviewee (4)</i>	PhD in Aeronautics	Aeronautics and Special Sciences	More than five years
<i>Interviewee (5)</i>	PhD in Architecture	Architecture and urbanism	More than five years
<i>Interviewee (6)</i>	Master in English	Technology	More than five years
<i>Interviewee (7)</i>	Master in English	Sciences	More than five years

<i>Interviewee (8)</i>	Master in English	life and Natural Sciences	More than five years
<i>Interviewee (9)</i>	PhD in Engineering	Technology	More than five years
<i>Interviewee (10)</i>	Master in English	Technology	From three to five years
<i>Interviewee (11)</i>	Master in English	Veterinary	More than five years
<i>Interviewee (12)</i>	PhD in Physics	Sciences	More than 5 years
<i>Interviewee (13)</i>	Master in English	Medicine	More than 5 years

Table 2.1: Information of Participants

2.13 Data Collection Procedure

This research proceeded in four phases. During the first phase, a list of interview questions was designed and examined against the research question. Two ESP teachers were selected for the pilot study. During and after the administration of the interview, the teachers were asked if they found any question to be ambiguous or misleading. They were also asked if they had any suggestion for improving the sequence of the questions, and the wordings. Those teachers had administrative positions besides their teaching practices. This fact proved to be helpful in getting informative and professional insights about the questions and the time of the interview, which was more or less than an hour. It was noticed that the interview took more than an hour with both teachers. As a result, an extra half hour was allocated to the interview in case the teacher was willing to share more information.

Having approached the ESP teachers and chosen the sample that voluntarily agreed to participate in this study, the second phase of the research procedure started by focusing on the interview timetable arrangements. The ESP teachers were, once more, reminded about the purpose of the study and the nature of qualitative research that looks for the meanings that teachers assign to various issues in their professional setting. After receiving the consent of

the participants, the second phase started. At this phase, teachers were contacted according to the time that they arranged for the interviews. Most of the teachers were interviewed in their offices for their comfort and convenience. Other participants preferred to be interviewed in their classrooms after the end of the session. As pointed out by research, interviews need to be recorded using various methods available for documentation and later analysis (Kvale, 2007). In this study, interviews sessions were recorded using a personal cell phone. These recordings were transferred to the computer for safety and protection. All participants were consented to being recorded and informed that their identity would be protected. In this study, though the interview was designed for one hour, it actually ranged in length from 40 to 60 minutes, and all interviewees were given the choice to respond in the language that they feel comfortable using (English, French, Arabic or dialect) Furthermore, participants were not interrupted to allow the flow of the interviewee's response, but made sure that the main issues of the study were covered. The interviews were conducted in both English and Arabic as the participants code-switched using some words and terms in Arabic, especially when they deemed it easier to convey the intended meaning in Arabic. The non-English terms and clarifications were translated, trying as best, to capture the essence of the words and expressions. The recorded interviews were transcribed to facilitate interpretation and analysis.

The third phase of the study – the observation sessions – overlapped with the second phase. During this phase, three ESP teachers from the above sample were observed in their classrooms. The researcher observes and records some field notes from the participants' activities, practices and interaction with the students to attain better understanding of the central phenomenon and confirm some of their responses to the interview questions. Their interviews were coded and categorized, during the second phase, to realize in what ways their knowledge informed their practices, and to understand the principles underlying their pedagogical choices. Furthermore, the researcher prepared an observational guide for

gathering the data. The guide included some interview notes related to some beliefs and practices explained by the participants during the interview that needed to be investigated and observed closely to be confirmed against the interview responses. The teachers refused to be videotaped but accepted tape recording of their classroom sessions.

The teachers were observed one hour a week for three weeks. That came up to nine observation sessions, one hour for each. The sessions were followed by stimulated recall interviews on the same day that the teacher did not have other classes to teach. After each observation the stimulated recall interviews took place to listen to the participants' justification for their actions and classroom occurrences that were still fresh in the interviewees' minds.

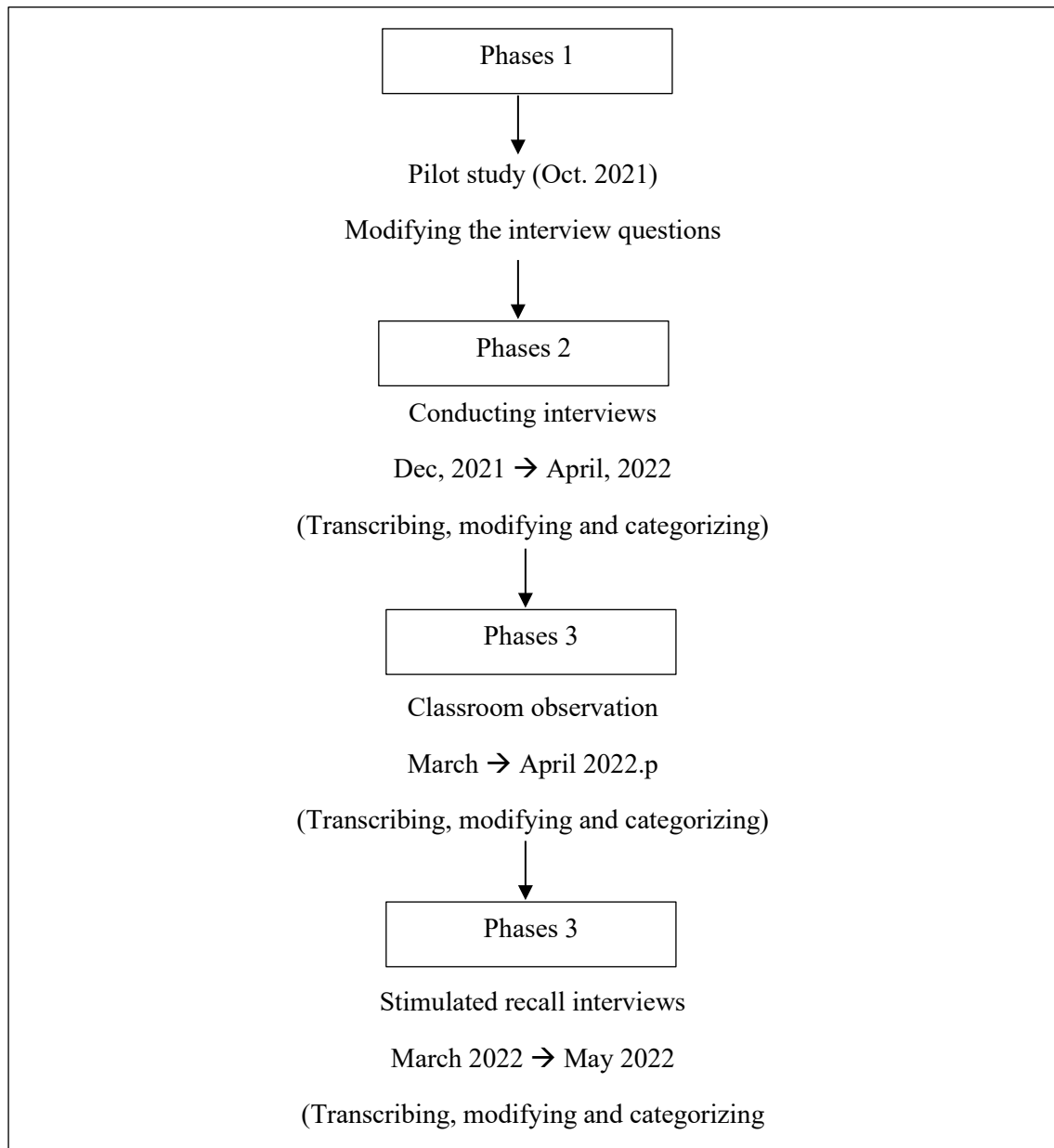


Figure 2.3: Phases of the Field Study

2.14 Pilot Study

Pilot study can be defined as “a small-scale trial of the proposed material and methods (Mackey and Gass, 2005, p.43). It allows the proposed instruments and procedures of data collection and analysis to be tried and tested to assess that they are workable and produce useful data. It also allows for the refinements and modifications to be made if necessary, before the actual study began. The interview questions used in the present study need to be

confirmed for clarity, organization and time consumption. The questions also need to be checked if it allows participants to express their views and perspectives clearly. The pilot work was conducted with two ESP teachers at the University of Saad Dahlab. The pilot work allows the researcher to have an idea about how to conduct the interviews more effectively and efficiently.

2.15 Data Analysis Procedure

Data analysis is an important step of the research procedure which allows the researcher to gain insights from the gathered data. In fact, the process of data analysis is meaningless unless it is followed by proper data analysis. In relation to the purpose of data analysis, Best (2012) states that, “the aim of all data analysis is to assemble the data collected in a meaningful fashion to produce an explanation, allow interpretation and enable an appropriate inference to be drawn”. In other words, this process is considered as the means by which data is organized, categorized and summarized in order to help elicit answers to the research questions and draw meaningful and trustworthy conclusions. Respectively, the aim of data analysis in the present study was to understand the practical knowledge that teachers hold about ESP at the Algerian tertiary level.

Cohen et al (2017) defined data analysis as “the body of methods that help describe facts, detect patterns, develop explanation and test hypotheses is used in all of the sciences” (p.9). This entails that the data analysis stage is not bound to a single method but rather diverse means and approaches including multiple techniques. The most known approaches are quantitative and qualitative. The present research adopted a qualitative approach to data collection and analysis. The data gathered are interpreted and measured not in terms of numbers, but rather by means of verbal accounts in a natural language description. This data cannot be subjected to counting and therefore are not to be analysed quantitatively. This type

of analysis is the process of describing emergent concepts in terms of quality or categorizing which can be subjective in nature. Though the issue of subjectivity in qualitative data collection and analysis influences the value of scientific research compared to quantitative data, yet it can be helpful in providing insightful understanding of concepts such as knowledge, perspectives and attitudes...etc. The researcher used qualitative approach in analysing the ESP teachers' interviews, in addition to data collected during classroom observation and stimulated recall interviews.

Research and theories into data analysis procedures in qualitative research data analysis revealed three different approaches which are discourse analysis, conversation analysis, and thematic analysis (Edwards, 1993, Potter, 1997, Heritage, 2005, Creswell, 1994, Ritchie, 2003). Discourse analysis focuses on the process of interaction with others to gain understanding. While conversation analysis focuses on the functions of the interaction to get the message. Unlike the two approaches, thematic analysis focuses on capturing in depth interpretation of meanings of the data obtained. According to thematic analysis, the researcher is concerned with identifying the phenomenon under investigation according to the data (Hammersly and Atkinson, 1993) and interprets them.

In order to interpret and analyse the data collected from interviews, classroom observation and stimulated recall interviews, the researcher applied thematic analysis which involves going through several stages to analyse the qualitative data collected in the present study. The stages of thematic data analysis are adopted from Creswell's (2014) plan of analysis. This plan outlines the need to go through a set of steps which includes: 1) organizing and preparing data for analysis, 2) reading through all the gathered information in order to understand the general meaning, 3) coding data by understanding text segments and label them with a code, 4) representing the data of each participants in form of informative tales or charts, and 5) interpreting the data and examining the results gained against research and

theories reviewed in literature (Creswell, 2014). The following figure better illustrates these steps:

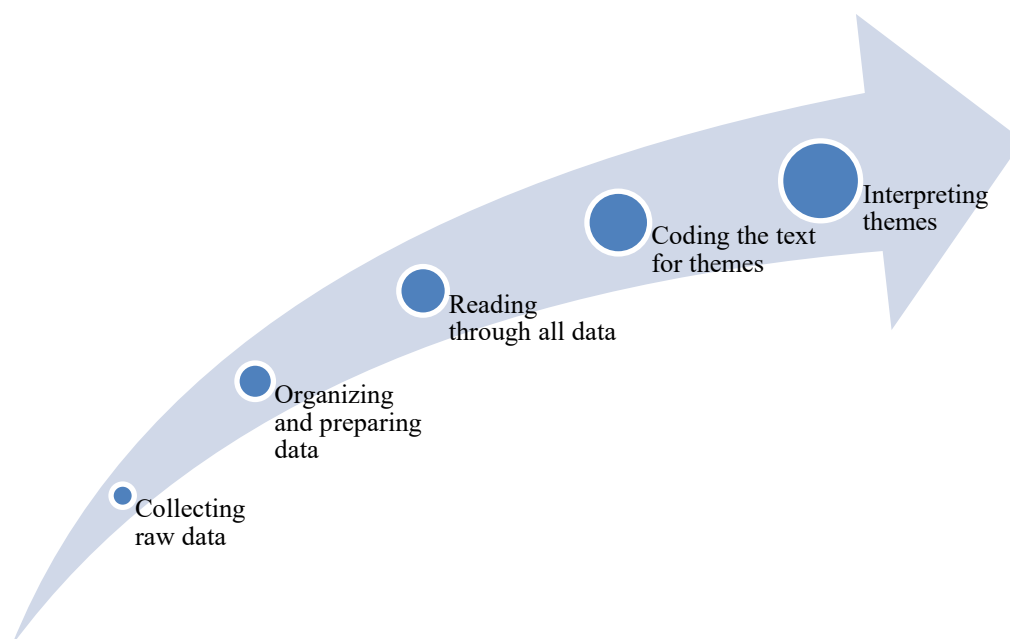


Figure 2.4: Qualitative Data Analysis Plan (adapted from Creswell, 2014)

2.16 Conducting Data Analysis

As suggested by Creswell (2014), the plan of data analysis illustrated in the above figure is adapted by the researcher because it is found a comprehensive way of managing the considerable amount of raw data collected. Thematic analysis outlines the need to follow several steps starting with organization of data for analysis, understand its general meaning, coding and representing the data of each participant in form of informative tales or charts for better interpretation of the results gained. This process of data analysis was applied with the data collected through the three qualitative methods employed in the present study namely semi structured interviews, classroom observation and stimulated recall interviews.

2.16.1 Interview Data Analysis

The data gathered through semi structured interviews was analysed qualitatively. As mentioned above, five main stages were followed in the analysis. It can be noted that the data gathered through semi structured interviews was voluminous. Thus, throughout the analysis process the researcher had to reduce the amount of data throughout the different stages of analysis to make it manageable. For example, through the process of conceptualizing and explaining data, repetitive and irrelevant ones were reduced. While reducing the amount of data, the researcher made sure not to lose significant information or remove data from its naturally occurring context. The researcher started by organising and preparing the information collected from the interviews. This step concerns the transcription process of the data collected which was done after each interview.

To maintain the trustworthiness of the findings, the researcher transcribed the recorded interviews verbatim taking into account every announcement declared by the interviewee for repeated reading and coding. This latter encompasses a number of issues such as grammar mistakes, repetitions and the use of Arabic expressions even though the participants knew its equivalent meaning in English. These expressions were used by the participants spontaneously because they were allowed to express their thoughts and ideas in whatever language they felt comfortable using. The following step in conducting data analysis involved reading and reviewing all data provided by the participants from the different tools of data collection including interviews, classroom observation, and stimulated recall interviews.

The aim of this step is to explore meaning in the gathered data and generate the main ideas. The researcher is required to take notes of all the transcribed data spontaneously. The interview data was ordered and organized into meaningful topics and themes under smaller categories of information based on their meaningful topics and themes. The categories and

subcategories that emerged from the first interview were analysed and given a label or a code. The same process was applied on the rest of the interviews. As the researcher proceeded with the rest of the interviews, other codes that emerged were added. The final stage was to interpret the data. The aim of interpretation is to find meaning in the data collected from the research field. In this context, Bryman (2012) believes that the researcher attempts to relate the synthesized findings with the research questions as well as with the reviewed literature and theoretical framework related to the topic under investigation.

2.16.2 Classroom Observation

The classroom observations were analysed employing the same analytical classification developed from analysing the interviews. Observational field notes that were recorded directly from the participants' interactions were transcribed. Other observational notes were taken directly in the field and written in English. The procedure of organizing the data obtained from classroom observation applied the same coding process that was already established with various themes that emerged from the interviews. It should be noted that the responses obtained from the analysis of the semi structured interviews also informed the analysis of the stimulated recall interviews. Moreover, the analysis of the interviews also informed the issues observed during the lesson and eventually, the comments discussed during stimulated recall interviews. The domains of ESP teacher that were established through the analysis of semi structured interviews were employed when analysing the classroom observation data. The developed analytical framework including six main domains of teacher knowledge was used as a parameter to observe occurring classroom practices. That reflect teachers' perspectives, beliefs and accounts that contributed to the choices and discussions that they made.

2.16.3 Stimulated Recall Interviews

The stimulated recall interviews were transcribed and analysed following the same analytical plan adopted to analyse semi structured interviews. The questions were consistent with the findings, notes and reflections on conducting semi structured interviews and classroom observation. The researcher started by examining the semi structured interview transcripts and observational field notes of participants observed in their classrooms once more. This step helps guide the researcher to look for practical knowledge that reflects teacher's perspectives about ESP knowledge and challenges that they discussed in their interviews. The researcher focused on teachers and how they translated that knowledge in their classrooms. The participants were asked to explain and justify their thinking and classroom practices. During the stimulated recall interview, the researcher played the recorded classroom observation with the observed participants when necessary to help them explain and justify some of their decisions and actions in particular situations during the lesson. The researcher focused on what teachers know based on their accounts and how they act in their classrooms. The researcher also paid attention to different and opposing views and the way participants commented on as a result of self-reflection

2.17 Reliability and Validity in Qualitative Research

Validity and reliability are two key concepts used to assess the quality of research. These two aspects are very important to consider since they can determine how well the research is conducted and can help assure the credibility and trustworthiness of the results obtained. The use of reliability and validity becomes particularly very important in qualitative research paradigm.

Research has been described by a number of scholars (Gay, 1996; Patton, 2001; Creswell, 2003; McMillan and Schumacher, 2006; & Best, 2006) as a systematic application

of scientific methods to understand the phenomenon under investigation. Thus, without rigor, research loses its value and becomes fiction. Ensuring rigor requires attention to validity and reliability in all types of research methods. For better understanding of what validity and reliability encompass, it is relevant to examine what these two terms mean and how they can be used in qualitative research paradigm to ensure the attainment of rigor in the present investigation.

2.17.1 Reliability

The concept of reliability is used for testing and evaluating quantitative enquiry. However, this aspect is commonly employed in all kind of research. The issue of testing in qualitative research can be understood as a way of eliciting information. In this regard, qualitative study is more importantly tested in terms of its quality. According to Eisner (1991), a good qualitative research can help in understanding “a situation that would otherwise be enigmatic or confusing”. Stanbacka (2001) highlighted the difference in purpose of evaluating the quality of research in qualitative and quantitative approach by considering reliability as a “purpose of explaining in quantitative paradigm and “generating understanding in qualitative paradigm to research.

Demonstrating the criterion of reliability within qualitative research is believed to be challenging because, unlike quantitative study, there are no available statistical tests for this purpose (Lincoln and Guba, 1985; Stenbacka, 2001; Sutton & Austi, 2015). Thus, Patton (2001) provides three guiding questions for credibility (validity and reliability) of the qualitative research:

- What techniques and methods were used to ensure the integrity, validity and accuracy of the findings?
- What does the researcher bring to the study in terms of experience and qualification?

- What assumptions undergird the study?

These questions can be considered as a guide for research concerned with writing qualitative data. Usefully, data triangulation may also constitute a strong argument concerning the reliability of the findings (Richards, 2006; Gray, 2018) since consistent results collected through different instruments are more likely to contribute to the integrity of the findings. For more specific use of the concept of reliability, some researchers such as (Lincoln and Guba, 1985; Clont, 1992 Seale, 1999) endorse the concept of “dependability” with that of “consistency” which closely corresponds to the concept of reliability in qualitative research. Other notions including credibility, neutrality, confirmability, applicability and transferability can be used in qualitative research as essential criteria for the quality of the participants’ accounts as well as the researcher’s ability to collect and record findings accurately (Selltiz et al, 1976, p.182).

The consistency of research findings will be ensured by examining the findings obtained as raw data, reduction products and process notes throughout the different steps of research (Campbell, 1996). In the same layer, Seale (1999) emphasized the importance of examining trustworthiness in order to ensure reliability in qualitative research when he states that the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability”. In terms of evaluating qualitative study, Strauss and Corbin (1990) propose that the “usual canons of ‘good science’ ...require redefinition in order to fit the realities of qualitative research”. In order to insure reliability and validity, the present research provides a detailed description concerning the stages of the field work , the use of research tools and the procedures of data analysis. Thus, to conceptualize credibility and show the complex interplay between reliability and validity in qualitative research, Lincoln and Guba (1985) argue that “since there can be no validity without reliability, a

demonstration of the validity is sufficient to establish reliability”. In this respect Patton (2001) adds that reliability is the consequence of validity in a research.

2.17.2. Validity

The concept of validity in qualitative research refers to the accuracy and truthfulness of research findings (Le Comple and Goetz, 1982 p.32). Cohen et al. (2007, p.133) adds “if a piece of research is invalid then it is worthless”. A valid research should reveal what actually exists and a valid tool should actually measure what it is supposed to measure. This concept is not a static, common notion but “rather a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects” (Winter, 2000, p.1). Although some qualitative scholars have considered that the aspect of validity is irrelevant in qualitative study, yet, they have recognized the need to check and measure their research findings. For instance, Creswell & Miller (2000) came to the realization that the concept of validity can be understood based on both researchers’ perception of validity in the study and their paradigm underpinnings. Therefore, several researchers generate their own understanding of validity and endorse different terms such as rigor, quality and trustworthiness (Lincoln and Guba, 1985; Seale, 1999; Mishler, 2000; Stenbacka, 2001).

In discussing the issue of quality in qualitative study in relation to validity and reliability, Steale (1999, p.465) saw the need to develop specific terms for validity and reliability that reflect the interpretivist nature of qualitative inquiry. The issue of validity in qualitative study has not been opposed by Stenbacka (2001) like she did with reliability as she stressed the need for redefining the concept of validity in qualitative researches. Taking into account the measure of reliability and validity in the search for knowledge is replaced by the aspect of trustworthiness (Mishler, 2000), which is more “defensible” (Johnson, 1997, p.282) and contributes to the trustfulness of the findings (Lincoln and Guba, 1985). As far as the

issue of reliability, validity, trustworthiness, rigor and quality are used to show the extent to which research is “good” or “bad” then testing and evaluating the reliability, validity, trustworthiness, rigor and quality will be a prerequisite aspect to consider in any research paradigm.

The present research tried to ensure the interpretive validity by providing a deep and more revealing picture through capturing meanings that ESP teachers attribute to the different elements that intervene in their real professional world. The researcher also tried to capture the intentions off their teaching practices and decisions. Validity was equally substantiated through checking and confirming the accuracy of the participant’s responses. For example, interviewees were provided with the opportunity to clarify their responses when there are ambiguities. They were also allowed to confirm or correct the researcher’s understandings or interpretations of their words. This issue of mutual understanding has also been enhanced through the use of data triangulation to confirm that the research findings are as accurate as possible.

2.18 Ethical Consideration

While attempting to explore the practical knowledge of ESP teachers based on their experiences, stories and accounts, the researcher may more or less be involved in their values, beliefs, perspectives and views in the process of administering the interviews. A prerequisite for conducting this study is to ensure understanding between the researcher and the participants. Therefore, ethical issues such as anonymity and confidentiality, respect and privacy were carefully taken into consideration. In conducting this research, I started by asking teachers for permission to be interviewed and observed to discuss their practices after the classroom observation.

During the interviews, it was made clear for the participants that they retain the right to reject answering any question that they do not know or do not want to answer during the interview. Part of maintaining participant's rights, the present study allowed the participants to withdraw from attending the interviews whenever they felt uncomfortable. Following ethical consideration, the researcher had to show a lot of sincerity and tolerance while conducting the interviews to win the trust of the participants. For instance, it was made clear for the interviewees that the study was not meant to make any judgements about teacher's knowledge and performances, but was aiming to gain insights into what teachers do in their classrooms and how they justify their actions from their own perspectives. Similarly, under the principle of avoiding ethical issues, the confidentiality of the participants and the data was protected by keeping all recorded interviews and classroom observations anonymously in electronic files on a personal computer. In order to meet the concern of privacy, all data collected during the present research had to be destroyed once the study was completed.

2.19 Conclusion

In this chapter the researcher started by introducing the general and specific context of the study. It introduces a brief history of English teaching in Algeria and highlighted the factors that contributed to the development of ESP teaching in tertiary level. The researcher then, outlined the research philosophy underpinning this study to justify the choice of methodology and methods used in data collection and analysis. Qualitative/interpretive methodology deemed appropriate for this study in order to explore the central phenomenon in depth and understand the participants' accounts and perspectives. Exploratory design was utilised to understand ESP teachers' practical knowledge, perspectives and challenges in their natural settings. The researcher also discussed methods of data collection and analysis and provided justifications for the selection of the sample. Finally, a detailed description of data gathering and analysis processes was provided.

CHAPTER THREE:
DATA GATHERING AND FINDINGS

3.1 Introduction

The purpose of this chapter is to present the data obtained from qualitative research methods. The findings presented in this chapter covers a wide range of issues related to teachers' practical knowledge and understanding of ESP at Saad Dahlab university of Blida 1. It presents a detailed description of the sources of this understanding and the role of contextual factors that shape their professional and pedagogical practices.

The findings reveal ESP teachers' perspectives about what constitutes their knowledge about ESP and the sources of their understanding. This body of knowledge includes some aspects of beliefs and values. Various areas of teacher knowledge were identified from qualitative data analysis of the semi-structured interviews, classroom observation and stimulated recall interviews. The first two research questions address the main issues on research of ESP teacher knowledge and understanding in order to identify teacher knowledge on ESP teaching. Therefore the chapter starts by eliciting various emergent themes that constitute the body of knowledge held by ESP teachers and how it reflects classroom practices. The presentation of participants' perspectives concerning each area of knowledge is followed by the sources which shaped these views. This part attempts to answer the following research question:

- 1- What constitutes the practical knowledge of ESP teachers at Saad Dahlab University of Blida 1?
- 1.1- What sources shaped their understanding?

3.2. Teacher Knowledge of ESP Teaching

In order to explore teachers' understanding of ESP in the context of the present study, the participants were invited to share their views and perspectives about ESP and its practices. The data below are extracted from ESP teachers' responses to the interview questions,

classroom observations and stimulated recall interviews. ESP teachers' accounts indicated a number of elements which includes awareness about the specialized nature of ESP courses, students' target language needs and ESP teaching content and procedures. These elements contributed effectively to their understanding of ESP teaching. According to all participants, the following identified knowledge of ESP teaching were considered to be very important characteristics when they got involved in the teaching of English in highly contextualized settings. These understandings were constructed and developed from a variety of sources.

3.2.1 Specialized Courses

The data obtained in the study indicated that the majority of the participants (nine out of thirteen) considered ESP courses to be a way of teaching/learning English for specialized subjects to meet the specific learning and language use, needs and goals of a particular group of students. They also realize that each context has a restricted repertoire of words and expressions selected from the whole language. For example English for engineering, English for technicians. Interviewee (3) stated that:

ESP deals with more specific English. Students are dealing with a specific field of study (computer science) and therefore need specific English that is going to serve their domain...

Similarly, interviewee (6) talked about the idea that ESP courses were tailored to student's needs by referring to his prior education:

In doing my master degree in translation... we were introduced to tailored made courses and curriculum... we have also been introduced to different registers such as judicial register, medical register... it was interesting, you just need to know why students are learning English. Why do they need English?

Further responses show that most teachers realized that English taught in the various faculties at Saad Dahlab University is tailored to the learner's specified needs and related in content to well-defined contexts. This was evident in teacher's comments on the nature of ESP courses and practices. Few comments however, seem to raise concerns regarding teachers' understanding about pedagogy in ESP and may reveal some misconceptions in their specific pedagogical content knowledge (PCK). For example, interviewee (4) comments:

Well, there isn't a great difference between general English and ESP; we just need to focus on technical vocabulary related to student's discipline, that's it. They have few words that are different, and may be few expressions related to their context.

Her view that general English shares a lot of similarities with English used in various activities and occupations is true and agreed with ESP specialists who view that in theory there is no difference between EGP and ESP. However, it opposes the aspect that a considerable difference between the two approaches is evident in practice (Hutchinson and Waters, 1978, Widdowson, 1983; Robinson, 1880, Gatehouse, 2001). The interviewee's (4) statement clearly unveiled lack of knowledge and understanding about ESP teaching methodologies and classroom practices. In other words, the interviewee (4) is expected to help lead learners to particular state of knowledge related to their subject area as well as to various structures of language features of that specific subject area. This is not possible without awareness about the specific nature of ESP teaching and its methodology. This goal certainly requires that the teacher selects consistent methods and techniques that are different from those of EGP for accomplishing the aim.

Despite teacher's awareness about the idea that ESP courses were designed to meet students' needs, this realization seemed to contradict the reality of ESP teaching at Saad

Dahlab University. This was evident in the majority of teachers' comments who expressed their dissatisfaction concerning the lack of well-designed courses at the level of faculties. Teacher (5) states that ESP is teaching the students "the useful language that they need, not what we are teaching them". This view indicates that despite teachers' awareness about the distinction between EGP and ESP in terms of course design, some courses seem to be more concerned with general English rather than ESP.

3.2.2 Students' Target Language Needs

Most interviewees acknowledge the importance of students' needs. In an attempt to define ESP, the participants' responses linked it to specific content and specific language needs. They believed that since ESP entails specific English and specific terminology rather than general words, teachers have to address their students' needs effectively by exposing them to specific English and terminology.

Other participants link this definition to needs analysis. They believed that ESP courses are designed based on needs analysis results. For example, interviewee (2) comments:

We need to visit hospitals, for example and see how doctors respond. This is good for our courses. We have to be involved in real job places outside our faculties so that our programs become more authentic.

This indicates teacher's awareness about the necessity to visit target places and collecting information to determine the particular language skills needed by their students. And, accordingly, develop more authentic syllabus and material to meet their students' needs. This also reveals some awareness about the distinction between EGP and ESP courses, which requires a different syllabus and relatively different teaching methodology, techniques and materials to cater for the specific needs of learners.

Although teachers acknowledge the importance of learners' target needs for providing more appropriate teaching practices that respond to students' academic objectives, some responses attenuate some of the identified issues. These teachers seem not to take any step to identify and specify these needs through any kind of needs identification strategy. Conducting learners' needs seemed to be completely ignored in all the faculties of the University of Saad Dahlab under study. In responding to interview questions concerning ESP needs assessment, interviewee (1) replied:

Through my experience, I never do need analysis and I didn't see any one do any need analysis or visit any work place. And I really don't know why?

Participants' responses to this question indicates that the teaching of ESP at Saad Dahlab faculties is not really well secured in terms of the importance of making adequate pedagogical choices and approaches to their ESP courses. Teacher's answers also uncovered a gap in their specific pedagogical knowledge that necessitates needs assessment to fulfil learners' vocational and academic attainment. It equally revealed that subject teachers in charge of teaching ESP course did not feel the need for conducting such an activity in the ESP practice at their faculties.

Most participants perceive the activity of needs analysis as a hard task which goes beyond their job as teachers and thus requires assistance from the institution that should be knowledgeable about what students enrolled in each faculty needs the language for. This reality reveals participants' lack of awareness about their roles and responsibilities as ESP practitioners. ESP teachers asserts that needs analysis should be conducted by the institution and teacher's job then, is only to prepare relevant English courses that provide learners with the specific language repertoire, words and expressions related to their specific context based on the results of needs analysis.

3.2.3 Knowledge of the ESP Learners

While describing their knowledge about ESP, participants also referred to their students. All the interviewees agree that ESP students are adult learners who are expected to possess basic knowledge of the English language before they engage in a more specialized context of language learning. The ESP course is more interactive in nature and thus, requires basic understanding and background knowledge to effectively learn the language skills needed and attain the desired objectives. In reality, these views and perspectives seem to contradict the actual situation of students' level of English in the faculties of Saad Dahlab University which is very poor. Most interviewees shared their disappointments with their students' qualities which are characterized by laziness and low motivation to learn English. Interviewee (12) who taught the ESP course at the faculty of medicine described her students by saying:

Our students' level in English is very low. They lack basic linguistic knowledge. They don't know how to write a simple paragraph. They don't even know how to write one sentence correctly. They are very weak students. We have to teach them how to write.

Few ESP teachers (three out of fourteen) based their views on some researcher's beliefs that ESP course is motivating because it is directed towards their specific needs in learning the language. This view is supported by Ellis (2004) who believes that when English is related to students' field of study it will help them make efforts to succeed in learning the language. Reality of ESP students in the context of this study seems to oppose researcher's views and teacher's expectations since their students' suffers from a serious lack of involvement in the learning process. In this regard, interviewee (6) stressed "our students are not motivated and not interested in the ESP course at all. They don't even want to attend"

Some participants believed that ESP learners are adult learners who needed to assume responsibility for their learning, and positively participate in their own learning process. In other words, ESP students need to be dynamic autonomous language learners. However, the majority of interviewees (ten out of fourteen) pointed that their students did not conform to any of the above-mentioned qualities and characteristics. In this regard, interviewee (10) said:

I do my best to interact with my students and initiate discussion so that they can participate in class but they don't want to. They just don't want to. They are not really interested except very few of them.

Interviewee (13) believed that ESP learners should be thinking seriously about their studies and target professions to pursue academic studies and participate actively in discussions related to their areas of specialism. However, once more the participants asserted that the reality raises a kind of contradiction between the way students should act and the way they actually behave towards their ESP course. They believed that a considerable number of their students perceived that the English was "uninterested", "unmotivated", and "unnecessary". Therefore, they were "lazy", "irresponsible", and "careless". Interviewee (13) added that students lack academic skills and manners when she described her astonishment towards students missing their English classes for six continuous weeks. She said:

Students simply ignored Head of Department's instructions to attend the English course just because they agreed and decided not to bother and come... I was there for the six weeks, I waited and no one came. I was astonished! Surprised... we didn't use to do this when I was a student

Interviewee (6) believed that students are not aware of what they need to learn for their life, studies and career. They do not have the desire to become successful learners. The poor motivation that they show is reflected in their negative attitudes towards the process of

learning. She explained that in order for learning to become successful learners, they need help and guidance concerning what they need to learn to succeed in their field of study.

All the other participants agreed with the above view, and believed that the educational institution in Algeria is responsible for developing favourable or unfavourable learning environment. The interviewees claim that the administration does not provide them with encouraging environment and blame this latter for student's lack of awareness and interest in learning English. The ESP learners' attitudes at Saad Dahlab Faculties will be further discussed under the sub-section of challenges in teaching ESP.

The above shared perspectives concerning the ESP students' characteristics and attitudes towards the ESP course among participants. In addition, different related issues that ESP teachers experienced have been examined during classroom observation. The symptoms of low motivation were evident, students attempted to escape the course those who continue to attend were disruptive.

3.2.4 ESP Teaching Content and Procedures

Participants shared their perspectives about some of the processes involved in the teaching of ESP. They highlighted some ESP activities including designing syllabus, teaching material, identifying strong learning objectives and assessment/evaluation system. A discussion about these important processes was only initiated by participants after being asked to answer some prompts about ESP teaching activities. Their perspectives concerning ESP teaching processes has been presented as follow:

3.2.4.1 Identified Learning Objectives

With regards to learning objectives, most teachers (seven out of thirteen) target communicative skills and focused on improving students' writing ability. The rest of the interviewees (seven) believed that developing the four skills are very important for students to master. For example, interviewee (13) stated that:

our students need to read articles and research related to their field of specialism, they need to write well in English, they also need to develop their speaking skills to communicate their thoughts and ideas in discussions related to their areas of interest.

Other participants (six interviewees) saw the need to focus on technical terminology because they believe that the whole course of ESP should be designed to enable students to know vocabulary related to their special field of study and adequate phonetic knowledge on how to correctly pronounce them. The importance of the four skills of English for ESP students has equally been discussed with reference to teachers' own field of specialism. Participants mainly addresses the importance of English in the medical profession, interviewee (13) strongly acknowledged such significance. She admitted that due to the importance of English around the world, she changed from being a nurse to having a certificate in English because it is extremely essential in the medical field due to the literature found mostly in English.

Moreover, English also contributes to the professional development of doctors, pharmacists, dentists, and nurses. Interviewee (3) shared the same view, in which he noted" it is very important because teaching English contributes to the making of one's own personality. When we teach English, we are in contact with different social backgrounds. Thus, it widens our visions and broadens our mind". Interviewee (4) and (11) argued in the

same manner when they advocated for the teaching of English in scientific faculties. According to them, English is a vital language in the scientific specialities because most of the research articles and conferences are in English. Interviewee (4), in this light, added that two subject specialists came to him and asked him to translate an article they had written from French to English because of the need to publish it. Concerning interviewee (11), English to her is:

First, English is the world's language. Second, in the field of Science Matter, PhD students have to write their thesis in English. That is why it is very important in the field I am currently teaching

This significance is also seen when collaborating with other countries and earning scholarships. Interviewee (2) in his own words explained the essence of teaching and learning English in which he said:

I am retired now, but I still teach ESP to dentistry students. I am also teaching in private high schools. English is so important in medical fields because most of the documents I find and students find are in English. This is why I advocate for implementing English and making it the language of science where all the modules are taught in English.

From all the above comments obtained from the participants, it is intensively acknowledged that English has a valuable position, despite being neglected by some Departments. An instance that portrays such ignorance is seen in the number of hours that ESP course is taught in Saad Dahlab University faculties. In dentistry for example, second year students study English in a fortnight pattern which results in 14 sessions only during seven months.

3.2.4.2 Syllabus Design

All participants' responses revealed that the faculties and institutes that they enrol in did not provide any detailed syllabus for the English course. The Departments were provided with general guidelines on what to include for first and second year students' academic programmes. For example, interviewee (3) stated that the department asked them to be free in choosing their own syllabus and teaching materials. This attitude, as interviewee (3) explained, stemmed from the fact that the institution believes that syllabus design falls under the responsibility of the ESP teachers who know better what is relevant to learners' needs. Most participants agreed that designing course doesn't fall under their responsibility. In the absence of needs analysis, the choice of syllabuses and teaching materials was not based on actual information, but on teachers' perceptions and personal beliefs about specific language needs of their students.

A small number of the participants (three out of thirteen) showed a positive attitude towards the freedom that they enjoy in designing their own ESP programme. Their responses revealed their lack of awareness about their responsibilities as well as their lack of knowledge about stages required for designing an ESP course which is relevant to the requirements of their students' domains. Interviewee (9) states:

I need to be free in choosing my syllabus. I know how to decide what is relevant to my students and how to teach them. Teachers need to have a choice in what they are teaching. They should not be forced to follow a strict syllabus that they don't like.

Their lack of knowledge about what constitutes the task of designing syllabus raises concerns about the relevance and adequacy of their choices. Teachers lacked knowledge about need analysis which constitutes the most basic procedure for collecting information about

their students. Therefore, the syllabus that they design questions the adequacy of the course in effectively addressing the needs of their potential students.

Most participants' (nine out of thirteen) responses to this prompt seem to expose the state of confusion that they experienced concerning the distinction between course design, curriculum and syllabus. It was very complicated for them to decide what to include. They argued that they rely on what they feel and perceive to be relevant. For instance, interviewee (8) points "no one cares, there is no kind of supervision", interviewee (2) said "we do our best, we are not experts".

With the lack of any systematic plan and strategy provided by the Ministry of Higher Education and the educational institution, participants seem to rely on their intuition. They accepted the situation and assumed responsibility for making decisions concerning ESP syllabus and programme design at the various scientific faculties and institutions of the University of Saad Dahlab.

3.2.4.3 ESP Teaching Materials

As far as teaching material is concerned, all participants revealed that there is no official textbook designed for teaching English in various specialisations at Saad Dahlab University. Moreover, the Ministry of Higher Education did not provide any teaching material. ESP teachers relied basically on available online teaching materials and activities related to their students' specialism.

In order to design appropriate teaching material, ESP teachers need to identify certain elements such as content material of the specific subject and students' needs. As far as the task of choosing teaching material is concerned, interviewee (1) and (4) states that they select their teaching materials based on their students' needs, expectations and English abilities. In this regard, interviewee (4) argued:

If I don't select the materials based on students' needs and expectations, they will lose interest and motivation towards the module. And once the learners' motivation is gone, don't expect anything else.

Interviewee (8) also noted that he chose his materials based on the needs of the students. He further added:

I try to diagnose their level in general English, in grammar, and in communication so that I integrate activities which would be beneficial to them.

Interviewee (13) related the task of selecting materials to what she had already observed during her six months 'teaching. Based on her personal experience, she noted that her students did not know what they needed. Thus, she made some research about learners' needs in medical professions and found out that the focus was on the ability to read articles in English. So, she tried to design materials that would meet those needs according to the allocated time and level of proficiency in English.

Interviewee (11) insisted that he uses the first meeting with his students to diagnose their level in English in order to know how to choose teaching materials. For example, he asks them questions about the content material provided by their subject teachers to select teaching material based on their area of study. He also asked them what they study in general and then made some research about it. He selected texts that they could be familiar with in addition to its easiness and simplicity of language. His attempt in doing this was to familiarize his learners with the use of technical vocabulary within a context. Interviewee (3) said: "I select materials based on their needs and more importantly on their level in English. I even adjust if the material does not work for them". The obtained data revealed that all the interviewees take

into consideration their students' needs and level in English as the main criteria in selecting the teaching material.

3.2.4.4 Syllabus Assessment/Evaluation

The information collected in this study concerning ESP teachers' knowledge about syllabus assessment indicates that the participants have not been involved in any kind of programme evaluation. This important procedure is missing in the ESP context at Saad Dahlab University. This reality might show the lack of knowledge about conducting such an activity as well as the lack of awareness regarding its significance. With regards to this question, participants mainly referred to the evaluation of their learners' achievement tests and exams. Interviewees believe that taking a holistic look at their students' exam marks can be enough for them to evaluate the extent to which the designed objectives have been attained. Interviewee (1) states "I assess my courses based on my student's exam marks. If the majority of students obtain low marks, I understand that it was too difficult for them"

Some interviewees relate the procedure of programme assessment to their student's satisfaction with the course. The course efficacy is based mainly on students' performances and reactions. For example, interviewee (5) pointed that "when students complain we may modify the teaching material if they don't it means things are fine". The absence of course evaluation in the context of ESP uncovers a gap in ESP teacher knowledge.

3.2.5 Background Sources of ESP Teaching Knowledge

The data analysis revealed that the ESP teachers at the scientific faculties in Saad Dahlab University were not introduced to any specialized training in ESP. After the analysis of interview and observational data, the following background factors were found to be influential in shaping teachers' practical knowledge about ESP and classroom instruction: teachers' experience as language learners, reflections on their teaching practices and

experiences and professional education in the university. In sharing her stories about the sources of ESP teaching knowledge, interviewee (10) stated that she graduated from university with good English language proficiency which enabled her to gain high grades without hard work. Thinking back on her experiences in learning English, she stated that

I was introduced to ESP in my master studies... I found it interesting area of language learning... after attending a conference that stressed the importance of ESP in today's globalized world, I understand that ESP needed more attention in Algeria so I started to read about it.

Although interviewee (7) realized the importance of reading about ESP during her academic education, the knowledge that she obtained was not very useful when she started teaching English at the university because it was mainly theoretical in nature. She added: "the reality about teaching the English course in the faculty is far away from what I read before ... it's really different". She further explained that through years of experience she could acquire a different type of practical knowledge that helped her improve her teaching practices and understand her responsibilities as an ESP teacher.

Her view agree with other participant's perspectives who stated that their knowledge about ESP and its practices was acquired in the university through their professional education and developed through reflections on teaching practices. Their experience in teaching the ESP course helps them develop a practical type of knowledge that allows them to adapt to the various teaching situations of English in their respective faculties.

The basic knowledge of ESP teachers was gained through their education includes mainly theoretical concepts compared to practical skills. This data correspond to language scholars, like Shulman (1987), Andrews (2007), Borg (2006), and Grossman (2008) who attempted to outline the components of ESP teacher knowledge base perspectives.

Few participants also referred to their personal attempts to improve their knowledge about ESP through reading research about technical English using internet as the main source. Interviewee (5) maintained:

I always wanted to be an ESP teacher; I got interested in ESP... I started to read about it. Now I'm an ESP teacher interested in reading about my student's specialisation.

3.2.6 ESP Teachers' Identity

Teachers' identity becomes a significant issue in language teaching because they need to be actively involved in many contexts, such as the shift from EGP to ESP in the Algerian universities. With the absence of ESP training, teachers in the context of the present study are put under great emotional stress. Therefore, the issue of identity has been documented by research as central in sustaining teachers' professional development (Day and Leitch, 2001; Golombek and Doran, 2014; Lantolf and Swain, 2019 and identity construction (Lasky, 2005; Wolff and De Costa 2017; Tao and Gao, 2021). The issue of teacher identity is closely connected to what they hold as knowledge of English language teaching and learning. This can influence the way in which they understand the nature of ESP learning and ultimately their teaching and their role in the classroom. Thus, it is important to understand how English language teachers deal with identity and adapt their pedagogical practices.

Participants in the present study shared their understandings of ESP teacher knowledge based on their individual identities. Their responses revealed that they developed their professional identities as ESP teachers through their involvement in highly specialized context that the areas of ESP serve. This is mainly because classroom teaching required full engagements of a teacher as a whole person which shows the significance of identity "to the ways in which... teachers think about themselves and their work" (Brown, 2003). The stories

that ESP teachers share revealed that they all went through a state of confusion about how to handle the task of mediating the specific content to serve their students' real language needs.

Their accounts about their background knowledge and experience in teaching ESP clearly shows the difference between two types of teachers selected for this study: 1) eight English language teachers who hold Master or Magister degree in English as a Foreign language, 2) five subject specialist teachers who hold PhD in various scientific faculties and were chosen to teach the ESP course based on their high level of proficiency in English. The above differences were reflected in the interviewee's discussion about their personal and professional development as language teachers. The first group of participants engaged in teaching English in highly specialized contexts which are completely outside their areas of expertise. Interviewee's (8) remark reveals the state of confusion that he faced when the course that he delivered was not well understood by the students. He explained that he experienced self-doubt and frustration when he had to deal with a text with highly technical terms that he could not himself understand.

Similarly, interviewee (1) and (5) found that English for engineering, technology and science is highly contextualized and thus challenging to teach. However, they further stated that their interaction with subject specialist communities and workplace professionals such as engineers and practicing doctors contributed to their identity development. Language teachers' involvement in various professional activities helped them to acquire subject matter knowledge. This type of participants expressed their satisfaction with the task of teaching the English course, as they recognize the contribution of ESP teaching to the faculty in general and the department in particular. Despite the fact that their task of English teaching in these scientific faculties encountered a number of obstacles and challenges compared to the departments to which they belong to.

Although these teachers felt like strangers in an “uncharted land” due to lack of ESP training and orientation, language teachers in ESP contexts enjoy their status for becoming ESP teachers in tertiary setting. This is mainly due to their perception of English language teachings a world language that enjoys a higher status in today’s globalized world. This realization increases their motivation in teaching the ESP course and, ultimately, their capacity to overcome the challenge of teaching English in highly technical contexts.

Participants’ responses also indicated their awareness about the English language teaching situation in the Algerian Universities which is given more attention since the Ministry of Higher Education announced the need for generalizing the use of English in the Algerian Universities in 2019. Thus, the high status that English has in the Algerian educational system is considered as a direct result to the changes that have been implemented to embrace English for Specific Purposes in the Algerian universities. These reforms focused on providing English courses support and focused on the generalization and internalization of the business and education to keep up to date with the rapidly changing world of the 21st century which demands for good command of the English language. Language teacher’s awareness about these shifts in education priorities have contributed to the construction of ESP teacher identity.

The second group of interviewees is made up of four subject teachers pinpointed to teach the ESP course. These participants expressed their pride and satisfaction, to be chosen amongst their colleagues to handle the task of teaching English due to their advanced level in English. For example, interviewee (12) expressed her satisfaction saying:

My good English allows me to write and present my PhD thesis in English... this impressed the Head of Department who was a member of the

jury (examiner) she said to me I need you. You will be teaching the English course.

Other participants' stories were similar in that they were chosen to teach the English course based on their advanced level in English. Two participants of this group of subject teachers were actually found to appropriately fit the task of teaching English because they pursue their PhD studies in England. Not all subject teachers are qualified enough to teach the English course. The high status that English language enjoyed in the Algerian university nowadays raises language teachers' interest and motivate them to handle the task of learning about their student's specialization.

3.3 Teachers' Personal Knowledge

For a better understanding of how ESP teachers conceptualize their ESP knowledge, the researcher decided to explore their practical decisions and background knowledge. The aim of tracing teachers' background knowledge as learners and as teachers is to find connections between what they actually know and why they decide to take certain decisions. Teachers at this phase are required to provide justifications for their behaviours or their classroom practices.

3.3.1 ESP Teachers' Perspectives as Language Learners

In analysing participants' responses about their ESP teaching knowledge, teachers' accounts of their experiences as language learners stood out. Most participants (six interviewees) describe themselves as learners, which refers to the fact that these teachers have to acquire knowledge constantly throughout their teaching process. Learning a considerable amount of knowledge is regarded as a requirement for ESP teaching. In this regard, interviewee (13) responds:

I keep on learning new knowledge in both vocabulary and medical concepts, for me, it's like taking out a new subject enough to graduate.

The data obtained from subject teachers in relation to their personal background knowledge as learners was not different from those of the language teachers except for the fact that subject teachers attempted to read about technical English in their field of study in order to improve their language. This group of teachers shows interest and motivation in developing their level of English because they need to achieve progress in their post graduate studies. For instance, interviewee (1) said:

I personally work on my English because it's very important, we need English to participate in conferences, also, I publish my articles in English. I keep on advising my students to pay attention to English because they need it... I am pleased that two of my students are going to write their master thesis in English and I'm going to supervise their work.

Participant's responses revealed their positive attitude towards the task of learning a new subject and being involved with new workplace communities. These attitudes can be related to their interest in learning the English language. All of the participants described themselves as good language learners throughout the course of their different levels of studies. Interviewee (7) expressed her satisfaction with her choice to pursue English language as a subject at university.

Teachers' perspectives about their experiences as language learners shared a lot of similarities since all participants pursue their studies under the same Algerian educational system. All of them described themselves as attentive, serious, and responsible language learners. In relation to this, interviewee (2) stated "I was a very serious student, I enjoyed learning. I was really a hard-working student."

Teachers' accounts for their experiences as serious language learners seem to contribute to their willingness to acquire new knowledge, new concepts and understanding to improve their knowledge in the designated subject as far as language teachers are concerned and to improve their English language proficiency for subject specialist teachers.

3.3.2 ESP Teachers' Perspectives on Teaching Methods

The participants under study shared their perspectives about the methods of teaching. Their responses revealed that participants experienced two different approaches to teaching. Most participants (five interviewees out of thirteen) were taught English following teacher centred method to teaching, while other participants (four participants out of thirteen) experienced a more interactive approach to teaching and learning. For instance, interviewee (4) from the first group maintains that:

The teacher used to do everything... explain, write everything on the board. I don't remember there was any kind of interaction, you know, we just follow.

Two more interviewers supported the teacher-centred approach to language teaching. They based their argument on the fact that it was useful because it follows a strict system for teaching grammar and vocabulary. Once the system is understood, they could easily apply the rules and come out with correct use of English.

Interviewee (6) belongs to the group of participants who experienced the strict teacher centred method. However, she expressed her dissatisfaction with this way of teaching claiming that:

I remember the language class was boring, the teacher was very strict.

We basically learned grammar and vocabulary only. We only had to learn rules by heart; we had to apply them without understanding.

She admits that she was a very poor learner in grammar. She could resolve this issue only when she became a teacher. Her awareness of the weaknesses of the system of teaching, and through her reflections on her own learning, she was able to improve her grammar.

Teachers revealed that experiencing teacher-centred method of language learning completely ignored speaking and communication skills. Their assessment method was mainly based on structural understanding of grammar and vocabulary, as well as a set of reading comprehension skills. Interaction between the teacher and students was very limited to answering a set of task questions.

The second group of teachers had a completely different experience of language teaching and learning. Unlike the very restricted type of classroom that the first group of participants were exposed to, their colleague's language classroom was mainly communicative and interactive in nature. It was an interactive learning environment that allows learners to use the language and enjoy the atmosphere that a foreign language and culture learning brings to the classroom. It was basically described as an engaging, interesting and motivating learning experience for them as young learners. For example, Interviewee (8) explained:

It was fun, it was interesting, and I remember that I enjoyed learning English at that time. We had different types of activities.

Even though this group of teachers did not mention enough details about their learning experience however, their accounts revealed a positive attitude toward the interactive approach to language teaching and learning. They expressed that they were able to write and

speak English correctly despite the fact that they do not recall any type of direct approach to teaching grammar. Two interviewees of the second group of participants further referred to the positive impact of the use of audio-visual aids and teaching technologies to facilitate language learning and promote interactive classroom environment.

3.3.3 ESP Teachers' Perspective as a Teacher Learner

The participant's responses concerning their experiences as teacher-learners indicate the differences between the two types of participants. Both types of participants pursue their studies in Algerian educational systems through its different levels; primary, middle, secondary and higher education. Participants in the first group joined the Algerian university to continue their education in English Language and Literature or English departments and shared their experiences as language teacher learner. The second group of participants join the Algerian university to carry their education in different scientific departments and shared their accounts as ESP learners who attended English courses at the different scientific departments and under various specialities.

The first group constitutes the majority of participants in the present study which are EFL teachers. They all talked about their university studies and described them as a challenging experience that they were not prepared for mainly due to the considerable difference between the two systems of education (secondary and higher education). For example, interviewee (13) described her university experience as a 'scary' one and explained:

My first entry at the university was so scary moment , it was not like anything was used to when I was in secondary school, even though English was my first choice, but being there as a first year student at the English department coming from secondary school, the huge buildings, you know, it was a very intimidating experience to me.

Her answer revealed that the university architecture was strange and huge compared to the small structure of secondary school institutions and resulted in a state of fear among young learners who have just left an environment that they have been used to for three to more than three years. In addition to university architecture, participant's first exposure to English language in university setting which they were not used to also contributed to their fear. Interviewee (13) added:

The first class I attended was a listening lesson, the teacher was very fluent, he had an American like accent, and for one hour I kept looking at him trying hardly to grasp any word but I just did not understand any. When we come out of the class, I asked other students if they understand what he was saying. And I think most students found it difficult, I even doubt he was an Algerian teacher.

This experience was shocking to interviewee (13) who doubts her own ability to understand the language that she thought she was good at in secondary school. She stated: "for a moment I thought that I was in the wrong place and I should not continue my education at the English Department".

Other respondents in this group share similar views with interviewee (13) and believe that as they continue their education in the university they came to the realization that their previous education that they received at the secondary school had failed to equip them with basic academic skills such as speaking and writing that all participants in the first group found it difficult to master. Moreover, they were not well prepared to assume responsibility for their own learning as adult independent learners since they were used to depend on their teachers who provided them with all lessons that they needed. All participants seem to suffer from the

consequences of being ill prepared for university education. This reality was experienced by interviewee (9) who said:

I found myself struggling with the task of writing very long time, simply because we lacked basic skills for writing. It was very difficult and scary subject. It was only at university when I realized how important the skill of writing is because in the exams, we are graded based on our writing not on any other skill.

Interviewee (2) highlighted the issue of deficiency in speaking English and related this problem to her background learning experience as secondary school learner. She stated that though they were able to write grammatically correct sentences, but they were incapable of expressing their thoughts in speaking.

3.3.4 ESP Teachers' Perspectives as a Teacher

All Participants hold a positive image about themselves as they referred to their personality and character, yet their responses varied when they referred to their teaching practices. They described themselves as responsible and autonomous teachers who took their work seriously. For instance, interviewee (11) stated through her teaching experience she understood that being strict teachers when it comes to classroom regulation does not entail being hard on students.

3.4 Summary of the Results Obtained

The first part of this chapter analysed the data related to ESP teachers' personal knowledge. The findings of this section could be summarized as follow:

- Most participants in this study (nine out of fourteen) believed that ESP courses were meant to serve language needs of particular learners.

- Three teachers out of the fourteen interviewed sample believed that the process of needs analysis was an important step in realizing target language needs of their learners.
- All participants lacked training courses in ESP.
- ESP teachers in the context of this study lacked orientation, time, experience and personal efforts to allow them to realize their roles and responsibilities in the world of ESP.
- Subject-specific teachers focused on the importance of content knowledge rather than pedagogical content knowledge.
- ESP activities such as course design, material adaptation and programme evaluation were either missing or were not properly conducted due to the absence of needs analysis process.
- Teacher's identity strongly influenced their knowledge and understanding of ESP teaching and learning
- The study revealed that teacher's prior knowledge influenced their perspectives of their learners', educational context and their pedagogical practices.
- ESP teachers' experiences as learners and current teachers had a considerable impact on their understanding and expectations of their students.

3.5 Areas and Sources of ESP Teachers' Practical knowledge

Based on teachers' accounts about their teaching actions and practices that were elicited through semi-structured interviews, classroom observation and stimulated recall interviews, few areas of teacher knowledge were reflected. Semi-structured interviews show that ESP teachers hold a complex set of perspectives about ESP teaching. These perspectives were checked against classroom observation notes to examine teachers' knowledge in practice. Observational data revealed that ESP teachers' stated knowledge and perspectives

are not always realized in classroom practices due to a variety of reasons. Some of these reasons are directly related to context based factors of the ESP teaching environment as well as personal knowledge gained through years of experience. Stimulated recall interviews allowed teachers to justify and explain some of their pedagogical choices. ESP teachers' practical knowledge is presented under the following sub-themes: content knowledge, pedagogical content knowledge, general pedagogical content knowledge, knowledge of the ESP learner. The following table represent a sample of some of the interviewees' revealed classroom practices and their pedagogical justifications for classroom actions. The observational notes are described accordingly under the sub-themes below.

PRACTICE	JUSTIFICATION
Learners' needs are not assessed	Needs analysis is difficult to conduct, it is beyond teachers' responsibility
Syllabus and objectives are based on teachers' perceptions	Objectives are not identified due to the absence of needs analysis
Teacher talk is dominant in the classroom	Learners' low competencies, resistance to interaction
Use of content-based material (text)	English needs to be presented in a context related to students' field of study
Focus on technical vocabulary and expressions	Technical vocabulary is central in the ESP course
Grammar was linked with the theme or topic of the text	Easy to grasp by learners
Use of Arabic and French very often: to instruct, explain or translate	Student's low competencies, make sure students understand instructions
Lack of students' engagement	Students' low competencies and carelessness
Ignoring students' passiveness and behavioural issues	Difficult to manage large size classroom
Teacher reads the text, answers questions and writes the answers on the board	Students are weak in all the four skills, need to complete the lesson within time limits

General content is adequate for teaching ESP	English language teachers use simple content, subject specialist teachers are knowledgeable about content.
Context-based factors are challenging, it influences teacher's practices.	ESP is not seriously taken into consideration by the educational authorities.

Table 3.1: ESP Teachers' Practice in the Classroom

3.5.1. Subject Content Knowledge

Participants' answers suggested that ESP teachers have not received any kind of ESP training to gain knowledge about specialized content related to the ESP courses and field of study that they teach. Furthermore, the process of needs analysis was not conducted by any of the participants who declared that the content of their ESP courses and teaching is based on their own personal reading, beliefs and perceptions of what is relevant to their learners in relation to their field of interest. Few participants also stated that the content of their ESP courses was more general than specific. This reality was justified by the low level in English of students enrolled in the faculties. This latter is considered as a result of their practical knowledge to deal with students' low level in English.

ESP teachers had to deal with students who join university with a very low level in English. These students faced difficulties in the mastery of all the four skills of English. For example, interviewee (5) stated:

Students' proficiency in English makes it very difficult for me to teach. For example, students are very poor in using the four skills. How can I address their specific needs...? Instead, I try to identify their areas of weakness and turn to general English courses to help them improve their grammar, vocabulary and writing skills.

The above highlighted issues made ESP teachers' task very difficult to accomplish. Instead of focusing on specific content, ESP teachers found themselves forced to focus on improving students' language skills. As a result, ESP class becomes less interactive and less communicative which prevented student's from improving their knowledge about language use in their specific field of study.

Classroom observation further revealed that students' proficiency in English has largely affected their teaching. To overcome this problem of low proficiency in language, teachers sought the need to simplify the content so that it is manageable for students.

This reality can explain why content or subject matter knowledge seemed not to cause an obstacle for the majority of participants who are EFL trained teachers. These teachers have been dealing with simple content for years, thus they did not feel the need to improve their content knowledge. The subject matter knowledge that these teachers possess was enough for them to handle the task of teaching ESP course and serve the majority of their student's needs whose level in English is medium to poor.

Classroom observation with interviewee (5) showed that ESP course was directed more toward General English (GE) teaching as the teacher had to cater for student's needs to improve their grammar skills. In stimulated recall interview she justified by saying:

I'm not teaching ESP today, it's not an ESP class it is grammar. Though they are 2nd year but they are very low in English this is why I can't teach them ESP. I have to start with general English first, I introduce them to basic knowledge of English grammar and vocabulary and then, I direct the course toward more specialized content.

The data also revealed that teachers at Saad Dahlab University enrolled in highly technical faculties such as the faculty of Medicine, Technology and Aeronautics have found

that relying on simple content knowledge related to students' subject area is suitable to their students whose level of proficiency in English is low. For instance, interviewee (1) and (12) who are subject specific teachers believe that their subject matter content knowledge allows them handle their ESP courses and cater for their students' needs.

On the other hand, interviewee (13) who is an EFL teacher relied on the use of very simple texts to help her students understand specific content. When observed in her classroom, it was noticed that she uses content-based material on Oral Hygiene which included basic knowledge about oral health procedures with a hint on specific vocabulary. In stimulated recall interviews, she justified her choice of material by stating that:

Medical content is very difficult for me to grasp. Therefore, I choose only a simple text that I find easy for me to understand. If it is a specialized text then, it is not a choice for me. I prefer to avoid any occurring problems

She further explained by saying:

I only choose content that I can manage, it's very important for me to understand what the content is and to know the meaning of the words.

I have few smart and good students who keep on asking questions.

Suppose I don't have the answer, so how can I deal with this situation?

It could be argued that the teachers' lack of content knowledge would limit their work because without mastery of the content, teachers will not be able to use more specialized content. Moreover, teachers' choice of using simple content does not always stem from the need to meet their student's low level in English, it could be more the fear of losing confidence among their students if the text is very difficult for them to understand and explain. In ESP contexts, students' knowledge of their subject might be more advanced than

that of their ESP teacher which will often raise teachers' concern about being corrected by their students. She believes that her student know a good deal of specific content knowledge so she uses the simple content to focus on developing some academic and language skills that her students lack.

Accordingly, other participants' answers suggested that subject matter knowledge was considered as a basic component of ESP teacher knowledge. These participants were subject specific teachers who believed that without mastery of the target content of students' field of study, ESP teachers would not be able to handle the ESP course and teach the specialized language that students need to learn and use in their specific discipline especially in the highly technical faculties of Saad Dahlab University. For instance, interviewee (4) stated:

Teachers' knowledge of content has a great impact on ESP teaching.

For example, if I master content that students are interested in, I will easily address their needs and at the same time I will be able to teach students the English language relevant to their target content.

Additionally, interviewee (2) pointed out that teacher's proficiency in English is not sufficient to teach ESP courses. He asserts that "ESP teacher need subject matter proficiency to be able to deliver English language courses that relates to learner's specialization". He adds,

Without good knowledge of specialized content, it will be difficult for EFL trained teachers to meet students' needs in learning the language in a meaningful way. For example, ESP teacher has to know what the practice of dentistry is about in subject area and the basic skills required for promoting good use of English in such contexts.

In the context of Aeronautics, interviewee (4) simply comments:

It's no way for an EFL trained instructors teaches the ESP course because there are some scientific and mathematics aspects involved in Aeronautics and navigation which cannot be explained or taught unless he masters well that content.

The findings related to teacher content knowledge revealed that ESP teachers do not have adequate training to enhance their proficiency of content knowledge related to the subject matter. However, being knowledgeable on the specified subject matter is required by ESP teachers in order to contribute to the fulfilment of learners' needs. Collaboration between content teachers and ESP teachers has been suggested by numerous ESP researches such as (Dudley-Evans and St Johns, 1998) as a means to raise ESP teacher's awareness about the importance of discipline-specific knowledge.

Classroom observation revealed that ESP teachers encountered awkward situations when students' discussions could help and fill in the gap of teachers' specific content. In justifying their situations in stimulated recall interviews, they stated that though these situations were awkward yet, it could help them learn from their students and overcome the problem of lack of specific content.

Similar situations revealed the importance of specific content knowledge and its role in facilitating and directing students' classroom discussion in a way that contributes to meaningful learning. It is also revealed that ESP language teachers explained to their students that they are language teachers and not subject specialists in attempt to justify their unfamiliarity with the content knowledge and lack of confidence during their teaching performance. This situation can be seen with interviewees (6, 7 and 11) statement "feeling

insecure over limited knowledge”, “concerned about students losing trust in their ability to teach”, “lack of content knowledge prevents me from comfortably teaching”.

In ESP context, it is common that students are more knowledgeable about their field of study than their ESP teachers. Teachers’ occurrences and concerns revealed their awareness about having limited knowledge on specialized content which might be positive as it will encourage and motivate ESP teachers to learn and improve their knowledge about their students’ discipline as mentioned above in interviewees’ (7) comment: “..... I feel motivated to read about my students’ specialization”.

3.5.2 Pedagogical Content Knowledge

Pedagogical content knowledge is a category of knowledge needed by teachers to adequately deliver a particular content area in a particular subject to students in classroom practice. This type of knowledge is more practical in nature as it requires practical pedagogies and strategies to better represent content. Teachers’ awareness suggested that this type of knowledge is more personalized and context sensitive. On one hand, participants revealed that ESP teaching practices and actions are influenced by their own personal perspectives and views on how to appropriately teach a subject. On the other hand, it is influenced by context in which they are teaching such as students’ behaviour, motivation, anxiety in learning language and the type of educational equipment and facilities available, teaching and learning environment and classroom atmosphere. These contextual elements were revealed to be responsible for shaping their classroom decisions and shape the teaching of their subject.

In line with what has been stated previously, and as far as English language proficiency is concerned, it can be stated that the lack of motivation to learn the language among students of Saad Dahlab scientific faculties does not allow them to communicate using the language. Based on interviewees’ (4) belief, students are “very lazy, they don’t want to

make efforts, we just teach them the basic and that's all". Therefore, ESP teachers find it difficult to initiate discussion and create interactive classrooms. The actual status and practices of teaching the language in the different faculties do not rely on interaction. As a result, they tend to rely more on teacher-centred approach to teaching and learning with limited student interaction. Teachers' recognition about the importance of interaction is not given attention in practical terms due to students' negative attitude as well as their low level in using language.

3.5.2.1 Learners' Attitudes towards ESP

Learners' attitudes refer to views held about English for specific purposes and the desire to learn it. Through experience, ESP teachers in the present study developed awareness about their students' learning preferences, problems and needs. This type of knowledge seems to play a role in shaping teachers' pedagogical decisions. They claim that the majority of the students enrolled in scientific faculties of Saad Dahlab shows a great deal of carelessness, laziness and passive attitude towards learning English. All participants who complain about their learners, show poor motivation as described by interviewee (7):

Learners are not interested in the lesson I present to them. I keep on asking them questions, even in Arabic, but they still don't want to answer... the majority of students do not attend the class... I barely keep few students to attend while the others leave. I ask them for the reason... they don't know why???

Interviewee (5) believes that students are irresponsible and passive learners. Interviewee (13) adds that students show no interest in the ESP course, they have a very poor level in English language. They are very low therefore they decide to skip the ESP course. They lack basic language skills which is a direct result of their previous educational

background in schools. They seem to focus on exams and grades rather than on the quality of language learning. Students are only concerned about exams and grades without making any efforts to succeed in learning the language which is the ultimate aim that they are expected to attain.

Interviewee (12) acknowledges that students' low attitude to learn English affected her teaching practices. She explained that her attempts to follow a more communicative approach in her teaching were not fruitful as she said:

Students are not interactive, they do not participate, they are passive, they just want you to explain everything by yourself and provide them with the lesson and the hand-outs, even the exercises I use in the classroom they do not participate,... when I ask them a question I do my best to help them interact.... but I always end up answering by myself, they do not even try.

Due to the passive attitude and atmosphere that the interviewee (12) experienced with students, she decided to focus only on some basic language skills using more traditional approach to teaching. She believes that students are more used to teacher-centred approaches referring to the subject specialists' courses that students receive. Students are familiar with such traditional approaches because the teacher continues to provide them with all lessons needed and explain it all. Eventually, students found it easier because they do not have to pay any efforts. This traditional approach to teaching is followed by an easier way to evaluate and assess students in exams which consists mainly of multiple-choice questions that could be corrected automatically. Students seem to favour this assessment and evaluation approach and therefore they do not welcome any change.

Similarly, interviewee (13) mentioned that her students keep on asking for readymade hand-outs of the English lesson that she provides in the classroom so they can revise for exams. She added:

Students wanted a multiple-choice questions format of the English exam because they prefer it and are used to it with other subject specialist exams. Even the Head of the Department suggested if I can use the same exam format because this is how students are used to be assessed.

Interviewee (13) thinks that the suggestion of the Head of Department revealed a lack of awareness about the nature of English language teaching as this type of evaluation cannot assess students' language skills. She only thought about satisfying learners and serving their expectations.

This reality reveals that the Faculties and Departments of Saad Dahlab University do not encourage change. Therefore, it might seem challenging for ESP teachers to adopt a communicative approach in language teaching which they believe would better serve their students' communicative needs.

3.5.2.2 Students' Lack of Involvement in the Learning Process

On the basis of the examination of the data gathered from the participants, ESP students seem to favour learning in a conducive atmosphere where the teacher is in the center of the class responsible for delivering the lesson with minimum interaction from students. In this respect, teachers' attempts to use pair or group work activities was met with rejection as students show no attempt to get involved in such activities. Participants' responses also revealed that only few students perceive that group work and interactive activities are useful for them to improve their English proficiency.

Research reviewed in literature highlighted that teachers play an important role in classroom interaction and are responsible “for creating a learning environment that will effectively nurture the students’ desire to learn and to accept the challenges of thinking and inquiring into all that is offered by teachers” (Gurney, 2007). In other words, the teacher is expected to provide students with the right climate for effective learning and encourage them to participate in the classroom. Although participants realized the power of students’ interaction in the classroom however, they found it difficult to implement in reality due to learner’s lack of involvement. Interviewee (4) mentioned: “I try to stimulate their interest to interact and learn but they are not enthusiastic about learning”. Interviewee (4) who realized the importance of classroom interaction tried to encourage learners to take risks and make errors while using the different language forms related to their field of study and registers. However, students’ lack of positive attitudes seems to have a considerable impact on the implementation of pedagogical content knowledge.

When observed in her classroom, interviewee (13) seemed to suffer the same issue of students’ lack of engagement. One of her observed classes revealed the following issues.

In the following episode that is extracted from interviewee (13) classroom observation, using role play conversation to practice language use with the students is demonstrated.

Teacher: when patients speak about their problem, they often refer to a part of a body. The expressions and vocabulary seen can be used in a similar communicative situation between patient and doctor:

(Teacher reads): doctor may ask: how are you feeling today?

A patient may respond: not very.....

Students are not answering

Come on... not very..... Check the terms we have seen ... is it that difficult?

Teacher: if you had to visit a doctor it definitely means that you are not feeling very.....

Student answer: well

Teacher: yes, that's good.... not very well. The doctor then may ask

(Teacher reads): doctor: how long have you been feeling.....?

Teacher waiting for an answer and then says:

Come on you only need to think about the synonym of not very well.... which is?

Student: ill, sick

Teacher: Yeah, it can be correct but in this case you need to pay attention to what the patient answered so you better use

Students: unwell

Teacher: Good that's right. Well carry on... can you read the following role please (referring to the only student who used to answer.

Student: doctor: what is your like normally? (The student tried to answer, the teacher stopped her saying:

Teacher: anyone else. Can you fill in this gap..... come on ... think about it...

Student: health like normally

Teacher: yes, that's right...Oh finally

The teacher seems to challenge the traditional teaching system. This was evident in her pedagogical choices such as the teaching method that she applied and the procedures followed

that attempt to create an interactive learning environment. Unfortunately, the teacher was disappointed by students' performance and reactions toward her reflective practices. Her attempts were not fruitful due to student's lack of necessary language skills that allow them to engage in such learning activities. In the stimulated recall interview, she comments:

I think that students are not aware about how engaging in discussions and asking questions can help them improve their communicative skills which correspond to their needs in their field of study.... That's' it. They don't seem to have that awareness ...even when the discussion is related to their area of interest.

Based on teachers' shared accounts, students' beliefs, behaviours, attitudes and conceptions had a direct impact on teacher's classroom practices and decisions in the choice of material and activities, course design and actions in the classrooms.

Yet, as far as research ideas are concerned and teachers' stories, it could be assumed that both students and teachers need to share their knowledge to create an interactive learning environment. When both of them become learners and get engaged to discover the world of the subject, the amount of involvement and interaction will increase along with teachers' pedagogical content knowledge that teachers would have for teaching the subject and stimulate student's interest in it.

Interviewee (13) episode shows that the teacher tried her best to get students interact through the use of dialogues related to the world of medicine that better illustrates a conversation situation that could take place in their future occupation. She was ready to reflect on the nature of teaching and applied a method that foster critical thinking and interaction. Her pedagogical choice was based on her theoretical knowledge that foreign language learning is constructed through interaction and this can be achieved by helping her learners to

become individuals who can make sense and construct meaning in their own area of interest through interaction and the use of critical thinking. In the classroom context however, though the teacher wanted to help her learners approach English through subject-specific content that students are already familiar with expecting that combining subject matter (which is medical in this episode) with English would be attracting, motivating and interesting for students to get involved and take on the responsibility of their own learning, they did not make any efforts to improve their English.

However, the linguistic and communicative demands in the discipline seem to be an obstacle for her students what prevent interaction in the classroom. This reality was disappointing for the teacher who described her frustration and seemed to affect her both professionally and emotionally. In stimulated observation interview, interviewee (13) admits that she lost hope trying to get students interact and decided to change her teaching method to a more traditional and teacher-centred approach rather than communicative and interactive one. Teacher's reason for changing her teaching approach is her realization that students are interested about exam only rather than learning English. This reason is not very different than those of the other ESP teachers of Saad Dahlab University who found themselves obliged to satisfy their students and focus on what is needed to sit for exams only instead of learning. Participants hold similar views about their students' poor language skills and critical thinking abilities as these are important in constructing knowledge and learning.

3.5.2.3 Vocabulary Instruction

Among the elements which make ESP distinct from EGP is the area of vocabulary instruction. In this regard, all ESP teachers perceive vocabulary at Saad Dahlab faculties as a fundamental part of all ESP teaching courses. They also agreed that it is important for students to build a consistent body of jargon and concepts that are specific to and occur

frequently in their field of study. Yet, teachers' personal views about how to teach this area revealed different considerations which correspond to two different types of vocabulary instruction; explicit teaching of vocabulary preferred by subject specialist teachers and the implicit type of vocabulary instruction preferred by EFL teachers. Responses of the first type of participants show that they preferred to provide their students with a list of terminology related to their field of study. For instance, interviewee (9) believes that students at the beginning of their study are not familiar with the technical vocabulary in their discipline therefore; exposing them directly to a list of vocabulary items with their definitions in English can lead to successful learning of vocabulary. Teacher, then, checks students' understanding in the classroom through discussion of their meaning, provides synonyms and acronyms and their equivalent in French and Arabic. She justified her choice by arguing that

Students are expected to develop knowledge of vocabulary through other subject specialist teachers, but we can't rely on that because they are not yet familiar with all technical terms, you have to provide them with a list so they are not lost. Then, I further explain and illustrate in class ... you know, they like it this way, this is how they prefer to study vocabulary.

Students' proficiency in English as well as their attitudes towards learning seems to have a considerable impact on ESP teachers' pedagogical content knowledge. For instance, interviewee's (9) choice of vocabulary instruction is based on her personal belief about the effectiveness of direct instruction and explicit learning of words since learners are unfamiliar with the new context. Her knowledge about student's preferences might have also influenced her decision as she is aware that students are lazy, dependent and irresponsible of their own learning and thus want to be provided with well-prepared lists along with their definitions and meaning.

Similarly, interviewee (12) prefers to provide a list of vocabulary with its translation in French and Arabic to help students acquire vocabulary. As a subject specialist teacher in charge of teaching the ESP course, she stated that the students are already introduced to technical items related to their field of study in the different subjects where teachers explain and illustrate these terms. Therefore, she believed that in ESP course, she just had to provide students with lists of terminology only to ensure that they won't fail in exams. She said:

I can't risk having students complain the day of the exam that they haven't seen this in class because this is how they are; they are so dependent on teachers You can't rely on them doing things by themselves.

Interviewee (7) agrees with interviewee (11) and was totally with providing students with specialized terminology with their meaning. She argued that students are not able to assume responsibility for their own learning. This later reveals that teachers' choice on how to teach vocabulary was influenced by their personal beliefs and perspectives.

Different from this perspective is the view of the second type of participants in which majority of them received EFL training. They are against providing students with lists of vocabulary because it prevents students from learning. For instance, interviewee (13) chooses to introduce vocabulary through a text or a passage where technical vocabulary is highlighted or written in bold. While reading, the teacher asks students to find the meanings of these terms using different strategies. She believed that it is students' job to look and search for the meaning of words and write their own definitions.

Interviewee (1) agreed with interviewee (13) and opposed the strategy of providing learners with vocabulary lists and their meaning. They view that teachers should promote autonomy and allow students to participate in their learning process instead of giving them

well prepared lists of vocabulary. It seems like she based her decisions on how to appropriately teach vocabulary on her knowledge that teachers should play the role of a facilitator not provider of knowledge. Yet, though her views indicate that students should participate in their learning, various classroom situations obliged some teachers to make certain practices that go against their real intentions and actual beliefs.

The following episode is extracted from the observation of interviewee's (13) classroom practices that reveals her method of teaching vocabulary by introducing the words through a passage and asking students to guess its meaning from the context.

T: well, we have a text entitled "Oral Hygiene"

Ok: read the text and think about the meaning of words in bold.

S1: (raise her hand)

T: yes, Manar, can you read the first paragraph.

S1: (student reads the text)

Text: Oral hygiene is the practice of keeping the mouth and teeth clean to prevent dental problems, such as **dental cavities**, gingivitis, and bad breath. Good oral hygiene results in a mouth that looks and smells healthy.

T: (teacher interrupts), what is "dental cavities"? What is cavity?

S2: students answer in French "cavity"

T: that's right in French.

S3: (answers in Arabic) tasawos asnane.

T: true "tasawos" this how we call it in Arabic. Can you explain its meaning?

S3: (answers in Arabic) essenna tetsawas, tentgab

T: yes, it is a common tooth problem (teacher writes the word on the board) can you think of a proper definition in English?

Ss: no answer, they try in Arabic and French but no appropriate answer.

T: (teacher ends up by writing its definition on the board) it's when tooth crown is destroyed and causes a whole called cavity or dental caries.

T: is this clear, understood.... good.

Now, can you think of a synonym for dental caries?

Ss: cavities.

T: right, that's good its "cavities" but there is another word, try to find it in the passage that we have just read.

Ss: (look at the text but no answer).

T: it is dental decay (teacher writes the term on the board and explains its meaning) dental decay means the destruction of tooth surface.

When asked about the reason behind her choice in introducing vocabulary through a context and discuss its meaning in both French and Arabic, she explained:

well, students need to make efforts and look for the meaning of vocabulary by themselves ... their level of proficiency in English is poor, they don't have good vocabulary knowledge and they are less motivated, so I use a text related to their area of study to raise their

interest and provide them with a content that can be helpful in guessing the meaning of technical vocabulary.

She adds:

I also believe that the use of French and Arabic to explain the meaning of words is good for students because students receive French as language of instruction that all subject specialist teachers use, they may know the word in French and this way they can relate the word with what they already know. I also use Arabic to ensure that they all know the word and consider student from different nationalities such as Syria and Jordan who are very poor in French.

Interviewee's (13) views are based on her awareness about students' needs and wants. She believes that if learners are provided with texts in familiar areas where they can bring a lot of relevant background knowledge to their reading, they will easily deal with technical unknown terms in context. The teacher also sought to interrupt the students while reading to write specialized terms on the board. Then, she tries to help students pay attention to the language of the text and draw on the available clues to explain the meaning of unknown words and discuss their use in different contexts. The use of such method will allow for greater chance of vocabulary learning.

Teachers' pedagogical choices and behaviours in this context seemed to be largely based on her personal knowledge and awareness about the importance of reading as a major source for vocabulary growth.

In her discussion, the teacher explains that a reading text can be helpful not only in learning technical items but also general vocabulary items. This awareness is based on her knowledge about students' poor vocabulary. Therefore, she highlighted the need for students

to develop both types of vocabulary because some technical terms were previously introduced to learners by the specialist subjects, but they need to know how these terms are used in a discourse to be able to use them productively and communicate professionally in their target future situations.

The majority of participants interviewed in the present investigation believe in the appropriateness of using translation to explain the meaning of unknown specialized vocabulary because they believe that learning these terms can increase significantly if they relate the word in second or foreign language with its meaning in the first language L1 which they know because it is already accessible. They also believe that the use of translation is easy, not time consuming and most importantly conforms to what students need “to be realistic, this is how students like it” interviewee (7) comments.

The above findings agreed with research and literature about the importance of reading in the course of language learning and vocabulary development as well as the effectiveness of the use of L1 or translation as an essential part in teaching language and learning vocabulary items as such (Nation, 2001, Long, 1988, Ellis, 1990, Newton, 1995).

3.5.2.4 Teaching Grammar

Teaching and learning new vocabulary items are completely different from teaching students how to build a tense. Teaching grammar has been perceived as a challenging task for most participants in the present study. They considered grammar to be the toughest part for their students mainly due to their lack of basic knowledge of language forms. While few teachers saw the need to teach it explicitly others however, show initial fear to grammar instruction and decided to teach it implicitly by approaching the topic of grammar through the use of real context related to students’ area of interest.

For instance, interviewee (4) chooses to highlight grammar rules indirectly while dealing with subject specific content that he uses to teach English. When observed in his classroom, interviewee (4) seems to highlight few grammar forms using the same content that he writes on the whiteboard. For example, the teacher was noticed to underline a sentence in the passive form and explains orally the passive and active voice a when and how to be used. Interviewee (4) addresses his students in a way that they already been presents with the passive and active form he is just reminding them about it. Although the teacher's interview responses shows that he perceive grammar as an important component in language teaching, he did not opt for direct instruction of grammar or rule building through exercises. During stimulated classroom observation, he explains that students' are supposed to learn rule system (or grammar) through observation of the language. Therefore, he prefers to encourage students to observe how the language is used and developed with the target language.

His views are not similar to other participants who decided devote more time to teaching grammar rules. For instance, Interviewee (7) devoted whole session for inductive teaching of grammar rules. She believes that student's have to improve their knowledge of the language forms before indulging in an advance use of language that correspond to their highly contextualized discourse related to their scientific field of interest.

Interviewee (13) on the other hand, provided students with the opportunity to practice grammar rules by including activities related to the reading text that she uses for teaching ESP content. She believes that students are expected to have already been dealt with all grammar forms in their previous education. Her task then is only to remind students about certain forms by practicing its use in specific-based content.

These different views can be explained by participants' different educational background and understandings. While ELT trained teachers choose to deal with grammar

forms through direct instruction, subject specialist teachers were observed to highlight grammar rules inductively. This latter, can be explained by their lack of adequate linguistic knowledge necessary to teach this area appropriately. However, both types of instructors agree that their students are expected to possess clear linguistic understanding of English language forms from their previous schooling.

3.5.2.5 Integrating Language Skills in ESP Teaching

The ESP course is expected to help learners use language to serve a communicative purpose in real situations. This latter includes not only grammar and vocabulary but also the mastery of the so-called macro-skills (reading, writing, listening and speaking). Classroom observation revealed that participants practised these skills whether separated or integrated according to their student's preferences. Few participants relied on the use of a reading text as an input to practice grammar, vocabulary and writing. Interviewee (6) stated "there are a variety of texts on the web which makes it easier for me to find a text that will interest the students and may encourage them to read and listen"

Besides emphasise on teaching vocabulary and grammar, teachers seem to focus on reading and writing among the four skills compared to listening and speaking which were almost ignored and not integrated in the classroom activities and practices. Students could only listen to their classmates or teacher reading the text. However, speaking was limited to students concerns or answers to teachers' questions. Most participants observed in their classrooms seem to focus on reading.

Looking across the data gathered through teachers' interviews and class observations, different responses were identified but this clearly indicates that most participants focus on reading. For example, classroom observation with interviewee (13) revealed that she focused her lesson on a reading text followed by reading comprehension activities and grammar

activities. As for vocabulary development, the teacher used matching as well as fills in the gaps exercises to help students understand the meaning of words and use them in contexts relevant to their field of interest.

Interviewee (13) justified her choice of using a reading text as the best choice that provides students with an input related to their area of study. Most teachers ask their students to read a text but they occasionally read some passages to highlight some basic terminology and ideas.

Another reason for teacher's choice to read was to avoid time waste and correct students' pronunciation and poor reading skills. For instance, interviewee (9) explained that she needed to read the passage in order to make a pause when she encounters new vocabulary items. The teacher first makes sure that learners understand the word in order to discuss later different word meanings and properties. After reading the text and understanding each passage, the teacher then asks students to answer some comprehension questions to check their understanding of the topic.

3.5.3 General Pedagogical Knowledge in Practice

3.5.3.1 Classroom Management

General pedagogy is an essential element of teacher knowledge. This latter implies the ability to teach effectively and manage the classroom. This is commonly due to the fact that good classroom management techniques and strategies allow the teacher to better communicate the lesson to students and attain the desired course objectives. The ESP classroom often has a more active atmosphere, because ESP students are adult learners who are supposed to have specialised background knowledge of the field scope of the study. Therefore, they are expected to interact and exchange and discuss different information, and seek to learn the type of English which is believed to be encountered in their educational and

future situations. Hence, the role of the teacher is to supervise learning in the classroom and keep students attentive.

Awareness about the specialized and unique nature of an ESP classroom and actions is a key parameter in teachers' pedagogical knowledge because of the fact that the language content of the ESP courses are different from those of general language courses and thus require different pedagogies as well as awareness of the importance of classroom atmosphere to improve language learning. In order to investigate ESP teachers' general pedagogical knowledge, teachers' practices and decisions to manage their classroom had been observed. Findings in this section revealed that teachers' practices and strategies to manage their classes were as follow:

3.5.4 Ignoring Student's Misbehaviour

Interviewee (2) chooses to ignore students' misbehaviour and noise in the classroom and decided to carry on his lesson by interacting only with few serious students sitting in the front. Students sitting at the back of the classroom decided to escape the lesson by leaving the classroom without asking for teacher's permission. The teacher seems to show no reaction toward students' behaviour.

During the stimulated recall interview, the teacher explained that he decided to ignore students' misbehaviour and disrespect because it was time waste and time consuming to try to keep a large class silent and attentive during the whole time of the lesson. He also believed that the administration is to blame for such an issue because they cannot provide enough English teachers and decide, instead, to include more than two sections in one lecture hall so that they can be taught with the only teacher available in the Department. He stated:

We are so in struggle with large classes, usually noisy because it's hard to control. It's just a waste of energy and time to try to keep all

students attentive ... if they are not interested then they better leave. I just don't care; they are adult learners and they should be responsible for their actions. If they don't want to attend the course, I can't oblige them. They can't listen well at the back and I have nothing to do about it. This is not my problem.

Interviewee's (2) remark reveals the struggle that many teachers face at the university when the administration asks the ESP teacher to deliver the course for a large class (a lecture hall) that includes all the sections in order to overcome the problem of lack of teachers. Interviewee (2) justifies his tolerance towards students' misbehaviour by stating that the ESP course is limited to a specific period of time where the teacher is almost obliged to handle the task of teaching and time management under extreme pressure and noise that come with the consequences of teaching large classes. The teacher blames the administration for his failure and inability to manage his classroom. He believes that teachers should use their energy in order to prepare and teach the course and it is the administration's responsibility to provide appropriate teaching environment and atmosphere for the teacher to do his job efficiently. Consequently, the teacher decided to ignore student's behaviour and focus on the task of teaching the lesson within the time allocated. He further comments:

I used to take time and try to advise students and raise their awareness about the importance of learning English, but afterward I noticed that they don't listen. It was awkward to try to keep students interested in the course. It was nothing but a waste of time. They don't listen at all; they are careless and unserious. They show no sense of responsibility towards their education... they don't care so why should I?!

Teacher's justification also seems to reveal that his decision and actions can be considered as a direct result of his awareness and knowledge about his learners and their way of thinking such as their carelessness, lack of motivation and interest in the ESP course.

Interviewee's (2) comments concerning students' carelessness and misbehaviour in the classroom seem to agree with other participants' opinions. However, while few participants were tolerant with student's misbehaviour and disrespect in the classrooms, others believe in the effectiveness of severe punishment and used harsh measures to manage their classrooms because they believe that student's disruptive behaviour could reduce the efficacy of their teaching and prevent the lesson from advancing smoothly. They believe that it is their responsibility to create good teaching environment that promote interaction with interested students. This is only possible through the use of pedagogical strategies that help teachers manage course content and tasks within the time allocated for the session.

3.5.5. Severe Treatment and Retribution

Classroom observations revealed that few participants choose to rely on the use of harsh treatment to manage their classrooms. They believed that they should act harshly towards student's misbehaviour such as, tardiness, noise and carelessness toward the lesson because it could prevent the lesson from advancing as planned and create time management problems. For example, interviewee (7) decided to deal with the problem of attendance and tardiness by threatening students to make a report to the Head of the Department so that he could act toward their irresponsible behaviour. She believes that students fear when the problem is at the hand of the department authorities because it shows that the issue is serious enough to be treated by the administration. This was evident in the following episode extracted from one of her classroom observation sessions.

(Teacher interrupted the session and decided to discuss the problem of attendance with students)

T: you have missed so many sessions in this semester, now the Head of Department sent me an email to inquire about the number of sessions taught so far to see if we can schedule the exam.

So, what do you want me to say to him?

Sts: students are silent, they are not answering.

T: come on... what to tell him (teacher repeats the question in Arabic).

T: why you decided to leave the classroom and not to attend? (in French).

Sts: (students are confused and silent, they don't know what to say)

T: (teacher directs her question to the delegate of the classroom) what do we say to the Head of Department Salima?

St: (the delegate looked at her classmates and said) we don't know.

T: of course, you don't know what to do know? What do you know? You just know how to create problems (in Arabic)

T: I wonder what you were thinking when you missed all the session? You think there is no department and you just do what you want (in Arabic). Now I have to report things to the Head of Department.

St: a student told her: tell him we want to change the time of the session because we feel very tired and can't attend the last session.

T: now you say this!! Don't you think it's too late? We can't' even catch up for the missing sessions.

Interviewee (7) found herself in need to provide the department with some necessary information before the first semester exams such as the state of advance concerning the ESP course and decided to discuss the problem with her students. In justifying her choice, she replied:

They have created a problem so they have to deal with it. I had to let them know what's going on in the department, because they have to see the consequences of their irresponsible actions. It's not my problem I used to come I was there and all students left though they know that I will be there. So, I have to show to students where they did wrong so they can deal with it. That's it; they have to assume responsibility for their actions.

The above comment shows that the teacher felt a sense of anger, out of which she tried to communicate with students about their disappointing behaviour. She also believes that students have to be responsible, even if they are not motivated enough to change that behaviour, but at least they have to know that they caused problems that affected the administration's decisions concerning the planning of the exams. In her interaction with the students as illustrated in the above episode, classroom observation revealed that students experienced a transformation in their emotions from being careless and ignorant to a mixed feeling of responsibility and awareness. This was evident in their attempt to think about a solution.

The discourse of anger and punishment can also be found in interviewee (13) responses claiming that she decided to threaten students that she will consider the lessons that

they missed to be done and she will include them in the exams. She explained that she could not start teaching for a whole month only because the students decided not to attend the ESP course. This state of anger and frustration contributed to her decision to include the missed lessons in the exams as a kind of punishment. Her decision was supported by the Head of Department after she failed to alarm students to attend. She also believed that students care only about the exams and threatening them was found to be a solution to deal with the problem of attendance.

3.5.6 Content Management

In order to function adequately as a teacher, an ESP practitioner is required to manage a great deal of content including a variety of tasks which revolves around the teaching of English for specific purposes pertaining to students' professional, educational and future job demands. This latter implies the ability to teach effectively within the time allocated to the lesson. This is mainly because a teacher might have a good command of a language but this does not necessarily mean that she/he is pedagogically a competent teacher. In this regard Richlin (2006, p.135) states:

A pedagogically competent teacher communicates the objectives of the course to students, is aware of alternative instructional methods or strategies, and selects methods of instruction that, according to research evidence (including personal or self-reflective research) is effective to achieve the course objectives.

To achieve this end, the researcher observed teachers in their classrooms as they practiced their job.

3.5.7 Pedagogical Knowledge of the ESP Learner

The previously gathered data revealed that teachers' pedagogical choices and decisions were based on their understanding of their learners. It is this awareness of learners that affected teachers' way of thinking and eventually orient their pedagogical and practical decisions. Pedagogical knowledge includes understanding their students' learning strategies, difficulties and needs in order to help them learn better. This type of knowledge can have a considerable impact on teachers' pedagogical decisions. ESP teachers believe that their students' psychological, social and cultural background as well as previous educational experience can affect their way of thinking and how they prefer to learn. Understanding these factors can help teachers make appropriate teaching choices in the classroom. For instance, interviewee (1) described his students by stating:

They are not the type of students who can take decisions without consulting their parents or family members; they are not self-dependent.

This type of mentality can have a considerable impact on students' way of thinking and learning. They are not willing to take risks or assume responsibility for their learning. Interviewee (4) added:

Our students are shy, especially female students. They are not so keen to initiating discussion.... They simply don't want to speak the language in the classroom.

According to participants' accounts, students' social, cultural and psychological background could prevent them from taking classroom decisions, interact with others and initiate discussions. This type of understanding can also help teachers take better instructional decisions because it provided them with insights into how differently students can best learn so that they can cater for their specific and varied needs. Some participants choose to avoid

activities that involve classroom interaction as a result of students' unwillingness to participate. In the same line of interest, interviewee (7) stated:

My students are lazy; they don't want to copy what I write on the board, they always ask for hand outs of the lesson.

She also believes that students developed this habit with other subject teachers who used to provide them with hand-outs of lessons. Even though she believes that preparing ready-made lessons for students to use is not an appropriate method, because teaching language is different from teaching other subjects, however she was obliged to abide to her students' wants. Interviewee (7) adds that even when she provides copies of the lesson with few questions at the end, her students still feel lazy to write and prefer to use their phones to take photos of the answers written on the board instead.

The same attitude was observed in one of the lessons of interviewee (13) as students were noticed to take pictures of what was written on the board instead of writing on their copybooks. Some of them used their phones to tape the lesson instead of using a pen and a copybook. Others however, were noticed to use their phones to record the whole session.

This attitude was observed by the majority of the participants who declared that their students' preferred to receive their lessons in electronic versions using their digital devices. However awareness about student's learning strategies and preferences is not always welcomed by ESP teachers. For instance, despite interviewee's (5) awareness about student's preference of digital versions of the lesson to use their cell phones in studying , he chooses to write the lesson on the board where students are required to copy it in their copybooks. He justified his choice by stating that "students have to write in order to learn the language".

Interviewee (13) stated that her students claimed that they usually commit a lot of spelling mistakes when they copy the lesson from the board and thus preferred to receive the lesson via the various networks that they use.

It appears that ESP teachers' preferred style of teaching is largely influenced by their knowledge and understanding of their learner's mentality. Some participants were obliged to cater for their students preferred learning strategies, even if they believe that it was not the appropriate technique to use.

3.5.8. Technological knowledge

Technology is expected to be employed in ESP classroom as a tool that supports traditional forms of language teaching and learning. As new technologies found its applications in the 21st century foreign language classroom, the development of various technological sites has offered tools for language teaching and learning to create a space for communication (Bloch, 2013). When asked about the use of technology in ESP pedagogy, all participants comment that technology was extremely useful in ESP teaching. As interviewee (2) stated:

I rely on internet resources to define what my students need and find teaching material such as texts and activities relevant to my student's field of study.

Similarly interviewee (6) declared:

Internet is the only net of resources I use to prepare my ESP courses and create specialized materials that ensure student's engagement with relevant target discipline.

With the absence of any type of ESP training and administrative orientation, ESP teachers seem to rely on technological applications available to find relevant instructional materials and sometimes lectures that suits their students' specialization. They also use internet to deal with the difficulty of understanding and analysing discipline-specific content which they lack. In this context, interviewee (13) believed that internet is not only helpful in accessing authentic materials to be used in the classroom such as different written texts "I also use it to analyse texts and understand the meaning of technical vocabulary and expressions".

Based on their accounts, ESP practitioners seem to rely primarily on internet to exploit authentic discipline-specific materials to use in the classroom. They believe that technology also provided them with activities that can be used for language practice inside the classroom or for their student's learning by their own. Participants also referred to the use of social networking sites such as Twitter, Facebook to interact with their students or present their courses online via zoom and other digital applications. They believed that their students are used to different forms of social networks and expect these latter to be employed in their language learning. With such a proliferation of digital culture, ESP teachers are encountered with unprecedented challenges related to the integration of these new digital technologies into their day to day classroom activities.

Teacher's responses revealed the important role of ICT in ESP teaching yet; they only refer to its use in creating teaching material or adaptation, classroom activities and facilitating communication with tier student, ignoring completely the advantages of using ICT tools inside the classroom to facilitate the lesson delivery.

Participants seem to ignore the role of technology to support classroom teaching. Classroom observation further revealed that ESP teachers rely primarily on traditional forms of teaching such as providing students with hard copies of the reading text used in the

classroom. They were also noticed to use the traditional board to write long texts of the lesson and exercises. Despite the usefulness of technological tools in facilitating students' language learning in the classroom, the majority of participants did not feel the need to use them. In justifying their action, ESP teachers refers to lack of equipment, time constrains and lack of necessary digital skills which prevents them from using certain technological tools in their classrooms.

3.6 Challenges in Teaching ESP

Qualitative data gathering tools employed in the present investigation unveil a number of challenges and hurdles that might have hindered teachers from translating their knowledge in practice. Teachers who participated in the present study listed a number of challenges that they encountered in teaching ESP. At the heart of these behavioural challenges is a student who has experienced a great deal of dysfunctional conditioning beforehand. This conditioning is likely being reinforced outside the class as well. These challenges are grouped as follow.

3.6.1. Challenges Related to ESP Students

3.6.1.1 Students' Inadequate Level of English Proficiency

After they graduate, students have the opportunity to hold various positions in different fields, such as companies, hospitals ... etc. They often have to communicate effectively using English. In this sense, it becomes the ESP practitioner's responsibility to provide an appropriate learning experience for students so that they can improve their English communicative skills to act appropriately in real professional situations. However, based on the present investigation, accomplishing this task is never easy for the ESP teacher as there are several challenges that prevent teachers from implementing their knowledge in practice. A recurring theme in the interviews was that all respondents' perspectives revolved around the one main issue, student's low level in English. This theme emerged from the collection of

codes concerning student's low participation, no-completion of homework and lack of participation. They considered student's inadequate level in English to be the utmost challenge that hinders teachers from delivering an efficient ESP course. The sharp contrast between teacher's positive expectations of student's level in English and disappointment in receiving student's actual low level forms a low motivated and uninterested classroom environment for teachers to do their job. Interviewee (1) stated:

I think the most disappointing fact comes from students. They do not participate in class, and they can't communicate with me. You don't expect this from students after studying English for seven years. It's stressful, I always feel like talking to myself.

This situation is commonly experienced by other participants of the study. Most of them perceived student's low proficiency in English as an obstacle that hinders teachers from adequately teaching the ESP course and were under great pressure in implementing their designed and planned lessons in the classroom. In hope to connect with students and getting them engaged in future classes, interviewee (9) tried to involve them in a discussion of their negative attitude in the class in order to understand their needs and wants. In their interaction, interviewee (9) stated that: "students do not really understand what I'm talking about when I speak in English. They are just poor in English to understand what is going on in class". Therefore, teachers suggest that the poor level of English proficiency displayed by some students forms a hindrance to their participation in classroom activities. As such, students' low level in English forms a challenge in ESP teaching (Jiang et al., 2019). Thus, teachers believed that this issue is affecting their ability to practise their tasks and activities as planned. Further accounts of the respondents about the challenges that they encountered resulted in the emergence of other themes related mainly to their students.

3.6.1.2. Students' Lack of Behavioural Engagement

The findings of the study revealed that student's carelessness about the ESP course is perceived negatively by the participants. Teachers perceived their student's lack of attention, interest and laziness during the ESP courses more as a problem that hinders the implementation of knowledge in practice. Students show negative attitudes and behaviours towards learning which is negatively affecting the classroom environment. Interviewee (13) comments: "I tried to prepare the lesson in an interesting way and hope the students would like it. But sometimes I feel disappointed because they do not give any response in the class"

Interviewee (3) similarly comments: "one time, I prepared very interesting activities and I was ready to engage students in the class, only to find more than half of the class absent".

The above comments show that teachers attempt to keep students attentive and motivated by bringing their anticipations to the classroom, yet these anticipations turned into disappointment because students are careless and very passive to give responses. Teachers suggest that this problem is from the students themselves.

The issue of students' carelessness can also be found in other responses (interviewee (9), (6) claiming that ESP courses are not answering the demands of students and therefore result in students feeling unmotivated and unwilling to take part in the learning process. However, they related the causes of student's carelessness and disengagement to the ESP courses as social, cultural, and institutional factors rather than on the students themselves. In this regard, interviewee (9) argued:

Our students (means Algerian cultural background) are not truly interested in learning except only few of them who actually want to learn. The others can't wait to graduate, take their certificate and go to

the real world and try to find a job and make money. The only thing they care about is going through exams and not learning. It's their mentality. This is simply how they think.

Interviewee (9) perspectives are not very different from those of interviewee (6) as he stated:

Students think of the ESP courses as useless and this is why they don't want to make efforts in their learning, especially for male students as they only want to pass the final examination and go find a job. This is the culture here in Algeria.

Interviewee (9) and (6) agree with the rest of the participants that the majority of their students think that it is unnecessary to learn the English course because they see no use in doing so. Therefore, they are reluctant to invest too much energy in the course. They also believe that male students especially are more interested in the job market. This latter is perceived as a source of concern for teachers because it influences their pedagogical decision making in the classroom. Even if they tried to prepare interesting lessons, the students' cultural background still entails that they just need to graduate from the Algerian university and find a job. Participant' responses equally suggest that the students have such a good prospect that they do not necessarily need English to find a job in Algeria.

The above responses indicate that teachers related students' carelessness and lack of interest in the ESP course to external institutional and socio-political elements such as employment market, and English grade examination. Further responses indicate a clear influence of the institutional policy on student's behavioural actions and suggested that it contributed partly to their challenges in ESP teaching.

3.6.1.3. Educational policy

Both interviewee (5), (1) associated students' negative attitudes with possible deficiencies in the ESP teaching policies and institutional system. They believe that the higher educational system fails to meet students' learning and academic needs. Most participants carry similar perspectives as they critically examine the role of the higher institutions in empowering the educational arena with necessary conditions for adequate teaching and learning. All participants agree that it is the educational system's responsibility to provide not only relevant curriculum that prepares students for language use in real-world contexts, but also relevant teacher preparation to engage in the different ESP teaching situations.

Further responses reveal a common understanding that student's disengagement in the learning process is a direct result of their realization that the ESP courses does not address their needs in the future. They also blame the educational policy that focuses on the grades gained in final examination for further studies rather than on the accumulation of knowledge. Interviewee (13) comments:

We used to focus on learning and gaining the maximum of knowledge from our teachers rather than the exam grades because we used to sit for a national contest to carry Magister studies. Now things have changed, it is the final grade that matters rather than knowledge, students care about marks only..., and I don't blame them this is what the new system entails.

The above response shows clearly that the institutional policy affects students' attitudes toward learning. They know that knowledge does not matter, they only have to gain high grades so that they can join master studies and get a certificate which qualified them to find a job. As a result, ESP teachers encounter challenges in their attempt to use

communicatively based techniques to encourage interaction. Despite teachers' disappointment of coming across students' carelessness and disengagement in class, participants choose to blame the Ministry of Education. The reason for such a claim may lie in the ambiguity with the system that fails to provide a curriculum with clear objectives that matches the demands of the real workplace and market along with a detailed description on how to assess and evaluate students' performance in the classroom. They even believe that the current system fails to empower students with adequate preparation in the secondary education that could have been helpful for them at the university. In this regard, interviewee (3) who taught in secondary school for four years before she starts teaching ESP at the university stated:

When I came across student's poor writings and despite the unpleasant feeling, I really can't blame them for I know exactly that they went through a very ill preparation (previous English schooling) concerning the four skills.

The respondents highlighted another mismatch between students' preparation in the middle and secondary school and the current university curriculum requirements. Their level of proficiency in English cannot acquaint them with the ability to deal with the highly specialized and technical use of English that ESP discourse serves. It also indicates another mismatch between tertiary education and English use for future work which is not considered as helpful and useful at the university.

The above remarks indicate serious deficiencies in the Ministry of Education policies and their role in the development of the country. This problem had been reinforced and would further impact teacher's pedagogical decision in ESP teaching.

3.6.2. Challenges Related to Classroom Conditions

Further responses focused on some difficulties related to the teaching environment. Accordingly, contextual conditions orient teachers' pedagogical decisions and create mismanagement problems. Eventually, it limits their ability to effectively conduct the lesson and achieve the learning outcomes. The recurring themes concerning this type of challenges are large classes, lack of necessary equipment and lack of teaching material and resources.

3.6.2.1. Large Classes

Almost all participants encountered the same issue of having a large number of students in a class. This problem had been stated by Harmer (2001), who believes that large classes can be more challenging to deal with compared to smaller classes. Participants believe that large classes had a considerable impact on teaching and learning. They argued that a large number of students are expected to join the class and have their seats which is logically time consuming. They further stated that rising interaction is extremely challenging to direct and more likely to turn into lack of attention and notice. This is mainly due to teacher's inability to deal with students sitting at the back of the class, as a result teacher tends to interact only with few students sitting in the front and ignoring the rest of the class. Interviewee (7) expressed her struggle in dealing with a large class size by saying:

It's a big problem, there are more than 80 students in one lecture hall, imagine just the time they take to have their seats and pay attention, it's really waste of time and energy. Come on, have your seats, come on, keep quiet so we can start, come on, it's time, pay attention. This is me every time before I can start the lesson.

Other respondents added that a large class becomes usually noisy and makes it not an ideal environment for communication to take place. Interviewee (13) lamented:

It's really a serious issue, with me, the only teacher available in the department, I found myself obliged to teach a large number of around 100 students in one class, it's really frustrating for me to teach.

All participants face the same problem of having large number of students in class. This fact results in insufficient attention for the ESP courses because it is not an easy task for the teacher to manage both content and classroom organization. These conditions will affect the achievements of the planned learning objectives. Moreover, teachers will not be able to provide students with opportunities to practise the language. In some cases, teachers explained that it will be even impossible to support individual work and tasks, a reality that obliged teachers to modify the desired activities.

3.7 Conclusion

This chapter was devoted to the presentation of the major findings on teacher's practical knowledge and perspectives with regard to the teaching of ESP. The data were elicited from the interviews, classroom observation and stimulated recall interviews and explored through the different themes that were grouped under four main topics of areas of ESP teachers' knowledge; teacher's personal knowledge, teacher's practical knowledge, challenges in ESP teaching.

Analysis of the findings have shown that classroom practices of ESP teachers are often shaped and justified by teacher's perceptions and knowledge, working environment and educational policies. Interaction of these factors has also been observed to cause some obstacles and challenges among ESP teachers. These observations have been documented in the areas of ESP teacher knowledge and classroom practices as well as in the challenges that these category of instructors encountered. The elements that seem to contribute to teachers' pedagogical knowledge and instructional practices could be summarized as follow:

- Large classes
- Student's lack of mastery of the four skills
- Student's lack of behavioural involvement and lack of interest.
- Teacher's focus on traditional teacher-centred method to teaching.
- Lack of institutional support and classroom equipment.
- Lack of students' involvement and interaction.
- Lack of teaching resources.
- Limited amount of time for the ESP course.

The inextricable link between ESP teachers' practical knowledge and beliefs and classroom practices will be discussed in the following chapter in relation to the context and the studies reviewed in ELT and ESP teaching.

CHAPTER FOUR:

FINDINGS' ANALYSIS AND DISCUSSION,

IMPLICATIONS AND RECOMMENDATIONS

4.1 Introduction

This research project investigates the ESP teachers' practical knowledge and challenges at Saad Dahlab University of Blida, aiming to identify the content and sources of such knowledge based on their own perspectives of their professional world. In this chapter, the researcher strives to analyse the data and discuss the results obtained through semi-structured interviews, classroom observation and stimulated recall interviews with ESP teachers. The researcher sought to gain insights into the professional life of the ESP teachers and provided rich data, analysis and interpretations of this category of instructors. This chapter discusses the key findings which are organized under themes that were identified in relation to the practical knowledge of ESP teaching and challenges in Saad Dahlab University of Blida 1. Four themes emerged from the participants' transcripts which are: teachers' knowledge of ESP teaching; teachers' personal knowledge; teachers' practical knowledge and challenges in ESP teaching. These themes represent the core knowledge base of ESP teachers in the Algerian context. It also described their perspectives and views about their professional ESP world. Accordingly, these knowledge base possessed by teachers might contribute or impeded teachers from implementing their knowledge in practice. At the same time, these themes are helpful in providing valuable responses to the research questions.

4.2 Discussion of the Key Findings

In order to answer the research questions of the present study, this discussion is structured into three themes and sub-themes. The first theme refers to teachers' knowledge of ESP teaching from their own perspectives as well as the sources of this knowledge. These perspectives include teachers' understanding of the specific nature of ESP courses and its main characteristics. The second theme encompasses ESP teachers' perspectives on their classroom practices and the factors that inform their knowledge, actions and decisions.

Finally, context-based challenges that influence the implementation of ESP teachers' practical knowledge are discussed.

4.2.1 Practical Knowledge of ESP Teachers in Algeria

The present research highlighted a wide range of perspectives about ESP professional knowledge. Participant's responses suggested that teachers possess a considerable amount of content knowledge about English for general purposes and pedagogical knowledge that was constructed through their undergraduate and graduate education. Understanding of ESP knowledge however, focused particularly on basic theoretical aspects gained through university education. It was only through practice and personal reading and research that these teachers could develop understanding about what and how to handle the task of ESP teaching in actual classroom situations. Some of these understandings have already been identified and examined on the reviewed literature and reflect on the present investigation of teachers' professional knowledge indicating that it was constructed through formal education (theoretical knowledge) or informal education through practice in classroom context and experience (Cochran Smith and Lytle, 1990; Elbaz, 1981, Shulman, 1987; Clandinine and Connelly, 1987).

Participants involved in the present research have not received any kind of formal education or training in ESP. Some teachers become familiar with ESP after joining the university where it was introduced as a subject in the English department. This knowledge however, was mainly theoretical in nature; therefore, it was not meant to prepare them for performance. In this respect, participants' recognition about ESP courses include some definitions and understandings about basic aspects such as the fact that ESP is a type of English language teaching tailored towards students' needs and purposes for learning the language and that these needs are to be identified through the process of needs analysis.

Nevertheless, these teachers were not introduced to any type of tasks or strategies related to the performance of needs analysis or of any of the other ESP activities such as ESP syllabus and course design, ESP teaching material, and ESP course assessment. Therefore, it could be stated that teachers' understanding of ESP processes and practices is mainly theoretical with no preparation for performance. This latter reveals a gap in teachers' specific content knowledge and its related pedagogical content knowledge required for ESP teaching.

Despite the gap indicated between teachers' theoretical and practical knowledge, other participants realized that English taught in the various faculties at Saad Dahlab University is tailored to the learners' specified needs and related in content to particular contexts. Therefore, assessing student's needs to identify their specific wants and lacks in learning language (Belcher, 2006, p.139) and realizing the specialized content areas relevant to learners' field of study were important aspects of ESP teachers' practical knowledge. ESP teachers also recognize that technical terminology is a fundamental part of ESP and it is very important for learners to build a consistent body of terms that are specific to their area of study and understand discourse with specialized vocabulary. These perspectives are significant elements of the practical knowledge of ESP teachers. This realization is important since needs analysis serves as a crucial tool for identification and justification for successful ESP course design and related activities (Hutchinson & Waters, 1991, Richards et al, 1992; Gatehouse, 2001). Needs assessment is a fundamental event in the field of ESP and considered as one of the core principles of ESP teaching as stated by Hutchinson and Waters (1987) "tell me what you need English for and I will tell you the English that you need".

Eventually, the above discussion and the inconsistency between what teachers possess as knowledge and how they act in ESP teaching settings seems to agree with Argyris et al. (1985) who stated that when people are asked to justify certain actions, they usually refer to

what they hold as theories of actions which often can contradict with their theories in use (Kanel et al., 2002).

4.2.1.1. Specific Subject Matter Knowledge

The discussion and diagnoses of the findings revealed that some ESP teachers at Saad Dahlab University perceived that subject matter content knowledge was essential for teaching ESP. This view is mainly shared among subject-specialist teachers who are concerned with the teaching of the ESP course in their faculties. Others however, believe that it is not necessarily a condition in teaching ESP. This view seems to reflect the controversial issue related to subject matter expertise that questions the extent to which subject matter knowledge is required by an ESP teacher. Teachers' views about the significance of content knowledge seemed to disagree with Taylor (1994) who highlighted interest and attitude as more relevant aspects required by ESP teachers rather than that of content knowledge. This perspective is based on the assumption that students generally possess the content knowledge and teachers can easily exploit that type of knowledge after being involved in the field of ESP practice. On the other hand, it agreed with Troike (1994) who argued that "it is far easier, and more efficient to train subject-matter specialists in the basics of ESL than to try to train ESL teachers in the technical content of the ESP subject", and "if we try, or even pretend, to teach ESP without knowing the subject matter, we are seriously fooling ourselves or short changing our students, or both" (p.7). His view is similar to that of Hoyle and John (1995) as they stated that it is commonly acknowledged that the previously accepted conception that subject matter knowledge is sufficient for successful teaching fails to account for the complex nature of the task of teaching which encompasses new aspects such as the teacher as classroom manager and facilitator of learning.

The above opposing views identified and examined in the reviewed literature on subject matter knowledge are clearly reflected in the present investigation. Johns and Dudley-Evans (1991) draw attention to the fact that similar situations of controversy about the relevance of specialized content knowledge appear when there is the presence of both subject teacher and English language instruction which is the case of the participants involved in the current study. This controversial issue needs to be further investigated to examine the extent to which this is practically feasible with the growing demand for ESP training programmes. As research is never an ending process.

Successful teaching of ESP requires more than a sound knowledge of specialized subject matter, being able to manage ESP classroom, facilitate language learning (Dudley-Evans & St Johns, 1998) and mediate that content characterized by specialized vocabulary using appropriate pedagogical tools are also key components of teacher's professional knowledge that they need to provide their students with meaningful learning.

Discussion of the findings revealed that subject specialist teachers in charge of teaching the ESP course assumed that without content knowledge, EFL trained teachers will not be able to teach the course. They further stressed the importance of subject matter understanding and believe that it was sufficient for successful teaching in ESP contexts. These views suggest that subject teachers lack awareness about the complex nature of the process of teaching which has been referred to in literature as a "complex network of knowledge" (Borg, 2006). Subject teachers who participated in the study have not been introduced to any type of preparation for language teaching therefore, they lack pedagogical knowledge and pedagogical content knowledge relevant for mediating content and facilitating language learning. These findings call for more pedagogically-oriented understanding on language teaching.

In ESP teaching, it seems that teaching specific content requires more than deep understanding of key concepts and a set of facts related to the various and specific disciplines and occupational needs of the ESP learners. Though this element is significant in ESP teachers' knowledge, they also need to know how knowledge of their subject matter and concepts are structured and linked with different means of representations which will inform teachers' pedagogical choices to better translate their subject matter in actual teaching practices.

It could be argued then, that EFL trained teachers' content knowledge is a significant element of ESP teacher's professional knowledge as it informs their practical knowledge in ESP contexts. However, it is not sufficient for undertaking the dynamic of ESP teachers' responsibilities.

4.2.1.2 Curriculum Knowledge

Teachers seemed to have conflicting perspectives about ESP teaching practices. For instance, some participants showed awareness about the need to setting clear objectives of their courses that are linked to student's purposes for learning. Awareness about this step forms a fundamental aspect of teacher knowledge that has been highlighted in the reviewed literature and examined by several researchers such as Elbaz (1981), Shulman (1987) and Turner-Bisset (1999). Having this knowledge, participants believed that ESP teachers can be free to decide about the course content and programme their own syllabus and select material according to students' needs and levels of proficiency in English. This view is supported by ESP researchers who believe that ESP teachers have to engage or participate in various ESP activities such as planning, designing their own courses as well as choosing teaching material (Hutchinson and Waters, 1991 Dudley-Evans and St Johns, 1998 Hyland, 2006). However, participant's responses were conflicting and confusing which uncover a gap in teachers'

understanding of their learner's target needs and the purposes that an ESP course is designed to serve mainly due to the absence of needs analysis. Furthermore, participant's responses suggest that ESP teachers lack adequate knowledge of course design as a result of the absence of professional ESP training programme. The state of confusion was evident in the majority of participants' responses about the concepts of curriculum and syllabus as they seemed to use them interchangeably to mean the content of the course. Relevant literature reviewed in the present research stresses the importance of drawing a clear distinction between curriculum and course or syllabus (Richards, 2001) because curriculum development is not part of teachers' responsibility as course designers. Thus, it is important for ESP teachers to have a clear understanding of the meaning of course, curriculum and syllabus.

4.2.1.3 Programme Evaluation

The process of programme evaluation and assessment are crucial requirements in ESP context. For example, evaluation is important to ensure the success of a curriculum. This requires extensive observation and mapping between the intentions of the programme design, the way those intentions were enacted and the results that accrued. It is equally important for programme development. Moreover, programme evaluation requires understanding of the affordances intended by the designed course and materials in order to help ESP teachers assess whether the planned objectives were attained, how easy or difficult the teaching material was to understand, how easy or difficult it was to use. Reflection on teaching practices can help ESP practitioners evaluate their own teaching style, approach and method and how receptive the students were. Extensive observation of all what is going on in the classroom as well as reflection and evaluation are essential both to refinement of the planned programme and to improvement of principles for the design of effective learning environment.

Evaluation is a central element of teacher knowledge which is closely connected to the process of needs assessment. ESP is a programme that requires regular evaluation, attentive observation to gain in depth understanding of a classroom as well as the teaching material and students' responses to it. This task demand for conducting needs analysis which should last even after the programme is designed and implemented (Hutchinson and Waters, 1991; Graves, 2000). This kind of analysis is needed because it allows the ESP practitioner to identify essential features of a learning environment, detect appearing problems, needs and lacks. This process could help ESP teachers to address these issues and suggest solutions and necessary improvements and developments of the ESP programmes which will save time and resources spent on evaluation.

Few researchers suggest that students could participate in the activity of needs analysis which could help ESP teachers gain more authentic data about students' needs and wants (Hutchinson and Waters, 1987), and serve as an indicator tool to know what to include for learners to improve their language.

However, the ESP activities including needs analysis and programme evaluation are missing among ESP teachers at Saad Dahlab University in Algeria, which indicates a gap in teachers' knowledge of ESP. Accordingly, participants believed that this task is not part of their responsibility and suggest that needs analysis and ESP course design should be conducted by a special committee. This proposition could be enacted in the context of this study. However, researchers assert that teachers involved in ESP teaching settings need to get involved in some form of research (Troudi, 2006).

Advances in technology provide various sources of knowledge which is dynamic and rapidly changing. Thus, it is a prerequisite that necessitates ESP teachers to broaden their knowledge through reading and research to promote their professional growth. For example,

ESP teachers can reflect on the pedagogical implementation on their students' learning through action research (Troudi, 2006). This type of research could allow teachers to identify their students' needs, reflect on their own teaching practices and think of better ways to improve their learning and teaching processes. Studies conducted by teacher-researchers can equally help teachers direct the course to meet the specific needs of their learners and find solutions to persisting problems identified as a result of reflection and evaluation.

Action research can be regarded as a means of self and professional development strategy that attempts to improve student's learning. Research knowledge can also be considered as part of teacher's responsibility as higher education instructors. Therefore, expecting teachers to be knowledgeable about innovative and recent trends in language education in general and ESP in particular is out of reach. Through this activity teachers can also detect some of the deficiencies and obstacles that might hinder them from attaining their planned objectives. Teachers then can focus on the teaching objectives and methods which could facilitate student's learning and help accomplish the desired learning objectives. It is also crucial for higher education institutions to provide these teachers with the opportunity to share their research finding in conferences and workshops and be active participants in academia. These types of opportunities permit the ESP teacher to share their views and beliefs and contribute to the ESP activities of course design and evaluation indirectly.

4.2.1.4 Subject Specialist and Language Teacher Collaboration

Participants' accounts about ESP teaching and its related aspects revealed that the act of collaboration with subject specialist was absent. As far as subject specialist teachers involved in the study are concerned, there was no need for collaboration with other teachers since they are knowledgeable enough about their discipline and are familiar with what their students need. EFL trained teachers who participated in the study showed awareness about the

need for collaboration with subject-specific teachers and acknowledge its importance in helping them decide what to include in their ESP course content. Yet, the extent to which it has been implemented in the classroom remains variable mainly due to time constraints for both sides.

Many researchers (Dudley-Evans and St. John, 1998; Belcher, 2009) focus on supporting EFL teachers to collaborate in team teaching with subject-specialist teachers in ESP contexts. They believed that collaboration is crucial since it helps teachers develop adequate knowledge on the relevant subject matter that they lack. This latter becomes especially very important due to the absence of ESP training. When the educational institution does not provide the necessary ESP training, it becomes teachers' responsibility to improve their knowledge to teach ESP.

Collaboration could perfectly support ESP teaching in the context of this study. ESP teachers can receive help from subject specialist teachers to familiarize themselves with the specific discourse that they are expected to expose to their learners. Related literature reviewed in the present study stressed the importance of developing specific subject content knowledge in order to teach the language effectively (Kennedy, 1980 p.122). In addition to collaboration with subject specialists, ESP expert Dudley-Evans et al (1998, p.13) also stressed the necessity to collaborate with the students. This is justified by the fact that ESP has its own characteristics which revolve around the learner; communicating with them and gaining familiarity with their target field constitute another type of collaboration in the ESP context. This is simply because "the teacher is not the primary knower of the carrier content of the material" (Dudley-Evans et al, 1998, p.13). Therefore, students can be considered as a source of information about the nature of the content as well as their target language needs and finding ways to fulfil it (Bojović, 2006).

Most participants in the present study were not familiar with collaboration. This latter, can be related to the fact that some of them were subject specialist teachers in charge of teaching the ESP course who are already familiar with the target discipline. As for EFL trained teachers, collaboration with subject specialist teachers took the form of asking few questions about the content of the syllabus so that they can prepare activities that take into consideration the content that students are dealing with in other specialist subjects. Most of the time those teachers tend to rely on research if they encounter problems in the understanding of the content.

Few participants sought to compensate for the absence of collaboration with subject specialist teachers by communicating with their students. These teachers tend to ask their students questions about the content they are covering in other subjects to ensure the relevance of the material selected to their studies. However, participants' responses revealed that this type of collaboration is unconsciously done by teachers in the classroom as part of initiating informal interaction with learners to try to know what their needs and wants are.

This fact shows the lack of awareness toward the importance of collaboration. If the teachers know how to work in team with their students, both of them will be able to share responsibilities. This latter may help teachers to bridge the gap in content knowledge and students will eventually be more autonomous in their learning. The act of collaboration with subject specialist was missing in the current study. Moreover, collaboration was also absent between ESP teachers and their colleagues in teaching the language at the same faculty.

Only two participants showed their awareness about the importance of peer collaboration and informal conversation with other colleagues. They expressed their need to exchange information with field experts through discussion about occurring problems and attending their classrooms could be useful in developing understanding of the field and

preparing more helpful ESP courses to their students. The importance of this type of conversation is acknowledged and supported by research since it could open the door for knowledge exchange. The fact that this kind of collaboration was totally absent in the context of this study was very disappointing for these two types of participants. Awareness on how to work effectively and respectfully with other colleagues teaching the ESP course is an important activity which can also be excellent for ESP learners because working together help them understand what their learners will need to succeed.

4.2.1.5 Knowledge of Cultural Environment

Some participants expressed their awareness about the strong link between language and culture. Learning language in the ESP context requires familiarity with the specific nature of the field in terms of cultural norms and values and the specific language and style used in these specific communicative environments. Teaching ESP is not only about language as a linguistic system; understanding how language is used in a particular context compared to another is also an important element of ESP teacher knowledge. Each context has its own culture and traditions

ESP teachers need to develop familiarity with and awareness of appropriate knowledge and language typically associated with the specific context of the target culture and specialist discourse community. Thus, it is necessary that the ESP teacher becomes aware of extra linguistic features in addition to general competence that ESP learners require in the language to function adequately in their specific situations. Except subject specialist teachers in charge of teaching the ESP course who showed complete understanding of the cultural and language needs of their students, EFL teachers suffer deficiencies and lacks concerning this type of ESP knowledge which could form the basis for designing an environmentally relevant language course (Jordan, 1997).

Participants admit that they were not involved in any type of need analysis activities, a fact that explain their lack of knowledge of the culture of the target context that their learners were involved in. Though researchers and ESP experts such as Dudley-Evans and St. John (1998) suggest that assessing students' needs provide teachers with "information about the environment in which the course will be run" (p.125) and thus they will be able to design an ESP course that can be sensitive to the cultural environment in which it will be delivered. Unfortunately, participants in the study are not aware about the significance of this type of knowledge which could make their courses more relevant to learners' needs in their target environmental realities. ESP learners do not learn language in isolation from specialist context. Therefore, ESP teachers should encourage learners to make connections between the use of language on one hand and the purpose of communication on the other to overcome the ambiguous situation and avoid the state of student's wondering about specific use of language among members of the specialist discourse community.

4.2.1.6 Knowledge of the Learner

As summered in the reviewed literature, knowledge of the ESP learner is perceived as a critical element of teacher knowledge (Shulman, 1987, Turner-Bisset, 1999). Teacher's responsibilities in the ESP context centres on prioritizing their learner's language needs, perceptions and attitudes toward the course. This knowledge is considered as a basis on which teachers select material and orient instruction pedagogies toward student's desired objectives.

The participants' perspectives about their ESP learners and characteristics agreed with the experts' views reviewed in the present investigation. They perceived the ESP learners as adult learners eager to assume responsibility for their own learning. Most participants join the profession of teaching the ESP course with a common body of knowledge that they will be

dealing with different students with different needs and interests in learning English. They also believe that ESP learners come to the university with at least basic knowledge of the English language before they engage in a more specialized context of language learning. They understand that ESP learners are interested in developing language skills related to their academic and future professional demands, which would have an important influence on their motivation to learn. Their responses show awareness about the significance of preparing relevant courses to their learners' needs and interests in their field of study.

To achieve this end, few participants believed that providing learners with texts from their specialist area (text about Biology for Biology students, text about Aeronautics for Aeronautics student etc.) will raise their interest in learning the language. These teachers assume that the clear relevance of the English course to their area of study would motivate learners and increase the effectiveness of their learning. Teacher's knowledge about their ESP learners conforms to experts in the field of ESP. However, it could be argued that their knowledge is mainly theoretical in nature and do not include teachers' awareness about language needs.

Teachers also realize that ESP learners differ considerably from EGP learners mainly in terms of the specificity of their attitudes toward learning English. This knowledge is only superficial because teachers could only get insights about their learners' needs and wants through needs analysis. This activity however, is totally ignored by the participants of the study. Needs analysis process is considered as a basis for designing adequate ESP programme (Hutchinson & Waters, 1987), because it orients ESP teachers in selecting appropriate teaching material and syllabus that fit learners' needs. The absence of this vital activity remains as a gap in the common body of knowledge of ESP teachers in the Algerian context.

It should be noted that what teachers expected about their ESP learners is completely different from what they encountered in reality. For example, they expected that ESP learners come to the university with at least a basic knowledge of the English language that allows them to deal with a more specialized context of language learning. In reality, these views and perspectives seem to contradict the actual situation as they found themselves dealing with student whose level in English is very low. Most participants shared their disappointments with their student's qualities which are characterized by laziness and low motivation to learn English.

Relatively, students' lack of basic knowledge of general English makes it harder for them to start the ESP course. Therefore, teachers try to make the learning process easier in order to deal with students' poor competence in English. Moreover, students lacked basic language skills which resulted in their resistance to classroom interaction. This reaction affected teacher's pedagogical choices to prepare a lesson which is gradually simplified. They were trying to offer students a chance to preview the content by sending a reading text via email earlier in hope of helping them develop understanding in class. They also encountered students who are not interested in the ESP course because they think that English is not necessary to find a job.

It can be argued that teacher's knowledge about ESP learners and their characteristics was influenced by their own experiences and educational background as language learners and shaped by their experiences as teachers. Participants' responses suggested that most participants had a successful learning experience. They value learning and education. Therefore, they expected learners to possess some of these features. Unfortunately, their expectations were higher than the actual situation of the ESP learners in the context of this study. Ultimately, ESP teachers' perspectives about their ESP learners contradict those of ESP experts and perspectives that ESP courses are interesting and motivating because they are

linked to their specialized areas of study and future job requirements. This reality raises serious concerns about the ESP programme in the scientific faculties of Saad Dahlab University that suffer from a number of deficiencies that require the attention from the authorities to find solutions for it.

4.2.1.7 ESP Language Teaching Methods

Language teaching methods refers to the general theories and principles, pedagogy and management strategies employed for classroom instruction. Interview responses to this concern indicated that teachers' prior knowledge and educational experience both as learners and teachers had a considerable influence not only on their perceptions of the ESP learners, but also on their choice of pedagogical strategies, approaches and methodology to classroom instruction.

ESP teachers' understanding of the language and how it should be taught were reflected in the methodologies that they decided to use in teaching the language. ESP teachers often restore to use different teaching philosophy and approaches that their teachers used which would determine the type of classroom interaction they tend to promote. Few teachers choose to rely on their experience as learners and use the same methods employed by their language teachers. Since the majority of the participants were introduced to traditional approaches to teaching, they viewed language as a system of rules and believe that direct instruction of grammar rules is useful for their students. Only few participants were introduced to a more communicative and interactive approach which they believe to be effective and thus employed the same method in their teaching of language. Few participants expressed their dissatisfaction with traditional teacher-centred approaches to language teaching and learning that their teachers used since it neglected their capacity to communicate. Thus, they choose to adopt the same communicative approach used by the

other participants. While few participants who experienced traditional approaches and teacher-centeredness in their education decide to stick to it because they believe in its effectiveness, others however, criticized its use and were more willing to adopt a different approach. This latter suggest that some ESP teachers are opened to adopt totally new approaches that contradict their prior knowledge, understanding and experience in learning the language based on what they constructed as new knowledge.

The findings reveal that despite teachers' attempt to improve the ESP teaching methodology and try to find more effective alternatives to teach English to students enrolled in various specialities, the ESP teaching situation in the context of this study seem to contradict their views. Many of the principles and perspectives that teachers hold about the effectiveness of the communicative approach for ESP learners are not actually practiced in reality.

While teachers view that traditional approach to ESP course focus on vocabulary and grammar only and do not provide learners with the ability to communicate (Kumaradivu, 2012). In fact, they fail to analyse and take into account the realities of the ESP learning situation. More often, instructors are required to provide learners with a text of a certain speciality and raise their motivation and interest to read and learn a foreign language. Taking into account the communicative approach to learning, students do not only read the material and answer some comprehension questions, as it was in the traditional approach, they also learn to share their views, to develop critical thinking skills, and to understand and interpret the material. In classroom observation sessions, it was obvious that the ESP learning situation does not support the implementation of such communicative and learner-centred pedagogies. ESP teachers are dealing with demotivated students who show resistance to interaction, students who are unable to communicate their opinions due to their low level of proficiency in English. As a typical consequence to this reality, ESP teachers are often put in

a position of having to use traditional and more teacher-centred approach to teaching which their students are familiar with.

It can be argued that the traditional approaches are more appropriate to communicative approaches in the context of ESP teaching at Saad Dahlab University. Teachers' decisions and choices about method, pedagogy, and management strategies in the ESP context are largely influenced by their personal perspectives and beliefs as well as by contextual factors. This view seems to agree with research and studies on language teacher's views about EFL teaching (Peacock, 2001; Zheng, 2009).

It can be understood that even though teachers show awareness about and attempt to employ more effective approaches to language teaching, however, their attempts are not implemented in classroom practices. Despite teachers' belief that the communicative approach to teaching and learning a foreign language better responds to student's needs, in reality they were unable to use it in their classrooms due to contextual influences.

4.2.1.8 ESP Teacher Identity and Professional Development

Teachers need to be active participants in their classroom which requires their full involvement with identity. Therefore, knowledge is not separate from identity. It is important for teachers to be aware about the impact of their identity on knowledge and teaching. Thus, teacher knowledge and practices can be understood in the light of the wider social, cultural and educational contexts that contributed to their identities.

Since the present study, is interested in understanding various areas of ESP teacher knowledge, beliefs and classroom practices, it is relevant to explore the connection between ESP teachers' identity and the knowledge that they possess about ESP teaching and learning. The findings of the present study suggested that teacher' perspectives and views about ESP teaching are partly shaped by their personal identities.

Participants' accounts show that their knowledge of learners has been shaped by their learning experience. Teachers refer to their background learning experiences when they try to understand their learners and take certain decisions to help them learn better. It is only when participants started to talk about their learning experiences, that they start realized its influence on the knowledge that they developed. It could be noticed that their knowledge and understanding relied, partly, on their personal journey as individual learners.

4.2.2 Influence of knowledge on practice

The majority of participants in this research work found themselves in charge of handling the task of teaching ESP. These teachers belong to institutions and faculties that expected them to fit the job based on their knowledge and mastery of the English language. In the course of their carrier, these teachers experience challenges in adapting to the new foreign teaching environment. It was only through time and experience that this category of instructors could understand the requirements of their job and the set of roles that they needed to get involved in the teaching of their ESP students.

4.2.2.1 Influence of Institutional Environment

Based on the analysis of the data gathered in this study, it could be argued that ESP teachers were not consciously aware about their roles in the context of ESP. This point agrees with literature reviewed in the first chapter as teachers were revealed to lack understanding of their roles and responsibilities to handle the task of ESP teaching (Farrell, 2003). The data further show that the educational system seems to focus on the importance of exams and grades rather than knowledge, understanding and skills needed in their future profession. Eventually, teachers tend to prepare students for their exams only. ESP teachers experienced lack of support both from the institution, such as orientation and training and peers due to the absence of collaboration. This reality prevents teachers from of developing professionally and

turned their job into a routine. As a result, they try to make sense of their environment on their own during the few first years of their teaching. When teachers get involved in teaching, they are allowed to discover the profession and gain necessary knowledge and skills required for mastering the job (Borg, 2006). The data gathered in this study also revealed that ESP teachers were not provided with the opportunity to grow professionally and improve their knowledge. It was only when they get involved in the world of ESP along with prior knowledge gained through their education that these teachers could realize their roles and the requirements of their job. The demands of this new environment however, was challenging and struggling for the majority of the participants. They believed that the institutions who hired them to take the responsibility of ESP teaching expected them to appropriately perform their job without any type of preparation. This was evident in interviewee's (13) comment "I was shocked" when the Head of Medicine Department asked her to start teaching the ESP course immediately right after her job interview. This expectation was not very welcoming by some participants which suggest that ESP teachers require a supportive educational policy to be able to perform their job successfully.

In considering teachers' perspectives about their roles as ESP practitioners, this study uncovered some deficiencies in the educational policy in general and ESP teaching in particular that need to be addressed.

4.2.2.2 Influence of Teachers' Educational Background

When involved in the context of ESP, teachers begin to experience the real physical classroom environment. One of the common issues that they encountered at the beginning of their carrier was a gap exist between what they know as theory gained through formal education and, the reality of their classroom situations (practice). Responses in this study revealed two groups of ESP instructors and eventually two different perspectives. The first

group of participants represent subject teachers in charge of teaching English who enjoyed confidence in their work because they believe that their subject matter knowledge and pedagogical knowledge were adequate for the delivery of their courses and student's specialization. This confidence could be related to their professional experience and level of education first as students in their field of study and then as subject teachers in their respective faculties. This latter familiarized them with the task of teaching as well as with the teaching environment and specialization that their students are interested in. To phrase it differently, teachers' background knowledge provided them with an advantage over their EFL trained teachers who lacked teaching experience as well as subject matter knowledge. Differences between the two groups are quite small, but are significantly and relatively consistent across the different faculties of Saad Dahlab University.

Teaching experience with interactive and communicative nature of classroom environment seems to play a facilitative role in their teaching experience. Their experience as learners in the given speciality is also helpful in understanding their students and ultimately catering for their needs. This corresponds to Xu and Liu's (2009) findings that teachers' background experiences affect their teaching practices and decisions. It also conforms to literature on teacher knowledge that regards pedagogical content knowledge or (practical knowledge) as an important element of teacher's knowledge (Shulman, 1987; Cochran Smith & Lytle, 1999). This type of knowledge is gained through experience (Shulman, 1987) which agrees with the study conducted by Hegatry (2000) that experience is one of the contributing factors to the development of knowledge base required for teaching.

The influence of teacher's prior educational knowledge as learners combined with their teaching experience or practical knowledge, which is perceived by literature as a crucial area of teacher knowledge (Cochran Smith & Lytle, 1999) was obvious in the teacher's use of traditional language teaching methods and approaches and in adopting a more teacher-centred

instruction. This was equally evident in teacher's use of grammar translation approach and the use of French and Arabic in explaining vocabulary (code switching) however, while grammar translation approach used to focus on the teaching of grammar in a passive manner, subject teachers in this study seem to focus on technical vocabulary and used translating and code switching to explain the meaning of difficult technical terms rather than in grammar teaching.

The data gathered suggest that subject teachers focus on vocabulary and choose to teach grammar implicitly within the content they use in teaching language. This latter stem from teacher's lack of language teaching knowledge as a system since they are not EFL trained teachers. Subject teachers are not trained on how to teach language; therefore, they lack necessary linguistic knowledge to teach English. These teachers are not aware about the importance of this type of knowledge believing that mastery of subject matter knowledge is enough which explains their confidence about teaching the ESP course. They also believe that without subject matter knowledge, it will be impossible for EFL trained instructors to teach ESP students especially in highly technical faculties such as Physics and Aeronautics.

The classroom practices of the participants who argue that ESP should be taught with the use of communicative teaching approaches diverged from their stated knowledge and perspectives. The teaching of deductive practices, lists of vocabulary, rare communicative activities, and teachers-centeredness were dominant in the classroom, which are contradictory to their stated belief. In stimulated recall interviews, they explained that they were forced to use traditional approaches due to a set of context-based factors such as students' passiveness in learning language, and low level of proficiency in English. This conclusion corresponds to literature on teachers' use of traditional approaches (Assalahi, 2013) which revealed that despite teachers' awareness about the effectiveness of communicative approaches; they tend to use traditional instruction due to the impact of contextual factors which include students' classroom environment and educational system.

The data further indicated that the majority of participants, who attributed learner's low level in English to the difficulty to apply communicative approaches believe that the educational system fail to prepare students who are supposed to be autonomous and ready to assume responsibility for their learning. Students in the present study were viewed by teachers to be lazy, who expect from teachers to provide them with everything. These views and perspectives might indicate that knowledge of learners had a considerable influence on teacher's pedagogical choices which agree with literature reviewed (Shulman, 1987 Turner-Bisset, 1999).

It can be argued that ESP teachers in Algeria are influenced by their background educational knowledge which informs their pedagogical choices and practical decisions in the classroom context. Moreover, their understanding of their students' educational background in general and language learning in particular influence their choice of instructional methods employed due to the absence of any kind of needs analysis processes in the context of this study. ESP teachers base their decisions and choices of syllabus content and teaching material on what they assume and belief to be relevant to their students' language needs.

4.2.2.3 Influence of Classroom Environment

In addition to teachers' educational knowledge, context-based factors also had an important role to play in teacher's pedagogical choices. In their practice, what was found contradictory to their stated beliefs is their disregard of the use of communicative classroom activities that could have been interesting for students and effective for promoting language learning. For instance, they view that the use of some teamwork activities was very difficult to handle with large classes of learners whose level of proficiency in English is very poor. This reality corresponds to Ahmed's (2014) view that large classes are very challenging to deal with for language teachers.

Furthermore, teachers expressed the need to make some pedagogical choices about the time devoted to classroom tasks. Participants justified their choices in the stimulated observation interviews that in a large classroom and the limited class time devoted to the ESP course forced the classes to be teacher-centred. Teachers are obliged to take the lead and complete the lesson within the given time. Similar constraints among teachers were observed in Farrell and Lim's (2005) study. The classroom environment plays a vital role in ESP teachers' belief and pedagogical practices (Oder & Eisenshmidt, 2016). One possible strategy to overcome this type of contextual challenges is to hold a sound knowledge of classroom management. For example, teachers choose appropriate activities, rearrange time and set clear objectives that suit the time allocated for the session. This is especially very important since good classroom management skills promote effective teaching (Murray and Christion, 2011).

The study further revealed that students' behaviour and attitude also influenced teacher's professional attitude to classroom practical actions and sometimes forced them to use some strategies that contradict their own views and perspectives about classroom management skills, and sometimes deviate from the designed plan for the lesson. For example, many ESP teachers encountered stressful disciplinary problems with their students and opted for severe measures believing it was effective in managing the classroom and creating healthy learning conditions. Other ESP teachers however, were exhausted and emotionally tired enough to act passively toward their students' disrespect and careless attitude toward the ESP course. For example, interviewee (5) decided not to take any measures to control the class and tolerated students' carelessness, noise and irresponsible manner in classroom and even ignored students leaving the classroom before the end of the session especially in large classes. The case, in the present study, corresponded to the findings of Jennings and Greenberg (2009) study who reported that language teachers may suffer emotional stress from classroom management and students' behavioural issues. Under this

stressful classroom climate, teachers may become hostile, severe and harsh toward student's attitudes. It has been indicated that classroom management and classroom interaction had effects on classroom teaching practices.

The majority of teachers' reports revealed that classroom management was very challenging for them. They seemed to focus on the disciplinary climate since it has a strong impact on their teaching and sometimes forced teachers to take severe measures as referred to by Jennings and Greenberg (2009) which will result in an unhealthy learning atmosphere. Appropriate learning atmosphere is achieved by good classroom management as maintained by Williams & Burden (1997), who argue that students' achievement is closely linked to teacher's ability to control their classroom and create a positive learning environment.

In relation to classroom management, the findings of the present study revealed that classroom environment and student's behavioural issues seemed to considerably influence teachers' classroom practices and prevent them from employing some strategies, techniques and activities that they perceived as efficient for promoting student's learning and raising their interest and motivation.

4.2.2.4 Absence of Adequate Curriculum, Syllabus

Curriculum knowledge constitutes an important element that could help ESP teachers take appropriate instructional choices regarding the content of syllabus, teaching material and activities that suit the curriculum's goals and objectives. Accordingly, teachers account of practice revealed different views and perspectives regarding curriculum and syllabus objectives and their implication. ESP curriculum was viewed by many participants as vague, redundant and insufficient. Most curricular areas provided at the level of Saad Dahlab faculties tend to focus on terminology and are also viewed as irrelevant to the educational and cultural background of the ESP students enrolled in these faculties. These views correspond

with Jones (2007) who argues that a curriculum is often featured by oddness and unevenness. Moreover, most curricular provided is not accompanied with teaching material and resources. In the view of other participants, the content of ESP curriculum was whether inaccessible and irrelevant to the Algerian educational context and regime. Under these circumstances, the ESP teachers were required to design their own courses and syllabus which was a challenging task for them. In teaching ESP, all participants preferred to choose material and activities that will necessarily help learners attain the curriculum goals and objectives. However, the type of activities and material that will seem interesting and fun for their students and more importantly that will suit their level of proficiency was viewed by ESP teachers as impossible because of their very low level in English. In other words, course design is not based on the curriculum's goals and objectives, but on what they believe to be relevant and useful for their students.

Like most of their knowledge and perspectives, some ESP teachers showed awareness of the significance of curriculum knowledge yet, it was not realized in practice. The choice of what and how to teach was dynamic and flexible as teachers did not follow the necessary ESP course design procedures mentioned in the literature review. It was made evident in the participant's responses that there is not always clear understanding of the requirement of course and syllabus design. Teachers' accounts revealed that there was a lack of interconnectedness between the syllabus designed and other procedures related to the assessment of student's learning and implementing the necessary changes based on the results of course evaluation and assessment. This problem might be the result of the gap in their knowledge based about course design, material selection and adaptation, and about student's specific needs.

These observations revealed the importance of raising ESP teacher's awareness about the significance of curriculum knowledge in understanding course design procedures and their

role in teachers' instructional choices and decisions. This issue could be addressed through the integration of in-service professional ESP training courses to overcome the gap in ESP teacher knowledge. Although the majority of the participants in the present study were experienced teachers with a good knowledge base, the application of their knowledge in practice was challenged by contextual and educational factors such as large class size, student's low level of proficiency and administrative constraints.

Such challenges contributed to the complexity of teachers' task in the world of ESP and prevented them from the attainment of real ESP teaching and learning objectives. This conflicting situation agrees with Nalosca's & Arthur's (1988) view that large classroom and lack of educational support create management problems and widens the gap between teacher's knowledge and actual classroom practice. It is important for curriculum developers and experts to understand that the success of ESP teaching and learning relies primarily on teachers' freedom of choice in terms of the content of syllabus and material based on students' needs.

4.2.3 Contextual Challenges

4.2.3.1 Influence of Context on Practice

Various context-based elements can intervene in shaping teachers' pedagogical decisions and contribute to the challenges of teaching ESP. Teachers' challenges were mostly related to student's passive attitudes, low level in English proficiency and disciplinary problems. Student's low competency in English hinders teachers from efficiently teaching the course and implementing intended activities. While few teachers choose to focus on EGP in an attempt to improve students' level in English, others however, seemed to adapt to the student's passive learning environment and work only with few students who could interact with and ignore the rest of the class. Dealing with large classes created another challenge for

teachers who found it difficult to employ communicative-based activities and interact with learners. Most teachers gave up trying to apply the communicative approach and stuck to traditional, teacher-centred approach to deal with student's passive learning environment.

Teachers found it challenging to link the ESP courses that they provided to their student's future job mainly because they believed that their students did not see the need for English in their professional life. This reality unveils the deficiencies that exist in the educational system in terms of the indifference between the aims and objective set by the curriculum makers and the outcome of it in real job-related situations. This resulted in teachers perceiving their job as an obligation that needed to be accomplished regardless of the outcomes of their efforts.

Further challenges that the ESP teachers encountered were related to the teaching environment. Some of these issues include lack of supportive teaching material, resources and classroom equipment. Most participants felt the need to improve their knowledge and use updated methods and techniques to enrich both teaching and learning processes. However, lack of such facilities seems to contribute to teacher's belief that policy makers in the Algerian educational system did not take the integration of ESP course in higher education seriously. Similar deficiencies need to be addressed since the improvement and development of the country is linked to the development of higher education.

4.2.3.2 Knowledge Practice gap

The relationship between what teachers know and how they act in their classroom could be observed and understood through the analysis of teacher's behaviours and actions. Researchers like Xu & Liu (2009) believe that teachers' judgements are largely based on their knowledge. The relationship between knowledge and practice might be evidenced through

observing and analysing the extent to which teacher's knowledge matches what they actually do.

The data gathered in this study revealed that teachers' practical knowledge and pedagogical decisions was found to be influenced by various contextual factors. As previously discussed, ESP teachers enrolled in the different faculties of Saad Dahlab were not provided with clear and relevant curriculum objectives, and their course content was based on what they perceive as relevant and useful for their students rather than on their actual needs. Furthermore, their instructional choices, teaching material and method of teaching was informed by their own experience as learners and current teachers as well as their personal understanding of their learner's cultural background and preferences.

ESP teacher were allowed to freely choose what and how to teach. ESP teachers believed that students' level in English is very low, besides; they lacked motivation and interest in the ESP course. Therefore, they opted for content that is adequate for the level of their students. This reality raises concerns about the issue of authenticity in ESP as stressed by Belcher (2009, p.9), the use of authentic material should be accompanied by authentic activities and tasks. Although participant showed awareness about the importance of using authentic material in the ESP context, using motivational and interesting strategies and procedures to support their student's positive learning were abandoned in practice. However, they attributed their inability to use authentic material and employ interesting pedagogies to their student's low performance, lack of interaction and motivation toward language learning.

This correspond to Gullin-Kies' et al. (2015, p.57) view that authentic pedagogy is closely connected with appropriate interaction in the classroom. From this perspective, it is more important for teachers to develop pedagogical content knowledge that could enhance student's language learning, problem-solving strategies and employability skills. Typically,

these are the kind of needs that are not easily defined by ESP teachers and tend to be ignored due to the absence of needs analysis. In the context of this study, ESP teachers seemed to fail to consider what their learners wanted to do with the target language and define their needs precisely. It indicates a gap in teachers' pedagogical content knowledge responsible for informing teacher's about appropriate pedagogies which can serve not only the learners' language needs, but also develop different communicative skills required in their future profession.

4.2.4 Pedagogical Implications of the Study

Based on the discussion of the findings, several implications could be recognized. For the sake of improving ESP teaching situation in the context of the present study, this last section has tried to provide some hopefully beneficial suggestions and recommendations which may be useful for the ESP teachers to enrich their practical knowledge and help them overcome some of the obstacles and challenges presented in chapter three.

In the light of the data gathered, a set of suggestions and recommendations about teacher's knowledge and encountered challenges have been proposed. Since the present research cannot deal with all the issues, some suggestions have been proposed to pave the way for further research.

4.2.4.1 Understanding ESP Teacher Knowledge

This study revealed that ESP teachers at Saad Dahlab University of Blida accumulated knowledge about language teaching formally during their undergraduate and graduate education. Their knowledge about teaching ESP was formed practically through teaching ESP courses at the faculties of Saad Dahlab University. Their stories revealed a gap in their formal (theoretical) knowledge, and their practical (Golombek, 1998), or experiential knowledge (Wallace, 1991) gained from teaching practices. Moreover, the data exposed some areas of

deficiency in ESP teacher's knowledge about teaching ESP and the roles of the ESP practitioner. The lack of adequate knowledge about the nature of ESP practices seemed to play a significant role in overlooking some important ESP activities. The structural approaches to language teaching and teacher-centeredness noticeably dominated the ESP classes. And the choice of methods contradicted the majority of knowledge and belief about language teaching and learning. Moreover, the link between course objectives and practice seemed to be vague. The limitations in implementing ESP knowledge in practice were linked to contextual factors among which students' lack of language skills as well as undesirable attitudes toward the ESP course.

The study further revealed that teacher's prior knowledge appeared to play a role in shaping their knowledge about language teaching and learning. The participants were exposed to two different language teaching and learning environments; teacher-centred and learner-centred types. The majority of those who experienced the former type of teaching believed in controlled learning. This was manifested in providing learners with restricted lists of vocabulary and grammatical rules. It was apparent in the application of structurally based assessment system to evaluate learners' language competencies. Therefore, teachers controlled instruction, students' learning and the type of assessment. The teaching practice of the majority of participants in this group was noticeably influenced by their previous experience of teaching and learning English using structurally based approaches. ESP teachers, in this study, claimed that their attempts to teach ESP using communicative approaches were abandoned due to learner's low competency levels and an environment that lacks a supportive requirement.

4.2.4.2. The Need for Implementing ESP Teacher Training

In investigating the areas of ESP teacher knowledge, it has been noticed that the ESP teacher who is perceived as a key parameter in the ESP teaching and learning suffer a number of issues which are not exclusive to the context of this present study. ESP teachers who enrolled in various faculties in the Algerian tertiary level encounter a set of challenges which prevent them from adequately performing their job in their respective faculties. Regardless of this, ESP teachers who are expected to teach particular students with specific needs are supposed to have adequate knowledge base, preparation and motivation to start teaching English in highly technical contexts. These types of instructors are in need of institutional support and thorough training. The findings of the study concluded that the majority of ESP teachers who participated in the present study hold a master degree in English in one of the following specialities; didactics, literature or translation. This latter allow them to gain the status of EFL teachers. During their educational preparation, they were only theoretically introduced to the concept of ESP and its characteristics. In practice however, they were not provided with any type of guidance on ESP teaching. The absence of adequate ESP training, therefore, could be considered as a main reason for the deficiencies that the ESP practitioners face.

Thus, integrating ESP training in the Algerian context would better help teachers cope with the needs of their learners and handle different situations in the land of ESP. under this line of interest, Mebitil (2015) suggested the integration of a “Master in English for Specific Purposes” which is a pre-service training programme intended to overcome the issue of qualified ESP teachers in the Algerian universities. The training course proposed by Mebitil (2015) is highly advantageous as it could deal with one of the main challenges encountered by ESP teachers Therefore, the findings of the present investigation called for the

implementation such training course as one of the Master specialization offered by the English departments in Algerian tertiary level.

This is more important since the data obtained in the present study revealed that participants not only lack specialized subject matter knowledge but they also lack specialised ESP teaching methodology. This issue could be solved through the implementation of a Master in ESP. This specialization is already available at Tlemcen and Oran University but it needs to be integrated at all English departments nationwide. This latter, would help ESP teacher acquaint for the specialised content knowledge that they lack and establish a solid knowledge base required for ESP teaching. Preparing English language teachers professionally and academically is necessary (Gorska-Poreka, 2013) because it could help them deal with multiple tasks and responsibilities in ESP context such as identifying their learners' specific needs, design relevant ESP syllabi and develop teaching material.

4.2.4.3. Implications for ESP Curriculum Development and Course Design

One of the crucial steps that contribute to successful ESP teaching is designing effective ESP courses. Though the Algerian higher institutions show awareness about the importance of English for academic and professional success, important issues such as course design and ESP curriculum were shown to be given less attention in the present study. The absence of clear national curriculum makes it very difficult for ESP teachers to develop adequate syllabi for their students.

The findings of the study suggest that some ESP teachers were unaware of the significance of ESP curriculum. Others participants' responses however, seemed to confuse between curriculum and syllabus design. The reason behind such confusion may be related to the fact that these teachers were not involves in any of these vital activities. Moreover, the study findings show that the Algerian educational authorities seemed to ignore the role of ESP

curriculum in determining the success of any course design and ultimately ESP teaching and learning. The curriculum provided at the level of some departments was stated by the participants to be very broad with no clear objectives. In other faculties however, it was totally absent whereby teachers were left to freely decide what to include in their ESP course. In other words, the Algerian higher educational instructions provided no clear curriculum for teachers to implement.

ESP curriculum should be given attention by Algerian higher education institutions to be able to keep up with the worldwide educational and scientific development. It is obvious nowadays that the dramatic rise of ESP, as put by Benesh (2001, p.31) was not as sudden or natural, but politically and economically a carefully planned endeavour. He added that “on the part of industry, aided by governments, foundations, and academic institutions working together to shore up markets in developing countries”. Consequently, the emphasis of ESP teaching is a result of English being the language of science business, technology, medicine, etc. therefore, it is the language that students need to master to join the international market of job. It is the mastery of English that can provide teachers with better opportunities to study abroad, effective international communication, and better access to information (Galyna, 2005, p.28). Thus, the findings of the study call for the development of well-designed ESP course based on clear curriculum objectives to insure students’ mastery of English which becomes essential in preparing students to cope with the demands of the 21st century. Moreover, it will provide students with the required competencies, strategies and skills that will sustain them in their learning process and later in their professional target situations.

It is also recommended that a well-designed ESP course need to be flexible so that ESP practitioners ESP syllabi which pertain to the need of their students enrolling in different specializations. In this way, the ESP course can be open for further modifications and improvements based on the results of professional development outcomes.

In this respect, it is relevant to refer to the ESP framework suggested by Benabdellah (2019). It is a well-developed and flexible framework for ESP course design based on strategic planning as shown in the figure below:

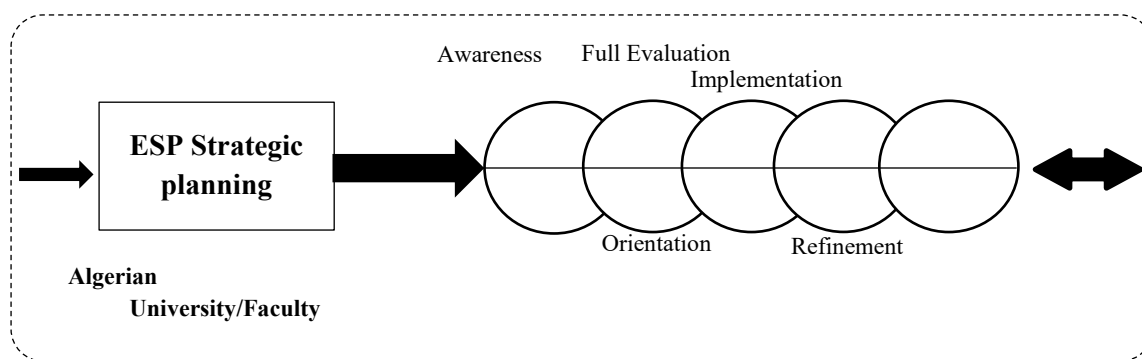


Figure 4.1: ESP strategic planning (Benabdellah, 2019, p.35)

The framework is found as a suitable reference for designing an ESP course due to its flexibility which makes it open for improvement and change to meet the requirements of 21st century higher education institutions. The study suggests that authorities at the educational system in Algeria need to invite teachers to be active participants in the activity of curriculum or syllabus design. They also need to realize that syllabus and course design is not only a significant element of the ESP practitioner, but also one of the main characteristics of the effective ESP practice.

4.2.4.4. Implications for Professional Development of ESP teachers

Professional development is a significant mechanism for broadening teachers' understanding, subject matter knowledge and improving pedagogical practices (Bybee and Loucks-Hhorsely, 2000; Garet et al. 2001). Thus, Developing academically and professionally can be best achieved through the implementation of in-service teacher training programme. ESP teachers should be provided with the opportunity to participate in the progress of scientific research through attending workshops, conferences and publication of articles. In

this way, ESP teachers who are already engaged in ESP teaching contexts can cater for their own needs and acquire a second field of expertise. Moreover, these programmes might help fill in the gap in teacher's specialised knowledge as well as pedagogical content skills and strategies related to the field that they are involved in. Thus, the findings of the study call for the organization of a set of seminars regularly as well as a set of workshops so that they can discuss emergent issues encountered by ESP teachers in various target situations.

Based on the data obtained in the present study, it has been shown that ESP teachers need to be provided with training programmes in areas such as ICT, ESP syllabus curriculum design, ESP course assessment and evaluation. Such opportunities can help teachers update their knowledge and gain new insights into the innovative modes of teaching practices (Clark, 1986; fernstermatcher, 1986; Borg, 1998) especially teaching strategies that involve the use of technology in ESP instruction. The unexpected eruption of COVID-19 pandemic has demonstrated yet again how vital a strong and updated knowledge base is for tackling transformational challenges. For instance, teachers has to swift to online teaching and adapt lesson plans, teaching methods as well as communication with their students and colleagues within a short period for preparation. Constant changes in today's globalized era, including challenges similar to COVID-19 pandemic are likely the scenario of the future education. Considered as 'strangers in an uncharted land', ESP teachers need to be empowered with deep professional knowledge base for the mastery of adaptive challenges encountered in the world of ESP. Growing professionally through participating in scientific research can also help ESP teachers function more adequately in their field of interest, professionalize their teaching and respond positively to the specific demands of their learners.

Clearly, professional development would result in fostering ESP teachers who would successfully promote language learning in whatever teaching context he or she may be situated. This is especially more important if the training programmes are informed by

findings on research on teacher's professional knowledge similar to those obtained from the present investigation. Borg's (1998) asserts that the stimulated representations of classroom practices that emerge from studies like this one can be used in professional development programmes.

Most ESP teachers participating in the present research are experienced teachers who revealed, through sharing their accounts, that they have approached the field of ESP teaching not as empty vessels, but as professionals who hold valuable perspectives, ideas and theories about how students learn, how best to teach them and what contributes to desired outcomes. Thus providing them with professional development opportunities such as workshops would broaden and deepen teacher's knowledge on the nature of ESP teaching, enhance their pedagogical practices as well as their capacities to reflect on their experiences for purposeful change.

While professional development programmes are implemented to help teachers develop understanding of both teaching and learning and construct a coherent pedagogical content-based practices, efforts need to be made to support any change that will result from professional development. For instance, when teachers are given the chance to share their experiences and reflect on their own and others' experiences they need to be assisted to implement new change especially when it comes to new technological pedagogical practices. As previously reviewed several frameworks developed by researchers such as Jones and Moreland can be adopted to help teachers to experience, reflect on and critically analyse concepts of technology and technological practices. Williams (2008) stressed that encouraging teachers to work collaboratively with peers and educational experts increase the success of developing professional understanding of technological pedagogy which is essential for adopting new classroom practices. Consequently, ESP teachers need to be encouraged to work collaboratively so they can explore new concepts, provide each other

with support and encouragement to develop. Borko (2004); Desimone et al. (2002) assert that professional development is enhanced by collaborative and cooperative environment as it is believed that teachers may not achieve progress by themselves.

4.2.4.5 Limitations of the Present Study

The aim of this study was to provide insight into the life of ESP teachers in Saad Dahleb University with regard to their knowledge, practices, perspectives and challenges in the ESP context. The use of semi-structured interviews was to elicit teachers' stories and elicit deep insights into their professional knowledge and beliefs. The researcher tried as much as possible to provide a representative sample of the population. Nevertheless, the researcher was mindful of ensuring the validity and reliability of data obtained through such methods.

Teachers' responses were adequate for providing deep insights into broad areas of knowledge across the various ESP teaching situations. Opportunities for data triangulation were created through the use of classroom observations followed by stimulated recall interviews with a selected number of participants. These observations and responses provided a consistent picture of the link between teachers' knowledge beliefs and practices.

The present study, however, does have some limitations. First, the study was conducted only about one year after the eruption of the coronavirus, at a time were not all ESP teachers were available for conducting interviews. Nevertheless, ESP teachers had to respect the protocol and safety measures taken by the ministry that forced teachers to switch to online teaching with no time for preparation. As a result of these events, most ESP teachers were conducting the ESP course online via different technological tools available as part of ministries and policies' decisions to limit the spread of Covid-19. Therefore, ESP teachers were out of reach which prevents the fieldwork from proceeding as planned.

4.2.4.6 Recommendations for Future Research

The current research highlighted ESP teachers' perspectives on the ESP knowledge, teaching practices and related challenges in the Algerian context. There is a need for future studies to trace the development of teacher knowledge through experience and its impact on practices. There is also a need for studies which deals with the differences and similarities between EFL teachers and subject specialist teachers to determine the needs and wants of each category of instructors which would be a salient issue in ESP research.

Investigating the link between ESP teachers' pedagogical knowledge, and beliefs and teaching practices could have wide ranging implications for the implementation of large scale ESP curriculum innovations (Kennedy & Kennedy, 1996; Carless, 1999; Gorsuch, 2002; Li, 2003). It is important for educational authorities to take into account teacher factors that could influence the day to day pedagogical decisions and instructional practices in ESP teaching and learning. The finding of the study revealed that teachers' decisions and actions are shaped by their pedagogical content knowledge and beliefs about key aspects of ESP teaching and learning. These factors can influence the way teachers interpret curriculum content and objectives into well designed ESP syllabus. The findings of the present study could also be used as a source for developing ESP teacher training programmes that raises teacher's awareness about their roles as ESP practitioners and prepares them for the multiple tasks that they are required to perform besides teaching such as course designers, material developers, researchers and collaborators.

Many recent studies about investigating teacher knowledge in the context of ESP have typically focused on small sample of participants and how their teaching practices are influenced by the knowledge and beliefs that they hold. These studies have been useful in providing deep insights into teacher thinking and classroom practices. Involving small

number of teachers, however, may not offer a representative picture and understanding of thinking and practice among ESP teachers in a large population. Therefore, it is advantageous that a study investigating ESP teachers' practical knowledge and beliefs to be conducted with larger samples. Such a study can have a confirmatory role with regard to observations and findings derived from a small sample such as the present study.

Most importantly, such a study could examine the issues and challenges derived from ESP teacher's perspectives to provide a clear picture of the reality of ESP teaching situation, which could contribute to finding more accurate and pertinent solutions. The results of present investigation will be useful for drawing up policies for developing ESP curriculum and setting a clear agenda with regard to the integration of ESP teacher training at both pre and in-service level. In addition, there is a need for researching teachers' practical knowledge and experience in teaching ESP to increase understanding of the factors that influence the way teacher knowledge about ESP practice is constructed.

General Conclusion

Teachers' knowledge, beliefs and practices are crucial in understanding and improving educational processes. This is even more important in the field of ESP teaching in the Algerian universities due to the supremacy of such language in today's world. The Algerian higher education system generalised the use of English in its universities as an attempt to respond to the globalization trends in the world of science and technology. As agents of change, teachers play a significant role in the success of ESP integration in the Algerian context because they deliver these changes in their classrooms. To meet the required knowledge base for effective ESP teaching, teachers have to grow professionally by including new knowledge and skills in order to implement the necessary changes in their teaching. In the quest of perusing such aim, ESP teachers encounter challenges that could deter them from carrying out their tasks as planned. As teaching always take place within broad contexts, the existing conditions within those context can influence teachers' understanding and practices of teaching.

It was on these beliefs and understandings about ESP teaching that the present study was based. The target of this study was to investigating ESP teachers' practical knowledge. This is important because the accounts that they provide can reflect a profound understanding of what knowledge is essential for effective ESP teaching. It can also provide insights into how this knowledge can be implemented in classroom practice for successful implementation of ESP in the Algerian universities. As in the aforesaid, previous research on ESP mainly focused on the content and aims of the ESP course to be taught and the extent to which it is oriented to learners' specific and professional needs. As a professional area of specialization within English Language Teaching (ELT), ESP is characterized by scarcity of research and attention from scholars. However, the increase demand for ESP in the world politics,

business, economic ties, science and technology necessitated the specialized use of English in each professional setting and contributed to the significance of ESP in the 21st century.

Thus, the teaching ESP in higher education requires the practitioner to possess a profound knowledge base necessary to provide courses in English that are usually designed to have students' specific needs as the basis. In reality, however, the ESP teaching situation in the Algerian context suffers a number of challenges that hinder ESP practitioners from successfully attaining that aim. Thus, the current research sets about to investigate these issues, the content of ESP teacher knowledge, practices and challenges within the scientific faculties of Saad Dahlab University Blida-1, in order to understand core areas of knowledge and beliefs responsible for shaping pedagogical practices. Moreover, understanding ESP teachers' practical knowledge can help develop more appealing suggestions for practice and policies.

The ever accelerating changes reshaping economies, societies and educational research can be considered as major challenges for both teachers and the educational authorities responsible for implementing these transformational changes. Today, ESP teachers are expected to develop students' English skills in highly specialized contexts so that they can cope with the 21st century demands which calls for effective use of English language. Therefore teachers are required to possess a solid practical knowledge based on recent research on teaching and learning to be able to deliver effective ESP courses to the students. They are also required to update their knowledge and constantly renew their teaching techniques and pedagogies to tackle educational challenges similar to COVID-19 pandemic where teachers had to adapt to online teaching within short period of time. In fact, the need for innovative approaches and practices to online teaching is likely the scenario for the future education due to technological advances and digital facilities available. Moreover, the digital world has brought new expectations for students who developed a digital culture and expect

these latter to be used in their teaching. For this, teachers need to be empowered with deep professional and practical knowledge which is critical for rising students' interest and motivation for the ESP course as well as dealing with various encountered challenges.

The present research sets the scene for an in-depth investigation of the practical knowledge of ESP teachers. It provides a thorough review on the development of research on teacher knowledge. Previous research seemed to rely on behaviourist point of view and process-product paradigm to understand how teaching should be done and what knowledge should teachers possess to be efficient in teaching language. This study works against that behavioural assumption of teaching and presents arguments for considering teaching as a complex thinking activity. Therefore, understanding the “what” and “how” of that teaching process should be based on educational research that focuses on teachers' experiences, decisions and practices in the classroom where they meet with their students. Educational research shifted from the focus on teachers' behaviours towards an investigation of thought processes, perspectives and personal experiences. This study centred, then, on the question of what constitutes the practical knowledge of ESP teachers and the sources that contributed to their understanding of ESP teaching from their own perspectives. It also examines how context in both social and institutional sense shape what teachers know and how they act in different classroom situations. The final question probe teachers' challenges in implementing what they know in classroom practices. This investigation values teachers' voices and perspectives on ESP teaching practices. It examines the major understandings in teachers' journey that has combined pursuit of their professional knowledge with the establishment of psychologically complex identity. This review informed to a large extent the research methodology employed in this investigation.

The theoretical framework was developed by the researcher from several existing language teaching knowledge theories and professional knowledge base models. A qualitative

approach was chosen to investigate ESP knowledge for teaching through engaging in real classroom environments of the ESP teachers. Additionally, an exploratory and interpretive design was applied to capture holistic understandings and interpretations of this category of instructors from insider and outsider perspectives and challenges, aiming at enhancing the quality and richness of the results. The data of this study were obtained through semi-structured interviews with 13 ESP teachers from various faculties and classroom observation with four participants from the above sample. Classroom observations were followed by stimulated recall interviews for further information and data triangulation. Listening to teachers' accounts through the use of semi-structured interviews provided access to teachers' knowledge and views about ESP teaching concepts, practices and challenges. Personal thoughts and perspectives are closely related to teachers' pedagogical practices. For this reason, deep understanding of teacher knowledge can only be obtained by observing their classroom practices for coping with different teaching situations as well as dealing with encountered challenges in their daily professional life. Teachers' knowledge and practices are also shown to be influenced by their own personal perspectives as well as the institutional environment. Thus, it is very important to investigate ESP teacher knowledge in relation to the context in which it is carried out. Classroom observations were effective in eliciting deep insights into their understanding and help demonstrate the link between their knowledge and teaching practices. It is only when followed by stimulated recall interviews that observed classroom practices and actions were justified.

Subsequently, a thematic analysis was undertaken which involves organizing, exploring and coding the data into several themes, and displaying and interpreting the data to answer the research questions. The emerging themes indicate a considerable degree of agreement with the existing literature on the knowledge base and practices of ESP teachers. The findings reflect several core areas of knowledge as constructed from the interpreting

participant's responses. The analysis of these findings also highlights the value of interpretive studies that provide deep understanding of what ESP teachers do in their classrooms by investigating what they know regarding ESP teaching and their actual practices. Responses from in-depth interviews resulted in a set of accounts to enable researchers to consider teacher's views and perspectives. These accounts, set against the background of each teacher's individual beliefs and experiences, can provide research with further insights into the complex process of teachers and interplay between knowledge, beliefs and practice. This will provide an added personal perspective to an understanding of the improvement of ESP in Algeria. Their stated knowledge and observed practices were explained and justified in their own words and based on their own perspectives.

The first research question examined teachers' knowledge of ESP teaching. On the whole, the study found that teachers' understanding of ESP has been mainly concerned with theoretically based perspectives directly extracted from ESP teachers. With regard to the core areas of knowledge of ESP teachers, the results drawn from their responses showed awareness about knowledge base required for teaching. This knowledge is mainly theoretical in nature covering a wide range of understanding of ESP and its characteristics, general pedagogical knowledge, skills and strategies for dealing with different ESP teaching situations. Their stated knowledge and perspectives seemed to converge with the awareness of the different ways that ESP teaching and methodology is defined in the literature. Their accounts also revealed teachers' awareness about the importance of understanding learners in terms of their specific needs, attitudes and problems. Though ESP teachers recognize the importance of needs analysis and course design, they do not in practice; conduct any of these vital activities which diverge with their knowledge and understanding. Considering the sources of such knowledge, teachers' understanding of the ESP context was partly developed by their background educational experiences as language learners. It can also be argued that Algerian

ESP teachers' knowledge and teaching practices depend highly on their professional education as well as years of experiences in the teaching of ESP.

The second research question was to identify the practices of ESP teachers in their classrooms. The findings revealed that ESP teachers' classroom practices seem to diverge from their stated knowledge and the theorized practice of ESP methodology as defined in related research. This divergence can be considered as a direct result of ESP teachers being influenced by a set of context-based factors such as students' level of proficiency in English and their attitude towards language learning, teaching environment and administrative policies. Algerian ESP teachers' educational background was based on traditional approaches. Therefore, some of the features of traditional approaches are still rooted in their beliefs such as teacher centeredness in the classroom. The teaching of deductive practices, focus on memorization of grammar rules and vocabulary, rare communicative activities and teachers' dominance in the classroom are practices that are contradictory to teachers' stated knowledge and perspectives. The reality can be grounded by the views that teachers' practical knowledge is embedded in the context. Even when few teachers try to use more communicative approaches to ESP teaching, they found themselves encountered by some contextual factors that hinder them from implementing their knowledge in practice. ESP teachers need to be aware about the gap between their existing knowledge and the philosophy of ESP teaching by relating their views with new ESP pedagogy. They also need to consider the use of innovative techniques and strategies such as the use of ICT in ESP classroom teaching instead of their longstanding experience in language learning. Teacher's lack of specific content knowledge as well as other contextual factors places ESP teachers in a difficult situation, whereby they found themselves unable to adequately perform their job.

In their practice, the use of text as a resource to present ESP vocabulary was found congruent with their knowledge and beliefs. The use of content related material in English

classroom can significantly contribute to the learning of experience. ESP vocabulary development was viewed by teachers as a typical characteristic of ESP teaching as the students are learning the language integrated in their field of study in order to communicate a set of professional skills and perform particular job-related functions. The use of native language by ESP teachers as well as the use of translation as a traditional mean of teaching vocabulary was found to be a frequent practice in the classroom which was justified by the learners' lack of proficiency. The pattern of evenness of teacher's knowledge and practice is likely a result of the limited amount of time allocated to the ESP course. Consequently, teachers tend to focus heavily on reading and writing skills and on preparing learners for examinations. These trends in knowledge and practice demonstrate the privilege of reading and writing, often on the expense of listening and speaking. Of all the aforementioned obstacles that hinder teachers from implementing their knowledge in practice, class sizes seem to be a persisting issue that was common among all participants in the study which shows that teachers' knowledge and practice are context-bound

In Algeria, the rationale for programmes in ESP appears to stem from the growing importance of English being the prominent language of today's world. It is the language that university students need or expect to learn in various contexts. Thus, the Ministry of Higher Education need to pay more attention to the development of ESP practice. It is believed that providing meaningful ESP training programmes initiated by professional experts and subject-specific teachers is essential to ensure success of ESP teaching in any of the classroom situations. The findings represent a local Algerian ESP context which concerns the basic areas of knowledge required for ESP teacher, the sources shaping this knowledge and the challenges that could possibly impede the implementation of teacher knowledge in classroom practice and the influence of context in actualizing ESP teacher knowledge.

The present investigation highlighted ESP teachers' beliefs and practices in the Algerian context. It provides ESP practitioners with the opportunity to recreate the stories of their professional lives, and reflect on their professional knowledge. Here, the teachers were required to deliver the ESP courses although they had not been prepared for this through opportunities for professional development. The study suggests that when educational priorities change such as the case of promoting the use of English in the Algerian Universities, ESP teachers, then, not only need to gain new knowledge but also to construct strong professional identities. The study provides a great deal of contextual information and analysis of challenges impinging on ESP teachers in the university. The observed gap in ESP teachers' knowledge and practice, the limited amount of institutional support for ESP teachers and the marginalized role of ESP teachers in this context call for more developmental research on ESP teacher knowledge. Future researchers should work more closely with ESP practitioners engaged in the fields who may often provide precious insights into the teaching situation, as such provides a true reflection on their world and experiences.

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Appendices

Appendix 1: Teacher's interview questions

The researcher started by informing the interview about the aim of the investigation. The researcher further explained and confirms that the interview data will be recorded in order to be used for research purposes only.

Teacher knowledge areas to be investigated	Interview Questions
Teacher knowledge on ESP and its Sources	- How did you get involved in ESP teaching? - Tell me about your experience in teaching ESP at the university? - How do you think your education experience contributing to your teaching today? - Relate any past experience you think have had any influence on your work today.
ESP Content Knowledge	- How did you get familiar with the content of ESP? - How important is this knowledge in your teaching? - How does your knowledge about ESP content affect your teaching?
ESP Pedagogical Knowledge	- What knowledge is important for teaching ESP? - What do you know about teaching (ESP skills, approaches and strategies of vocabulary and grammar teaching)? - Is this knowledge important? Why? - Do you make use of this knowledge in your teaching?

	- Could you describe some classroom teaching situations showing how you make use of your knowledge in practice?
Pedagogical knowledge	- Can you describe your classroom management techniques? Why do you prefer it? - What areas of knowledge do you think are essential for an effective ESP teaching? Why?
Knowledge of learners and their characteristics	- How do you describe your students? - How do you engage, involve and communicate with your students? - What strategies do you implement to help support your students' language learning? - How does your knowledge about your students affect your own teaching?
Curriculum knowledge	- What do you think is the primary role of the ESP curriculum? - How do you decide what to include in the ESP course? - What resources do you rely on for selecting materials? - What ESP curriculum pedagogies do you implement in the classroom? - How does your knowledge about the curriculum contribute to your teaching?
Knowledge of the learning environment	-What do you do to create a favorable learning atmosphere in your classroom? -How do you support ESP students who may be struggling to learn the language?

Knowledge of the self	- How do you describe yourself as a language learner? - How do you describe yourself as a teacher? - How has your own teaching been affected by your experience as a teacher? - How does your knowledge about yourself affect your teaching?
Technological knowledge	- How do you implement technology to engage and support your ESP teaching?
Role of contextual factors	- How do you describe your school environment/context? - What effect does this have on your own teaching? - What kind of relationship do you have with the school community? - What constraints do you face in your job? - How does your knowledge about context affect your teaching?
Knowledge into practice	- How do you make use of the different knowledge domains in your classroom teaching? - Do you find it easy to put your knowledge of the various aspects of your work in practice? Why? Why not? - Do you make your classroom decisions based on what you know? Give examples of actual teaching?
Challenges of ESP teaching	- What challenges might hinder your implementation of knowledge in practice? - What have you done to deal with these challenges? And how will that help you? - What do you suggest for overcoming these challenges?

Appendix 2

Interview transcripts

Theme	Participants' statements
ESP teacher knowledge	In doing my master degree in translation... we were introduced to tailored made courses and curriculum... we have also been introduced to different registers such as judicial register, medical register... it was interesting, you just need to know why students are learning English. Why do they need English? (Interviewee 5) Well, there isn't a great difference between general English and ESP; we just need to focus on technical vocabulary related to student's discipline, that's it. They have few words that are different, and may be few expressions related to their context. (Interviewee 4) Well, of course, students' needs are very important because we are teaching technical English and it needs to be related to their field of study. We need to deal with what our students are expecting to find in their job when they graduate. We need to visit hospitals, for example and see how doctors respond. This is good for our courses. We have to be involved in real job places outside our faculties so that our programs become more authentic. (Interviewee 2) Through my experience, I never do need analysis and I didn't see any one do any need analysis or visit any work place. And I really don't know why? I don't think that teachers have to do need analysis; they can just expect what their students need English for or they can check with the department for some orientation, it should be their responsibility to responsibility. (Interviewee 1)

	Our students' level in English is very low. They lack basic linguistic knowledge. They don't know how to write a simple paragraph. They don't even know how to write one sentence correctly. They are very weak students. We have to teach them how to write. (Interviewee 12) Our students are not motivated and not interested in the ESP course at all. They don't even want to attend. (Interviewee 6) I do my best to interact with my students and initiate discussion so that they can participate in class but they don't want to. They just don't want to. They are not really interested except very few of them. (Interviewee 4) Students simply ignored Head of Department's instructions to attend the English course just because they agreed and decided not to bother and come... I was there for the six weeks, I waited and no one came. I was astonished! Surprised... we didn't use to do this when I was a student. (Interviewee13) Our students need to read articles and research related to their field of specialism, they need to write well in English, they also need to develop their speaking skills to communicate their thoughts and ideas in discussions related to their areas of interest. (Interviewee13) First, English is the world's language. Second, in the field of Science Matter, PhD students have to write their thesis in English. That is why it is very important in the field I am currently teaching. (Interviewee13) "I am retired now, but I still teach ESP to dentistry students. I am also teaching in private high schools. English is so important in medical fields because most of the documents I find and students find are in
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	English. This is why I advocate for implementing English and making it the language of science where all the modules are taught in English. (Interviewee 9) I need to be free in choosing my syllabus. I know how to decide what is relevant to my students and how to teach them. Teachers need to have a choice in what they are teaching. They should not be forced to follow a strict syllabus that they don't like. (Interviewee 9)
Sources of ESP teacher knowledge	I was introduced to ESP in my master studies... I found it interesting area of language learning... after attending a conference that stressed the importance of ESP in today's globalized world, I understand that ESP needed more attention in Algeria so I started to read about it. (Interviewee 10) I always wanted to be an ESP teacher; I got interested in ESP... I started to read about it. Now I'm, an ESP teacher and I am interested in reading about my student's specialization. (Interviewee 2) my personal efforts in learning English allows me to write and present my PhD thesis in English ...this impressed the Head of Department who was a member of the jury (examiner) she said to me I need you will be teaching the English course. (Interviewee 5)
Teacher's Personal Knowledge	I keep on learning new knowledge in both vocabulary and medical concepts, for me, it's like taking out a new subject enough to graduate. (Interviewee 13) I personally work on my English because it's very important, we need English to participate in conferences, also, I publish my articles in English. I keep on advising my students to pay attention to English

	because they need it... I am pleased that two of my students are going to write their master thesis in English and I'm going to supervise their work. (Interviewee 1) I was a very serious student, I enjoyed learning. I was really a hard-working student. (Interviewee 2) The teacher used to do everything... explain, write everything on the board. I don't remember there was any kind of interaction, you know, we just follow. (Interviewee 4) I remember the language class was boring, the teacher was very strict. We basically learned grammar and vocabulary only. We only had to learn rules by heart. We had to apply them without understanding. (Interviewee 4) my first entry at the university was so scary moment , it was not like anything was used to when I was in secondary school, even though English was my first choice, but being there as a first year student at the English department coming from secondary school, the huge buildings, you know, it was a very intimidating experience to me. (Interviewee 4) The first class I attended was a listening lesson, the teacher was very fluent, he had an American like accent, and for one hour I kept looking at him trying hardly to grasp any word but I just did not understand any. When we come out of the class, I asked other students if they understand what he was saying. And I think most students found it difficult, I even doubt he was an Algerian teacher.... For a moment I thought that I was in the wrong place and I should not continue my education at the English Department. (Interviewee 13)
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	I found myself struggling with the task of writing very long time, simply because we lacked basic skills for writing. It was very difficult and scary subject. It was only at university when I realized how important the skill of writing is because in the exams, we are graded based on our writing not on any other skill. (Interviewee 9)
Areas and Sources of ESP Teacher's Practical knowledge	Students' proficiency in English makes it very difficult for me to teach. For example, students are very poor in using the four skills. How can I address their specific needs...? Instead, I try to identify their areas of weakness and turn to general English courses to help them improve their grammar, vocabulary and writing skills. (Interviewee 5) I'm not teaching ESP today, it's not an ESP class it is grammar. Though they are 2nd year but they are very low in English this is why I can't teach them ESP. I have to start with general English first, I introduce them to basic knowledge of English grammar and vocabulary and then, I direct the course toward more specialized content. (Interviewee 5) Medical content is very difficult for me to grasp. Therefore' I choose only a simple text that I find easy for me to understand. If it is a specialized text then, it is not a choice for me. I prefer to avoid any occurring problems..... I only choose content that I can manage, it's very important for me to understand what the content is and to know the meaning of the words. I have few smart and good students who keep on asking questions. Suppose I don't have the answer, so how can I deal with this situation". (Interviewee13) Teachers' knowledge of content has a great impact on ESP teaching. For example, if I master content that students are interested in, I will easily

	address their needs and at the same time I will be able to teach students the English language relevant to their target content” (Interviewee2) Without good knowledge of specialized content, it will be difficult for EFL trained teachers to meet students’ needs in learning the language in a meaningful way. For example, ESP teacher has to know what the practice of dentistry is about in subject area and the basic skills to promote good use of English in such contexts. (Interviewee2) It’s no way for an EFL trained instructors teaches the ESP course because there are some scientific and mathematics aspects involved in Aeronautics and navigation which cannot be explained or taught unless he masters well that content. (Interviewee 7)
Challenges in Teaching ESP	I think the most disappointing fact comes from students. They do not participate in class, and they can’t communicate with me. you don’t expect this from students after studying English for seven years. It’s stressful, I always feel like talking to myself. (Interviewee 1) Our students (means Algerian cultural background) are not truly interested in learning except only few of them who actually want to learn. The others can’t wait to graduate, take their certificate and go to the real world and try to find a job and make money. The only thing they care about is going through exams and the learning. It’s their mentality. This is simply how they think. (Interviewee 9) students think of the ESP courses as useless and this is why they don’t want to make efforts in their learning, especially for male students as they only want to pass the final examination and go find a job. This is the culture here in Algeria”. (Interviewee 6)

	We use to focus on learning and gaining the maximum of knowledge from our teachers rather than the exam grades because we use to go through a national contest to carry Magister studies. Now things have changed, it is the final grade that matters rather than knowledge, students care about marks only..., and I don't blame them this is what the new system entails. (Interviewee 13) It's a big problem, there are more than 80 students in one lecture hall, imagine just the time they take to have their seats and pay attention, it's really waste of time and energy. Come on, have your seats, come on, keep quiet so we can start, come on, it's time, pay attention. This is me every time before I can start the lesson. (Interviewee 7)
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ملخص:

يستقصي هذا البحث المعرفة والممارسات البيداغوجية والتربوية والتحديات التي تواجه تدريس اللغة الإنجليزية لأغراض تخصصية من وجهة نظر معلمي اللغة الإنجليزية في جامعة سعد دحلب بالبلدية 1 بالجزائر. والغرض من هذا الاستقصاء هو استكشاف معارف المعلمين ومعتقداتهم حول المعرفة العملية لمعلم اللغة الإنجليزية لأغراض تخصصية من أجل فهم اختياراتهم للممارسات التربوية. كما تسلط الدراسة الضوء على التحديات التي تعيق تطبيق هذه المعرفة في الممارسة الصفية. وتعتمد الدراسة في إطارها التحليلي على منهج نوعي وتصميم بحثي استكشافي لفهم المشكلة من خلال الانخراط في بيئات صفية حقيقية لمعلمي اللغة الإنجليزية كلغة أجنبية وتجاربهم معها. وقد جُمعت البيانات من خلال مقابلة شبه منظمة مع 13 معلماً من معلمي اللغة الإنجليزية لأغراض تخصصية كلغة أجنبية وملاحظة صفيّة ومقابلات التذكر المحفزة مع أربعة مشاركين من العينة المذكورة أعلاه. على الرغم من فهمهم الثري لأصول تدريس اللغة الإنجليزية كلغة أجنبية، يبدو أن الممارسات التعليمية للمعلمين تتناقض مع وجهات نظرهم المعلنة. ويبدو أن ممارساتهم التدريسية تتأثر على ما يبدو ببعض العوامل القائمة على السياق وخاصة عدم وجود اعتبار مؤسسي لدورهم، وانخفاض كفاءة الطلاب في اللغة الإنجليزية والمواقف السلبية تجاه التعلم. وقد يكون هذا الوضع قد أعاق تطبيق معارف معلمي اللغة الإنجليزية في الممارسة العملية. يمكن استخدام الرؤى المكتسبة من دراسة معارف معلمي اللغة الإنجليزية لأغراض تخصصية والتربية البدنية والممارسات والتحديات التي يواجهونها كأساس للاستفادة من بعض الاقتراحات المفيدة لدعم معلمي اللغة الإنجليزية والتربية البدنية في النمو المهني وتحسين الممارسات التربوية لتلبية متطلبات اللغة المهنية للمتعلمين. وقد تساعد هذه الاقتراحات المعلمين على توضيح تفكيرهم وتشكل أساساً يمكنهم من التواصل مع المعلمين والباحثين الآخرين لتبادل معارفهم ومهاراتهم وخبراتهم في المعرفة العملية لمعلم اللغة الإنجليزية لأغراض تخصصية وإثارة المزيد من الاهتمام بهذا المجال .

الكلمات المفتاحية: معرفة معلم اللغة الإنجليزية لأغراض تخصصية، المعرفة العملية، وجهات النظر، التحديات

Résumé:

La présente recherche examine les connaissances, les pratiques pédagogiques et les défis de l'ESP du point de vue des enseignants d'ESP à l'Université Saad Dahlab de Blida 1, en Algérie. L'objectif de cette enquête est d'explorer les connaissances et les croyances des enseignants sur l'enseignement de l'ESP afin de comprendre leurs choix de pratiques pédagogiques. L'étude met également en évidence les défis qui entravent la mise en œuvre de ces connaissances dans la pratique de la classe. Pour son cadre d'analyse, l'étude s'appuie sur une approche qualitative et un modèle de recherche exploratoire afin de mieux comprendre la question en s'intéressant aux environnements de classe réels des enseignants d'ESP et à leur expérience en la matière. Les données ont été collectées par le biais d'un entretien semi-structuré avec 13 enseignants d'ESP, d'une observation en classe et d'entretiens de rappel stimulés avec quatre participants de l'échantillon susmentionné. Les thèmes émergents ont permis de répondre aux questions de la recherche. Les résultats montrent que les enseignants d'ESP possèdent plusieurs domaines de connaissances fondamentaux développés grâce à la formation professionnelle et à l'expérience de l'enseignement. Malgré leur compréhension approfondie de la pédagogie de l'ESP, les pratiques pédagogiques des enseignants semblent contredire leurs perspectives déclarées. Leurs pratiques d'enseignement semblent être influencées par certains facteurs contextuels, notamment le manque de considération institutionnelle pour leur rôle, le faible niveau de compétence des étudiants en anglais et leurs attitudes passives à l'égard de l'apprentissage. Cette situation pourrait avoir entravé la mise en pratique des connaissances des enseignants d'ESP. Les enseignements tirés de l'étude des connaissances, des pratiques et des défis des enseignants d'ESP peuvent servir de base à l'élaboration de suggestions utiles pour aider les enseignants d'ESP à se développer professionnellement et à améliorer les pratiques pédagogiques afin de satisfaire les exigences linguistiques professionnelles de leurs apprenants. Ces suggestions peuvent aider les enseignants à clarifier leur pensée et à former une base leur permettant de communiquer avec d'autres enseignants et chercheurs afin de partager leurs connaissances, leurs compétences et leurs expériences en matière d'enseignement de l'ESP et de susciter un intérêt accru dans ce domaine.

Mots clés : Savoirs enseignants ESP, Savoirs pratiques, Perspectives, Défis